SOME ASPECTS OF CHANGE IN POST-REVOLUTIONARY BOLIVIA: A GEOGRAPHICAL STUDY OF AYMARA COMMUNITIES BESIDE LAKE TITICACA

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ABSTRACT

The principal aim of this thesis is to identify and analyse the major social and economic changes overtaking rural Bolivia since the Republic's 1952 National Revolution, 'the most profound movement of social change in America since the beginning of the Mexican Revolution of 1910' (Alexander, 1958). Bolivia's Lake Titicaca region, where field work for the present purposes was conducted in 1971, lies within easy reach of La Paz and in close proximity both to the Peruvian border and to government-sponsored land colonization projects: during the last two decades its densely-peopled Aymara communities, in former times subject to the rank injustices of the hacienda system and virtually isolated from the mainstream of national life, have been exposed to the full impact of unprecedented forces and obliged to come to terms with an unfamiliar outside world.

Chapters V and VI describe at length the more significant of the multifarious post-revolutionary changes disrupting traditional patterns of life in two lakeside communities, Chua Visalaya and Llamacachi. Such modifications can be summarised as follows: the abolition of 'feudal' obligations; the replacement (in one community) of subsistence farming by a thriving cash-crop economy; improvements in housing conditions and general living standards; access to formal education; the emergence of 'the politically aware' campesino (countryman); greatly increased mobility; a dramatic expansion of marketing activities and the creation of an intricate, ever-widening network of rural-urban ties. The subsequent chapter focuses the reader's attention on the diverse factors stimulating socio-economic change within the Lake Titicaca area: it is maintained that contrasted historical backgrounds account in large measure for marked discrepancies in rates of adjustment and economic development.

The vital necessity of approaching the change process from the aspect of the participants themselves is emphasised throughout the dissertation. Hence Chapter VIII is concerned exclusively with the lakesiders' own attitudes towards change and innovation, with their self-expressed problems, wants and aspirations. It is clearly demonstrated that campesino viewpoints frequently conflict with those of outsiders, be

they government officials, representatives of overseas aid organisations or research workers. In the Lake Titicaca region countless community development projects have been doomed to miserable failure from the outset because would-be community developers have neglected to consult local opinion and consequently been unable to 'bridge the cultural gap' between themselves and their 'intended recipients': likewise the Bolivian Government does not appear to have appreciated the true sentiments of lakeside communities, particularly with respect to colonization and cooperativism. Simultaneously, a total lack of community cohesion and a reluctance on the part of campesinos to contribute either financially or manually towards community development undertakings has acted as a veritable stumbling block to progress.

After examining reasons for recent set-backs and failures and reviewing various seemingly insuperable obstacles in the path of rural development, Chapter IX specifies Aymara 'qualities of character on which to build a better future', and proposes 'a strategy of change': community development projects calculated to satisfy 'the felt needs' of the two communities studied in detail arerecommended. In the concluding chapter the wider implications of the findings are considered: it is argued that an 'ideological reorientation' and direct intervention by the central government are urgently required to forestall excessive rural-urban migration and enable Bolivia's agricultural sector to sustain national industrial growth.

Dedicated to Sofía, Hortensia, Marcela, Antonia,
Rosemarie, Nestor, Martín, Davido, Max, Hector
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CHAPTER I - INTRODUCTION

Aims of research

Whether or not the announcement of the Bolivian Agrarian Reform Law in 1953 produced 'a profound psychological transformation' in the mass of peasantry,[1] unquestionably the said decree, in conjunction with the radical programme of reforms instigated by the National Revolutionary Movement (MNR), paved the way for a comprehensive restructuring of rural life in Bolivia. During the two decades since the 1952 National Revolution, traditionally inwardly-oriented agrarian communities have been exposed to the full impact of unprecedented forces and obliged to come to terms with an unfamiliar outside world. It is the basic aim of the present thesis to describe and analyse post-revolutionary social and economic change within selected Aymara communities of Bolivia's Lake Titicaca region.

Change, implying the multifarious aspects of the modernising process, as a specialised field of study is not confined to any single discipline; it is an intricate subject demanding the attention and collaboration of historian, geographer, anthropologist, sociologist, agricultural economist, et al. If the 'geographical' component of the title of this study appears to fade momentarily into obscurity, it does so on occasions when certain anthropological or sociological details are regarded as fundamental to the core of the argument. The initial approach of any social scientist investigating the multi-causal factors of change in a part of the Third World may be highly systematic but, once in the field, it is forcibly impressed upon him that adaptability and flexibility are vital attributes and that continual assimilation of data from a number of closely related disciplines is essential to a complete and meaningful understanding of the dynamics of change.

To a certain extent this dissertation adopts a conventional format. Thus, the author will identify major social and economic changes affecting certain lakeside communities in the post-revolutionary period, and will describe the integral and ever-expanding network of relationships being forged with the world beyond the communities' physical bounds, in the present case especially with the primate city of La Paz. In Chapter VII the relative importance of change determinants, of both internal and external origins, will be assessed. The ensuing chapters

are designed to focus attention on problems precipitated by community change and on obstacles impeding development, questioning simultaneously whether 'modernisation' is necessarily synonymous with progress. Subsequently, courses or 'strategies' for action, which in the author's estimation could assist in the immediate amelioration of community living conditions, will be considered. Finally, in the concluding chapters the wider implications of the findings presented will be carefully examined and various recommendations advanced. All of these aspects are central to the theme of community change but interpretations on wholly traditional lines incline toward tedium and are valueless if they exclude what is surely a critical consideration - the attitudes and aspirations of the actual participants in the change process. Equally significant, but sometimes noticeably lacking in analyses of change, is an appreciation of the vital fact that national legislation and the offer of external aid do not automatically evoke sudden, constructive responses from 'recipient' communities.

According to Wagley (1964) most teachers, agronomists, public health officers, Peace Corps personnel, etc. 'cannot fulfill the role of a cultural broker for they do not understand the local society in which they are assigned to work'.[2] To the foreign social scientist it may at first seem entirely irrational that whilst vast tracts of potentially cultivable land in the Yungas (the valley region east of La Paz) invite exploitation, population pressure in the environs of Lake Titicaca grows increasingly acute, countless families currently subsisting on holdings each measuring less than one hectare. Frequently attempts are made to explain this paradox in terms of physiological or socio-economic variables, yet the simple truth lies in the plain fact that campesinos[3] themselves - certainly the majority of older ones in the communities investigated - maintain that they could but do not want to migrate to colonization zones because of strong emotional attachments to their place of birth. In a similar vein, Flores et al. assert that in Bolivia.. 'Aid from the United States in the form of food, money, equipment and technical assistance has often been diverted or misused, helping a few individuals but creating distrust and ill-will. Projects undertaken by the United Nations have also engendered dissatisfaction. In both of these cases, the greatest lack seems to be of awareness about - or concern for - the needs and wants of the Bolivian people themselves'.[4]

A strong preference on the part of the present researcher to interpret change not exclusively from the angle of the outsider but equally from that of the indigenous population dictated that she remain in situ during the period of field investigations, to be enabled to assume the role of participant in as far as this was possible. Throughout the thesis, attitudes of resident campesinos towards change in their own communities and their self-expressed problems, needs and hopes for the future will remain constantly to the fore. It will be demonstrated that conflicting values and misunderstandings - an obvious inability to bridge the 'cultural gap' - between central government and rural communities, no less than between various agencies for aid and individual communities, have been in large measure responsible for setbacks or total failures in non-spontaneous projects aimed at improving health conditions and introducing innovations in agriculture. Additionally, it will become clearly apparent that recent confrontation with a multitude of external impulses in the post-revolutionary period has provoked intense friction - even crises - inside rural communities: undeniably, in the ex-hacienda studied at depth, discord between and within families epitomizes the contemporary pattern of life and frustrates all self-help schemes dependent for fruition on community cohesion and corporate activity. The analysis of data from the selected communities will revolve around the surely natural hypothesis that, whereas the majority of internal stresses and conflicts are inevitable elements of community life during the interim phase of readjustment and modernisation, misunderstandings and clashes between rural communities and the outside world could frequently have been avoided in the past and can be prevented in the future if certain guiding principles are strictly adhered to.

Concurrently, the author will endeavour to determine how far the lakeside communities under review were in reality isolated, 'self-contained units' in the pre-revolutionary era i.e., whether or not the National Revolution marked an abrupt and decisive break with the past and its concomitant 'régime of feudal oppression' (Agrarian Reform Law Decree) - a viewpoint not infrequently expressed. Buechler (1972) argues on the contrary that 'the present day system of marketing is a continuation, expansion and development of pre- and successful post-reform patterns'.[5] The deliberate choice of Aymara communities

with strongly contrasted historical backgrounds presents an ideal opportunity for ascertaining if there is a positive correlation between pre-revolutionary community organisation and functioning, and the measure of willingness to accept innovation, together with the propensity for using initiative and making responsible decisions in the post-revolutionary period. More specifically, the author was interested at the outset to discover whether or not the now-defunct hacienda system exercised such a profound influence on the past way of life and thought of the colono population (the peasantry subjected to the estate system) that it created a lasting impact on the rural scene and remains a force to contend with.

Since planning for the future is bound to be a priority concern in any worthwhile analysis of change, an attempt will also be made to isolate elements in the framework of family and community life which today assist and could assist further in promoting community development. Finally, it would be inconceivable to ignore one of the crucial questions presently confounding Bolivian politicians and planners: is rural depopulation the inevitable outcome of excessive land fragmentation - minifundismo - or would it be more realistic to view rural-urban migration as a response primarily to other than economic 'push' factors? Are there any effective means of checking the ever-accelerating drift of young campesinos to the city - one of the outstanding features of contemporary life in the lakeside region - thereby curbing the ever-increasing rates of urban unemployment and its highly undesirable connotations?

Bolivia: a developing country

'I am rich Potosí, the treasure of the world, and the envy of kings'. Sanctioned by Charles V of Spain, this impressive inscription on the city's first coat of arms bears little resemblance to present-day Bolivia. 'Potentially one of the richest countries in Latin America' (Lloyds Bank, 1969),[6] Bolivia now finds herself reduced to the rank and file of developing countries in the Third World: lamentably, D'Orbigny's words - 'a beggar sitting on a throne of gold' - provide a more befitting description.

Indisputably, gross national product is rising at a faster rate than in neighbouring republics: average income per head increased by

38 per cent between 1958 and 1968. However, taken out of context such isolated facts foster misleading impressions. Analysing 'el decenio de desarrollo' (the decade of development from 1960 to 1970) in 1971,[7] the then Bolivian Minister of Planning and Coordination, whilst acknowledging some measure of progress and the attainment of certain growth targets, expressed his regret that the period had signified for his country 'crecimiento económico pero no desarrollo' (economic growth but not development). Nor should it be forgotten that the 1958 figure referred to represented a mere US $ 160. It is an inescapable fact that today Bolivia is 'un pobre país', qualifying as one of the most poverty-stricken of Latin American republics, with an average income per head exceeding that of Haiti alone.

The Lloyds Bank Report attributed Bolivia's unenviable status to her 'landlocked position, small and poorly educated population, poor communications and inaccessibility of many mineral deposits'. Likewise, Smith (1971)[8] maintains that: 'Of all South American countries it is Bolivia that faces the most intractable geographical and economic problems, not only because of its poverty and its excessive dependence on exports of tin and associated minerals, but also because of its position as a landlocked state and its lack of internal cohesion'. These are all significant contributory factors, yet to a large extent the answer must lie somewhere in the historical past. Alto Perú owed much of its early opulence and glory to the exploitation of rich mineral resources by the Spanish conquistadores: paradoxically, it was to be their descendants who, as a consequence of exploiting the region's human resources - the Indian population - were to be held accountable for Bolivia's decline and relegation to the category of developing countries.

Bolivia is a fascinating - perhaps unique - country in which to study the process of community change and expedites the researcher's task by providing him with the perfect starting point for his investigations. In April, 1952, Bolivia experienced 'a complete, rapid, effective' (Patch, 1961)[9] National Revolution, 'unparalleled in the history of Latin America'. The radical reform programme motivated by the MNR, the party vested with legislative power as a result of the political events of 1952, presaged a dramatic restructuring of

social, political and economic life. An elaborate description would be inappropriate at this preliminary stage but, to place the revolution in its historical perspective, a summary of the distinguishing characteristics of the pre-revolutionary Bolivian rural scene is essential: subsequently, relevant details will be embodied in the text as they serve to illustrate post-revolutionary change.

By 1952, agriculture and mineral production had become extremely concentrated in the hands of a prosperous minority of Bolivians, who had succeeded in excluding the mass of the populace from the monetary economy and were intent solely on maximising personal profits with the least possible effort and capital expenditure. Industrial enterprise was negligible: 'Whatever infrastructure was present in Bolivia prior to the 1952 revolution was almost entirely produced, either directly or indirectly, by the mining industry' (Zondag, 1966).[10] Minerals, principally tin, provided the mainstay of the economy; exports yielded over 90 per cent of the country's foreign income but although mineral exploitation brought untold wealth to the fortunate few - Simón Patiño's empire alone provided 80 per cent of Bolivia's foreign currency - the mine workers themselves reaped no benefit and dwelt instead in sub-human conditions. The distribution of population had remained predominantly rural in nature: the 1950 National Census classified only 26 per cent (1,096,500) of Bolivia's total population as urban dwellers i.e., inhabitants of nucleated settlements exceeding 2000 people. Simultaneously, the agricultural sector was employing more than 70 per cent of the total working population (87 per cent of the Indian work force), yet three fifths of the country's food requirements were being imported and paid for with valuable foreign exchange currency accruing from the mining industry. Throughout the Republican era, and with added vigour after the celebrated injunctions of President Melgarejo[11] legalised the purchase of communal property (1866), avid landowners had usurped and incorporated <u>comunidades originarias</u> (freeholdings) into the <u>hacienda</u> system so rapaciously that by 1950 only 3,783 communities remained intact and 90.54 per cent of all cultivated land was stated to be under semi-feudal methods of exploitation. Victims of the abuses and excesses of the <u>colonato</u> system of reciprocal obligations, (see Chapter IV) the rural masses were compelled to produce almost exclusively for the subsistence requirements of their immediate families. This severe restriction of

the market economy to the landholding elite, prohibited the advent of industrialisation on even a modest scale. The United Nations' Economic Commission for Latin America (ECLA) reported in 1950 that the prevailing system of land tenure and usage was directly responsible for 'the stagnation of agriculture and its retarding effect on Bolivian economic development'.[12]

If economic stagnation and backwardness was a major characteristic of pre-revolutionary Bolivia, no less so was gross inequality and social injustice. A tremendous contrast between the abject poverty of the Indian peasant population - the 1950 census classified 63 per cent of the total population as linguistically and culturally Indian - and the wealth of a narrow oligarchy of Hispanic Bolivians, dominating every sphere of national social, political and economic life, epitomizes pre-revolutionary Bolivia. As a member of the lowest class of a rigid class structure, forced to satisfy the exacting obligations of the colonato system, excluded from access to education and the Spanish language, and by inadequate income and literacy qualifications from national politics, the indio could only view his lot as reason for despair and hopelessness. Writing a few years prior to the National Revolution, Pando Gutiérrez summarised the peasant's plight thus: 'The conditions in which the agrarian indigene lives are frankly disastrous; he is without social security or medical care: he inhabits inhospitable regions, his alimentation is wretched and his hygiene conditions compare with those of the animals for the latter share his house and his food'.[13] In every sense the indio was exploited by the hacendado and the institution he represented: impassable barriers to social, political and economic mobility lay in all directions. In Tamayo's words: 'El indio da todo al Estado pero el Estado no da nada al indio' (the Indian gives everything to the State but the State gives nothing to the Indian). It is against this 'dual economy' and this static background that the events of the National Revolution must be seen.

The National Revolution 1952

The social, political and economic reforms introduced by the MNR are inseparable from the main theme of the present dissertation: since they will receive lengthy consideration in due course, suffice it at this juncture to outline them in the most general of terms.

Whereas previously inability to satisfy even the most modest income and literacy qualifications had precluded all but 7 per cent of the Bolivian population from participating in national politics (merely 200,000 of a population exceeding 3,000,000 had been entitled to vote in the 1952 general elections), universal suffrage became a reality for the first time in the Republic's history (the electorate was in fact increased by more than 1200 per cent). Political organisation at the local level, especially in the form of rural syndicates, was not only permitted but actively encouraged by the MNR and was usually a prerequisite for land reallocation. In 1955 the Education Reform Law Decree proclaimed that public education should be 'universal, free and compulsory'. The code stipulated the basic objective of rural education to be the integration of the Indian populace into national life; attainment of this ideal was to be facilitated by means of a literacy programme and the training of skilled labour to raise the productivity of traditional crafts. In the economic field, although the small tin-mining concerns remained under private ownership, the three leading companies of Patiño, Aramayo and Hochschild were expropriated and entrusted to a public corporation, the Mineral Corporation of Bolivia (COMIBOL).

But it was the Bolivian Agrarian Reform Decree, described by ex-President Paz Estenssoro[15] as 'the most momentous act in the country's entire independence', that by abolishing the legality of the latifundio, constituted the most radical measure of the reform programme and bestowed on the peasantry a new 'dignidad de la persona'.[16] The six fundamental aims cited in the preamble to the decree may be briefly summarised as follows: land reallocation, development of Indian communities, revision of agricultural relations, stimulation of agricultural development, conservation of natural resources and promotion of domestic migration. Signed in Ucureña[17] on 2nd August 1953, the bill destroyed irrevocably an institution which had pervaded the Bolivian landscape and cruelly exploited the indios for generations. The programme of land reform set in motion by the decree was responsible for a complete reorganisation of relationships between colonos and hacendados: the latter no longer had unlimited resources of unremunerated labour at their personal disposal and, with few exceptions, have relinquished claims to properties they previously

owned. The implementation of land redistribution, as will later be shown, was sometimes - and in parts of Bolivia still is - fraught with seemingly insoluble problems, but even within a very short time some 400,000 peasant families became independent freeholders, liberated from the rank injustices of the colonato system.

This revolutionary programme of reforms did not guarantee sudden change and economic development per se but, by eliminating some of the rigid class divisions, by granting access to education and political movements, by breaking the shackles of the colonato system and thus permitting the peasants' active participation in the national monetary economy, it made mobility possible in all spheres of Bolivian life. For the first time in the history of the Republic economic development became a feasible proposition: how far it became a reality it is one of the purposes of this thesis to demonstrate.

The Lake Titicaca region of Bolivia

The general area selected for the present study is the Lake Titicaca region of Bolivia. D'Orbigny once described Bolivia as 'the microcosm of the planet':[18] certainly its boundaries encompass a rarely equalled range of physiographic features. It is a country in which violent contrasts in terrain and altitude, great distances and inaccessibility have fostered a pronounced spirit of regionalism and a general lack of cohesion. Frequently human contacts across international frontiers have assumed more significance than those between physically alien regions within the Republic's confines. Nowhere is this more apparent than along Bolivia's western margins, where an arbitrary international boundary line dissects a well-defined natural region. The Lake Titicaca basin has been an area of dense population concentration and an intensive agriculture from pre-Incan times, favoured by moderating climatic influences and the existence of more fertile soils than those generally encountered in the Andean zone.

The Bolivian section of the Lake Titicaca region is situated in the Department of La Paz, the most populous of the country's nine departmental divisions. The entire area lies within a distance of 150 miles of the primate and dominating city, La Paz. Traditionally this is an area of Aymara settlement in which the Aymara language has survived prolonged and turbulent periods of Incan and Spanish domination.

Although Spanish settlers were attracted to the region by the lure of precious minerals in early colonial days, it was not until the latter part of the nineteenth century that encroachment on Indian freeholdings and subsequent incorporation into the hacienda system became more extreme than elsewhere in Bolivia: this was more than possible in a region where the existence of a dense Indian population minimized the hacendados' fears of labour shortages. Not surprisingly the Lake Titicaca area was to experience the maximum impress of the land reform programme in the 1950s.

Since the beginning of the twentieth century the lakeside region has been the scene of widespread Protestant activity. Of more recent years communications have been appreciably improved and traditional modes of life exposed to a great variety of outside forces. It is thus an area of acute population pressure on available land resources, lying in close proximity to the country's focal point of political and economic life, to the Peruvian border and to post-reform colonization projects in the Yungas. It is only to be expected that during the twenty years since the 'unparalleled' National Revolution, considerable modifications to traditional patterns of existence, including some degree of out-migration, should have resulted from the interactions of so many impinging forces.

Value of research undertaken

Such a field of study whilst being of intrinsic interest to the individual investigator can not be justified solely on grounds of personal satisfaction. Nor is it sufficient that lectures and slide shows should bring the contemporary dilemmas of a little-known part of the developing world to the notice of diverse British audiences: this is not to deny the value of such media as effective aids in stimulating interest and concern, thereby improving international understanding.

It is hoped that the present dissertation will make a useful contribution to the rapidly-growing accumulation of informative data on the problems of socio-economic development in the Third World. Furthermore, material of this nature is historically invaluable in that traditional life styles are fast disappearing and may already have become alien to the youngest generation; in Bolivia, a general dearth of

pre-reform historical documentation and statistical data currently constitutes a serious handicap to research workers, forced to operate within well-defined limits. Hence, field investigations during the inevitable transitional phase of adjustment and adaptation following the unprecedented national legislative measures of the early 1950s are essential to avoid further regrettable gaps in Bolivia's historical record.

However, 'the successes and failures of Bolivia's experience are relevant not only for their historical interest, but also in relation to the basic problems of modernization which face most underdeveloped countries today' (Clark, 1970).[19] Physical conditions and political institutions may be totally at variance but the majority of problems confronting developing nations are similar, if not identical, in essence and each country can derive considerable benefit from a knowledge of the experiences of others. It has already been stressed that the author's prime concern is with change at community level and with the necessity for interpreting such change from the viewpoint of the actual participants in the change process: unless external agents - be they central governments or overseas aid agencies - ascertain at the outset precisely what the communities concerned perceive as their <u>own</u> urgent needs and wants, and seek to awaken a spirit of enthusiasm, mutual trust and collaboration, there is no assurance of even a modicum of success in any programme planning. Indisputably, lessons with such profound implications are equally relevant to planning in the Botswanan or Bangladesh context as in Bolivia.

As a former volunteer personally involved with programmes aimed at inculcating change in another South American country,[20] and currently concerned with the over-all functioning of the British Volunteer Programme, it would have been inconceivable for this author to realise a study of this type without constantly thinking in terms of community projects within the capabilities of young volunteers, either native to the country or sponsored by foreign agencies. A failure on the part of the lakeside communities to appreciate the hard fact that the Bolivian central government lacks the necessary financial resources and manpower to fulfil all their expectations today acts as a stumbling block to community development: whilst some problems require resolution at national level, much physical and economic suffering could be alleviated

in the short term by corporate community action under the direction of discerning and tactful non-residents. But it must be reiterated that any community development programme appears doomed to miserable failure unless preceded by careful and comprehensive instruction on community organisation and attitudes towards change. The author was invited to expand on this general theme in a paper, 'Conflicting values in community change: some reflections on Aymara communities of the Lake Titicaca region of Bolivia', presented at Copenhagen in May 1973 to the Second Scandinavian Conference on Latin America.

During six months of field work in Bolivia, the author also remained in contact with Oxfam. Through her mediation the organisation financed the provision of lighting for a school in one of the lakeside communities: as a result of interviewing, she was able to give advice on the feasibility of a health programme for the general area, and was in 1972 invited to address a regional Oxfam Conference on the problems of development in rural Bolivia. Thus it is hoped that the material presented below will prove a source of interest to representatives of external aid organisations, such as Oxfam and the British Volunteer Programme.

The researcher's task was greatly facilitated by the cooperation and advice of individual Bolivians and various governmental departments, both during and after her visit to Bolivia. Throughout the period of field work close contact was maintained with the Social Investigations Section of the National Agrarian Reform Service (SNRA), for which the author was asked to prepare a preliminary report (subsequently translated into Spanish) of her findings, and an on-the-spot analysis, for a Ministry of Agriculture commission, of the events culminating in the outbreak of violence in one of the communities studied at depth. Gratitude must also be extended to Dr. Paz Estenssoro for granting two interviews and expressing interest in the work and final analysis: it is stimulating to receive assurance that research work undertaken by foreign students will be critically evaluated by individuals able to influence future national policies. More recently, Dr. Albó, Director of the Centre of Investigation and Promotion of Peasant Affairs in La Paz, has suggested that the thesis 'would be very useful in connection with our (CIPCA's) own research and promotion work in Bolivia': he has also offered helpful advice

on the amendment for publication of a paper entitled, 'The impact of the hacienda on the Bolivian rural scene'.[21] Such interest and concern in the final product of her work has been a constant source of encouragement and inspiration to the author.

Footnotes and References - Chapter I

1. L. Antezana E., Resultados de la reforma agraria en Bolivia, (Cochabamba, 1955) p.7.

2. C. Wagley, 'The Peasant', Continuity and Change in Latin America ed. J.J. Johnson (Stanford, 1964) p.47. All Peace Corps personnel working on Bolivian community development projects were, for political motives, dismissed in the early months of 1971.

3. Campesino (countryman or peasant) officially replaced the pejorative term indio, in the post-reform period.

4. E. Flores, R. Patch, D. Heath, C. Ferragut, 'Land Reform in Bolivia: An Informal Discussion' in The Progress of Land Reform in Bolivia (University of Wisconsin, Land Tenure Center Discussion Paper, May 1963) p.23.

5. J-M. Buechler, Peasant Marketing and Social Revolution in the State of La Paz, Bolivia (Ph.D. Thesis, McGill University, 1972) p.52.

6. Lloyds Bank Limited, Economic Report: Bolivia (Overseas Department, London, 1969) p.12.

7. J. Ortiz M., Ministro de Planificación y Coordinación, Revista de Planificación y Desarrollo: Análisis Crítico del Decenio del Desarrollo 1960-1970, an official statement to the Inter-American Committee of the Alliance for Progress (La Paz, 1971).

8. C.T. Smith, 'The Central Andes', Latin America: Geographical Perspectives ed. H. Blakemore and C.T. Smith (London, 1971), pp.319-20.

9. R. Patch, 'Bolivia: The Restrained Revolution', The Annual of the American Academy of Political and Social Sciences, 334 (1961) p.124.

10. C.G. Zondag, The Bolivian Economy 1952-65 (New York, 1966) p.21.

11. Mariano Melgarejo, President from 1864-71 and the hacendados' 'Salvador de la Patria', is usually considered to have been the most despicable and barbaric of all Bolivian caudillos: it has been estimated that, as a result of his 1866 decree, more than 650,000 comunario families (families living in Indian freeholdings) were deprived of land and status.

12. The United Nations' Technical Assistance Mission Report of 1950 (the Keenleyside Report) stated moreover that 'the static nature of Bolivian agriculture has tended to impede - if not arrest - the ordinary course of economic development'.

13. J. Pando Gutiérrez, Bolivia y el Mundo (La Paz, 1947).

14. F. Tamayo, Creación de la pedagogía nacional (La Paz, 1910) 'Franz Tamayo was a pro-Indian in his writings, but many feel that he was at the same time an anti-Indian, in the way he treated Indians on his own hacienda, Yarwichambi, near Peñas' (X. Albó, 1973).

15. As past and present leader of the Movimiento Nacionalista Revolucionario (MNR), the party responsible for the 1952 Revolution and the radical reform programme, Paz Estenssoro served for two terms as President - from 1952-6 and from 1960-4.

16. An expression frequently used in MNR publications and various research reports.

Footnotes and References - Chapter I (continued)

17. The first Bolivian rural sindicato has been formed in Ucureña, near Cochabamba, in 1936.

18. A. d'Orbigny, Descripción geográfica, histórica y estadística de Bolivia (La Paz, 1942).

19. R.J. Clark, Land Reform in Bolivia (Agency for International Development Spring Review Country Paper, USAID/Bolivia and Land Tenure Center, University of Wisconsin, 1970) p.3.

20. The author worked (1965-6) as a volunteer in Guyana, under the auspices of Voluntary Service Overseas.

21. Presented in December 1972 at a Cambridge Symposium on 'Landlord and Peasant in Latin America and the Caribbean'.

CHAPTER II - PRELIMINARY CONSIDERATIONS AND RESEARCH PROBLEMS

Field work for the purposes of the present dissertation was possible only through generous financial support from the Royal Society[1] and the Social Science Research Council: it was conducted between June and December 1971. Since returning from Bolivia personal contact has been maintained with the Aymara interpreter residing in one of the communities studied in detail (Llamacachi) and thus amendments have been made where necessary, to ensure that information is up to date.

Community studies

The advantages and disadvantages of researching at community level could be debated ad infinitum. No less problematic is initial agreement on a formal definition of the term 'community': concepts are modified by time as well as by spatial factors. In most regions of pre-reform Bolivia it would have been conceivable to view an individual hacienda or even an estancia (a sub-division of the former) almost as an isolated and independent entity. With the exception of the landowner's extra-estate marketing pursuits and limited peasant participation in rural fairs, the investigator would in the majority of cases have been justified in restricting his community study to an analysis of what happened within certain definable physical boundaries. Today such an approach is impracticable and totally unrealistic, even in terms of the 'local community' i.e., the part of a group delimited by matrimonial relations, living in the place of origin (Buechlers' definition, 1971).[2] An interpretation of the change process is meaningless if it ignores the role played by external agents in influencing change. The lakeside communities, be they ex-haciendas or comunidades originarias (freeholdings), are no longer detached from their surroundings: it will become increasingly evident that one of the most striking adjustments in the post-revolutionary period has been the emergence of a complex and expanding network of interdependent social and economic ties between lakeside groupings and migrants resident in La Paz. Without examining the individual community in this much broader perspective, the process of change is completely incomprehensible.

The hazards implicit in the community level method of approach are well documented. The field worker selects a community in the sincere belief that it is truly representative of the wider area; the more deeply he delves, the more convinced he may become that 'his' community is atypical in certain respects. Yet he might well pause to contemplate the nature of the 'typical' or 'average' community: he may indeed conclude that such terms can not legitimately be ascribed to any settlement. Regional patterns emerge but every community is 'atypical' in that it demonstrates some departures from the norm. Lessons are to be learnt from any single community; it is the task of the research worker to differentiate between characteristics peculiar to the particular community and those representative of the general region. Simultaneously, the investigator must be continually aware of the dangers of becoming so entangled in the problems and needs of individual communities that he is eventually diverted from the original goals of his research programme and unable to appreciate the significance of his findings in their regional context.

As has previously been intimated, in the author's case there was a predetermined preference for studying in depth at community level, with a view to analysing prevalent campesino attitudes towards change. Whilst much useful information may accrue from remaining in situ throughout the period of investigations, inevitably any person from a sharply contrasted cultural background is unable to become wholly 'integrated' into community life and normal behaviour patterns are bound to be modified to some extent by reason of his presence.

Bearing all the above points in mind, it is only to be expected that ultimate decisions as to the precise number, size and location of communities for study should be determined by practical considerations and diverse limiting factors.

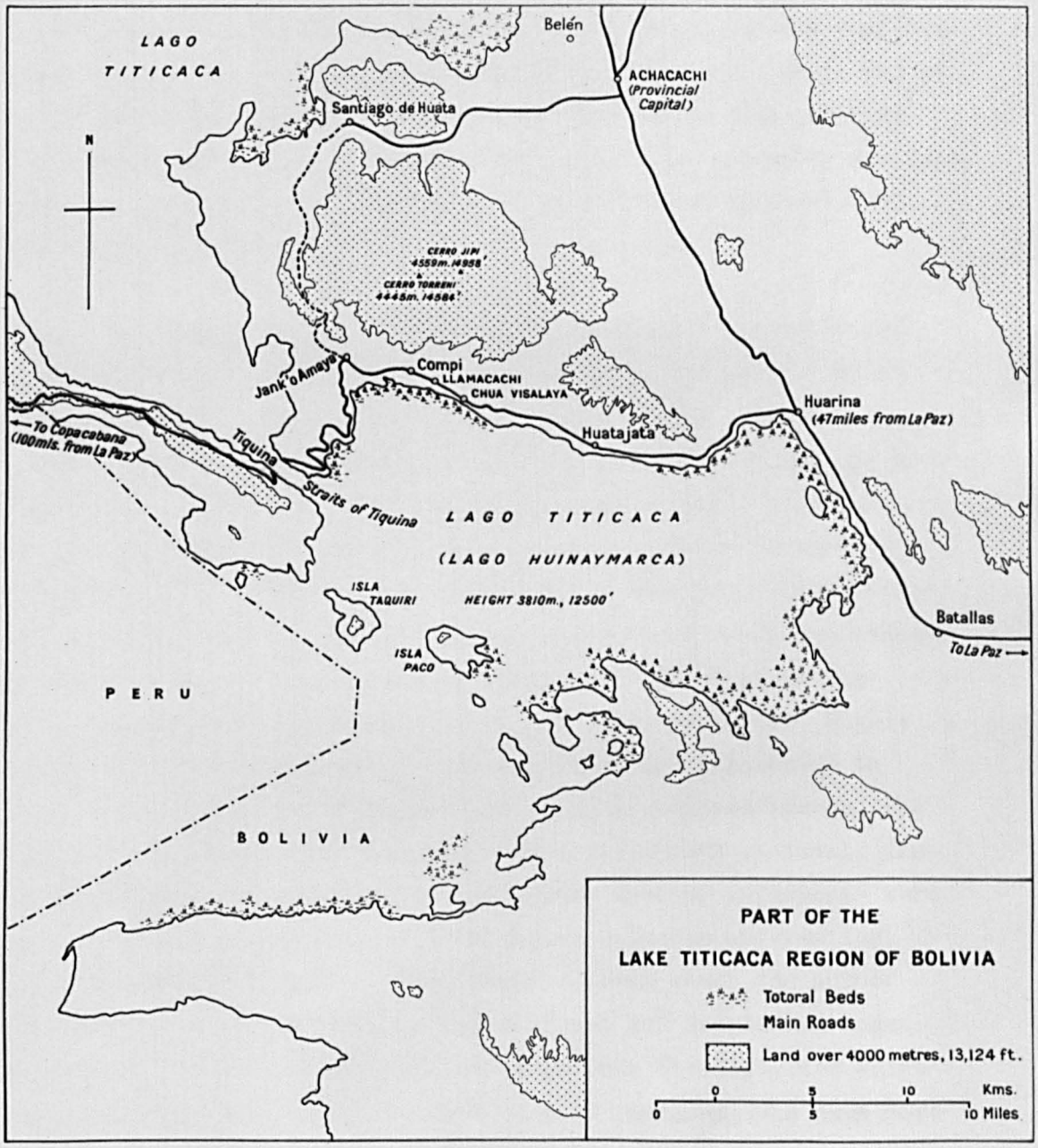
Selection of communities

The author was originally attracted to the Lake Titicaca region as the result of a brief visit to Bolivia in 1966. For more tangible reasons (see p.10) the area seemed an ideal one in which to concentrate research efforts later. A decision on the general region of study having been reached, accessibility to La Paz became a prime

determinant, since the author was to be largely dependent on local transport and the work programme necessitated making periodic visits to the SNRA in addition to obtaining data from various government departments.

A resolution to restrict investigations to two communities was based on considerations of economy and time. In the event, field work was frequently and unavoidably subject to delays and interruptions; it would have been exceedingly difficult to terminate survey work in a third community before the onset of the rainy season. It was obviously expedient to select communities offering prospects of fruitful comparison: there was clearly a possibility of introducing either physiographic or historical variables. In view of the communication and accommodation problems posed by operating in settlements widely separated in terms of physical distance, concentration on the historical angle was deemed preferable. Hence, two neighbouring lakeside communities of corresponding dimension, morphology and population density, but with strongly contrasted historical background, were sought. The final decision was considerably eased by the helpful and timely advice of the SNRA: an Aymara-speaking field worker, with an extensive knowledge of the lakeside zone, accompanied the author on a reconnaisance visit in order to suggest suitable communities and establish the necessary preliminary contacts with community leaders. Whilst it would be indefensible to deny that the communities subsequently selected (by mutual agreement) are atypical in certain aspects, on the whole they were to prove ideal choices.

Chua Visalaya and Llamacachi are of similar size (i.e. in terms of cultivable terrain, see p. 41), display like physical features and contain comparable populations. The historical differences are self-explicit. Llamacachi has from time immemorial been a *comunidad originaria*, on occasions resisting tremendous pressures from neighbouring *hacendados* trying to expand at its expense; conversely, Chua Visalaya was in pre-revolutionary times an *estancia* of a much larger *hacienda*, Chua. An additional advantage lay in the fact that the two communities are situated adjacent to the sacred lake, thus affording scope for a wider diversification of economic activities than is possible in communities removed from the direct influences of the lake, whilst being subject to periodic flooding. Moreover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Huarina
(47miles from La Paz)
Huatajata
To Copacabana
(100mls. from La Paz)
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the communities are dissected by the main road from La Paz to Peru, via Copacabana: the distance between Chua and La Paz is merely 60 miles, thus allaying further concern about accessibility. The fact that Chua Visalaya and Llamacachi are contiguous was an invaluable asset; the author was able to observe community interactions and to remain in contact with both communities throughout the entire period of field work. Although interviewing in the early stages was confined mainly to the ex-hacienda and subsequently to Llamacachi, there was no problem involved in transferring attention from one to the other as occasion demanded e.g. for the purposes of attending community meetings, accompanying campesinos to local markets or talking with government officials on rural visits.

The measure of success of field work undertaken in communities manifesting language communications problems must be closely related to the choice of interpreter; in this matter the author could not have been more fortunate. Throughout the investigatory period she was ably assisted in translations from Aymara to Spanish by Sofía Velásquez, one of few lakeside women in their 'mid-twenties' to have received a formal education beyond the age of twelve or thirteen. Many explanations were unnecessary since the interpreter was already acquainted with interviewing techniques, having previously worked under the direction of the anthropologists Drs. H. and J-M. Buechler. Highly respected in both communities for her expertise and initiative in marketing activities, and of a disposition inspiring confidence, she was ideal for the task. Her insight into details such as family disputes, and display of intuition in discerning whether informants were lying, excessively suspicious or withholding valuable information, were indispenable attributes. When after several weeks the author became fully aware of the deep-seated mistrust and suspicions engendered by rival syndicate and cooperative in Chua Visalaya, the value of a non-partisan assistant, esteemed by both factions, was even more highly appreciated. Furthermore, the fact that the interpreter was female made it possible to engage in open-ended interviews with some of the womenfolk, thereby procuring the female angle on family and community problems: it is unfortunately a truism that such viewpoints are rarely sought, let alone respected and considered seriously.

During the six months of field work the author occupied a room in

the house of the translator's parents. This particular adobe dwelling, situated in Llamacachi near to that community's border with Chua Visalaya, also functioned as one of three shops in the community. It provided the research worker with the perfect base; of recent years the building had become an established meeting place for the exchange of local gossip, and the adjacent roadside a natural halting point for trucks, public buses and, on certain religious festivals, for pilgrims en route by foot from La Paz to the shrine of the Virgin of the Lake at Copacabana.

Problems in the field

Many a research worker investigating social and economic change in a developing country would find it a feasible proposition to compile a volume on the multiplicity of problems confronting him in the field; hence the author's personal experience is not exceptional. The more commonplace difficulties were anticipated and necessary allowances made, others were peculiar to the individual communities, and a few directly related to political events at national level and to prevailing public sentiment - matters well beyond the researcher's control. Whilst such problems inevitably prove a source of annoyance and inconvenience, and may confound all attempts to complete work schedules within set time limits, nothing is to be gained from excessive despondency: it is imperative that the observer adopt a flexible approach, enabling him to take maximum advantage as unpredictable circumstances present themselves.

Basic misunderstandings and deep suspicions were the root causes of the majority of problems facing the present research worker in the field. A pervading sense of mistrust can be held accountable for many failures of community development projects in times past and has a vital bearing on guided planning for the future. Complications arising from such strong emotions will be discussed at length in the chapters concerned with campesino attitudes and with obstacles to change. However, since field work techniques and the actual quantity and composition of material obtained from community surveys were largely dictated by internal conditions and reactions to the author, it is appropriate at this stage to mention the predominant areas of conflict. Subsequently the author will consider some of the implications of outbreaks of physical violence both at local and national level.

Llamacachi's orillas in mid-October. With the exception of three parcelas planted with broad beans, all the green patches are onion fields; some are split into several c'uchus or irrigation units. The line of eucalyptus trees from the main road to the edge of Huiñaymarca demarcates the boundary between comunidad and ex-hacienda: of recent years inter-community arguments about the withdrawal of water from the stream bisecting Llamacachi's shorelands have grown in intensity. (The house inhabited by the translator's family is in the centre foreground).

Terraced hillside. The lower terraces of Cerro Picasa are exploited intermittently by land-hungry campesinos but are generally regarded as marginal for cultivation purposes (p.47). The two avenues of eucalyptus trees enclose valley lands formerly retained by Chuan hacendados as ahijadero (p.75).

In view of the region's tempestuous past, a deeply-engrained suspicion of all outsiders is more than understandable. Despite the interpreter's mediations and the acquisition of a work permit[3] carefully explaining the reasons for the author's presence, it was never possible to persuade the entire population of either community that the latter was neither a comunista nor an americana,[4] nor even a government official clandestinely gathering data about landholdings as a prerequisite for imposing land taxes. Previous unfortunate contacts, both direct and indirect, with research workers and with overseas agencies for aid conditioned attitudes towards the researcher and were accountable for various unfavourable impressions, dissipated only with great difficulty: for instance, that visitors to the communities obtain valuable information for their own personal usage without contributing anything in return, instead spreading dissatisfaction by raising false expectations; that all outsiders are wealthy foreigners with limitless financial resources at their immediate disposal, and that research workers are accustomed to ask questions about the intimate aspects of family life.[5] A fundamental confusion of roles may place a considerable onus on the research worker; in the author's case, the fact that Chua Visalayans made incessant requests for financial aid, for decisions to be made on their behalf, and for advice to be given on health matters, animal and crop disorders etc., could be logically interpreted as an attempt to find a substitute for the former patrón (the pre-reform landowner).

Chua Visalaya's seemingly insoluble 'land question' presented the greatest single impediment to field work and was to a marked degree accountable for suspicious attitudes both within the ex-hacienda and towards the author. The sequence of events leading to the formation of and subsequent intense rivalry between cooperative and syndicate, culminating in the outbreak of community warfare in August, 1971, is complicated and will be described in Chapter V. Bitter inter-family antagonism and a complete lack of internal cohesion were detrimental to interviewing in numerous ways. Firstly, whilst it had been envisaged that attendance at fiestas etc., would on occasions frustrate field work, far more numerous were the interruptions caused by countless reuniones involving one or other faction - rarely both - at which land problems would be endlessly debated and no practical resolutions passed. Genuine fears that information given to the author would in some manner

be transmitted to the opposing group made it impossible to obtain precise details about landholdings and livestock; in some instances campesinos even flatly denied ownership of property. In the days immediately preceding the fighting, the tenseness of the situation made it impracticable to continue interviewing; photography or the expression of any opinion on community affairs became inexpedient. Yet these unpredictable events were not devoid of redeeming features. They provided abundant proof of the acute pressure of population on available land resources and of the deep attachment to the soil; there was ample opportunity to discuss with resident campesinos their reasons for preferring not to migrate to La Paz or the Yungas. It was interesting to speculate as to who would take the lead if or when strong feelings could no longer be contained; in the actual event, the difficult task fell to the interpreter and research worker.[6] As a result of direct intervention (although prevention of further bloodshed had been the only motive influencing decisions) attitudes towards the author improved considerably. The final months of field work became increasingly rewarding as earlier suspicions disappeared: several householders, previously refusing to collaborate, even asked to be interviewed and events, such as the ascent of a mountain traditionally held sacred in the region, became feasible whereas formerly they would have been inconceivable.

As a result of the urgent necessity for procuring medical aid after the day's fighting in Chua Visalaya, the author was visiting La Paz when the national revolution of August, 1971, occurred. The ensuing period, until return to the lakeside was authorised, was spent advantageously, working in the SNRA and gathering data from various ministerial offices. The political events of these days were to facilitate frank discussion of community involvement and over-all impressions of national politics. The associated enforced closure of city schools led to children of migrants from the two communities making prolonged visits to assist their grandparents with household and field chores: this was an excellent opportunity for investigating the attitudes of a potentially influential section of the younger generation toward rural and urban living, and for making enquiries into their plans for the future.

These were but some of the problems and opportunities arising from

misconceptions and unforeseen political activity. It should be added that a number of households were cooperative throughout the entire period of field investigations, that the majority of problems were of short duration and that the personal attributes of the interpreter and her family more than compensated for many of the above inconveniences.

Methodology

(a) Pre-existing data on the communities

Credible and readily available documented material pertaining to earlier points in time is normally considered a prerequisite for change analysis: in the perfect situation the researcher would be at liberty to compare his own findings with descriptions and statistical data obtained in the course of previous community surveys. Unfortunately, ideal conditions are rarely encountered in developing countries. It may remain beyond the bounds of possibility to reconstruct complete pictures of past modes of life and there is no entirely satisfactory substitute for missing details, such as population statistics or crop yield figures. The researcher must make optimum use of whatever limited documentary evidence is at hand and devise means of compensating for obvious inadequacies.

Undeniably, the programme of reforms set in motion by the MNR prepared the way for changes in the countryside which could hardly have been contemplated before 1952: in Chua Visalaya, the introduction of wage labour and reallocation of hacienda lands were direct consequences. But it would be wrong to assume that the National Revolution guaranteed sudden change; for example, the mere granting of universal suffrage did not ensure that all peasants took advantage of their newly-acquired right to vote. Similarly, it is not justifiable to base reconstructions of former patterns of community life solely on generalisations and deduced averages: surveys of the magnitude of 'Estudio socio-económico en las provincias de Omasuyos, Ingavi y Los Andes del Departamento de La Paz' (1946)[7] afford useful background information but it does not follow that all, or even any, pre-reform conditions within certain communities accorded with the norm. Likewise, one may ascertain the date of construction of Chua Visalaya's first school, precisely when Peace Corps workers were introduced to the locality, or in what year the road between Huarina

Farmsteads in the central section of the Chua Visalayan valley. So far as is known the sayañas illustrated here were never cultivated by hacendados of Chua. The majority of adobes on the valley floor have been constructed in the post-reform period. A number of ex-colonos still live at considerable distance from the main road or even from the Avenida de los Indios i.e., the track flanked by eucalyptus trees: holdings, often marked by clumps of trees, straggle the lower slopes of Cerro Calvario (map p.50a).

Another impression of Chua Visalaya from Cerro Picasa. The irregularly-shaped fields in the foreground (for the most part given to onions) belong to Llamacacheños. Behind the row of trees are Chua Visalaya's sports field and primary school, built in 1970. South of the road lies the disputed tract of productive land originally cultivated by the hacienda and now in the possession of Cooperativa Chua Limitada.

(see map p18a) and Copacabana was widened and the surface improved; these were milestones in the historical development of one or both of the communities and encouraged modifications to traditional life styles but did not enforce them. Any interpretation of change must be based on more positive and tangible evidence.

A dearth of statistical material relating to the pre-reform and early post-reform periods was a considerable handicap to the author, yet by no means peculiar to the communities selected for study. Whilst originally it was conjectured that accelerated outward migration represents a direct response to an ever-increasing pressure of population on limited land resources - a natural hypothesis in view of Burke's conclusions[8] - emphasis on the demographic factor as the prime determinant of change was precluded by lack of statistical evidence. The 1950 National Census return made no specific reference to Chua and Llamacachi - indeed, there was no indication of these communities having been included in any of the local counts. Apart from the Buechlers' assessment (1971)[9] of Llamacachi's population and a dubious one made of Chua Visalaya's population by an SRNA surveyor in 1954, the only census to the researcher's knowledge was conducted by Peace Corps personnel in 1965:[10] in the case of the ex-hacienda there was no delineation of the actual area involved and the resultant figure appeared so high by comparison with that of 1971 (654:326) as to warrant little attention. As far as may be discovered there had never been any detailed field work undertaken in Llamacachi in relation to such vital issues as size of holdings, crop production and yields per hectare, animal husbandry and income per family: lack of such fundamental statistical data for the purposes of comparison imposed severe limitations. A few inadequacies could be redressed e.g., granted stable inheritance patterns and a knowledge of the number of children per family, it is possible to estimate fairly accurately the size of landholdings in the recent past. But in the majority of instances it was too late to remedy regrettable deficiences.

On the positive side certain detailed, reliable, documented material was at hand. Expediente No. 4445A,[11] entitled 'Chua Limitada' and made available by the SNRA, listed significant events in the estate's history of ownership since the year 1832 and contained

abundant data regarding the organisation and functioning of the hacienda in the 1940s and early 1950s. In the same dossier were recorded results of surveys carried out by a veterinary surgeon and various SNRA officials as a preliminary to land parcelization, which was finally authorised by a supreme resolution (No. 84494) in March 1959. The Agricultural Bank which, for reasons later explained, assumed control of part of the estate in 1964, provided the research worker with a copy of a detailed inventory of the property's assets at the time of acquisition. Llamacachi's strongly contrasted history naturally precluded the existence of such data. Whereas the above expediente yielded at least four conflicting estimates of Chua Visalaya's total area (correspondence dated 1970 pointed to a discrepancy of 472 hectares in post-revolutionary calculations) there was never the same urgent need to survey Llamacachi and, as far as is known, no serious attempts had ever been made to establish even the over-all dimensions of the community. (Carter (1964) was of the opinion that the detailed plan of Irpa Chica, prepared for him by an SNRA surveyor, was the first to have been made of 'a free community on the Altiplano').[12]

Whilst it was appreciated that Hans Buechler had conducted anthropological field work in neighbouring Compi,[13] it was not realised until the last months of the author's investigations - at a stage when it was impracticable to consider diverting attention to another community - that anthropological findings in Compi and Llamacachi were to comprise the substance of 'The Bolivian Aymara'. In the actual event, the book proved useful from two angles; it explained some of the cultural features essential to a meaningful analysis of the change process and it included a sound historical survey of Llamacachi, outlining the community's past relationships with the adjacent haciendas of Compi and Chua. Thus the present researcher was able to incorporate relevant details within the geographical framework, thereby saving precious time.

To compensate for some of the gaps in information from the past appeared impossible in the initial investigatory phase: to describe the contemporary landscape, to analyse the stage(s) reached in the development process and to forecast future trends, were regarded as facile tasks by comparison. The only practicable solution lay in

MEMORANDUM

FEDERACION DEPTAL. DE TRABAJADORES CAMPESINOS DE LA PAZ
BOLIVIA

"TODA LA TIERRA A LOS CAMPESINOS"
AMA SUA - AMA LLULLA - AMA KHELLA

La Paz, 5 de julio de 19 71

Al os compañeros campesinos
DE CHUA VISALAYA Y LLAMACACHI

Prov. Omasuyos.-

Compañeros:

La FEDERACION DEPARTAMENTAL DE TRABAJADORES CAMPESINOS DE LA PAZ, recomienda a Uds, para que la colaboren a la señorita JANE BENTON, quién se constituirá a esas regiones con fines de estudio por el tiempo de 4 meses.

Con este motivo, saludamos a Uds, atentamente

"POR LA SAGRADA MEMORIA DE TUPAC KATARI"

Jenaro Flores
Secretario Ejecutivo

Juvenal Sullaez
Strio. de Justicia

FEDERACION DEPARTAMENTAL DE TRABAJADORES CAMPESINOS "TUPAJ KATARI" Comité Ejecutivo

procuring information by word of mouth from people who had resided in the communities throughout the period of time in question, but how could one prove the reliability of the informants' memories and be assured that accounts were not biased, if not totally inaccurate? Unfortunately, in the case of Chua Visalaya there was no chance of consulting with the ex-hacendado and former members of his administrative staff, with a view to comparing their impressions of the past with those of ex-colonos.[14]

One source of non-partisan, trustworthy evidence was the 'Canadian' Baptist nurse, resident in nearby Huatajata (see map p18a) and a frequent visitor to the communities; herself a native of the lakeside area, she was able to close gaps in the recent history of Visalaya and supplement information on medical and related aspects of social life. Since otherwise the author was to be dependent on the statements of campesino families, it was vital to test the credibility of such material by comparing information imparted with precise facts recorded in the expediente. The researcher was pleasantly surprised at the accuracy with which a number of individuals recalled features of hacienda life. Generally the elderly members of the community retained more vivid impressions of hacienda days e.g., one aged ex-colono remembered almost exactly the number of sheep in each of seven groups into which the hacienda flock had been split in the early 1950s. On occasions descriptions were undoubtedly biased; this was especially true of allegations of punishments meted out by mayordomos[15] and the arduousness of certain hacienda tasks. Exaggerations of this nature were to be expected and such statements were compared with those volunteered by less-biased Llamacacheños. In Llamacachi there was a paucity of documented evidence by which to test memory reliability; it was only feasible to compare dates given by comunarios with recorded ones e.g., the date of constructing Llamacachi's Baptist church. A distinct tendency was noted for details to become firmly associated in people's minds with seemingly unrelated events - hence, a householder might be convinced that he first became accustomed to eating bread during a certain presidency. Discretion must always be exercised before reliance is placed on such isolated facts and this was another situation in which the translator's insight into individual family backgrounds was a valued asset. In both communities key informants emerged; in Llamacachi, the then corregidor[16]

of Cantón Chua, one of few older residents to have received a formal education in La Paz, proved a priceless source of information about past ways of life in both communities.

(b) Availability of maps and plans

A problem of similar magnitude was presented by shortcomings, both quantitatively and qualitatively, in mapping and survey work. For regional coverage the author was largely dependent on the 1:50,000 topographical sheets produced by the Inter-American Geodetic Survey and the Instituto Geográfico Militar, La Paz. Whilst serviceable in many ways, a scale of 1:50,000 naturally prohibits the insertion of community boundaries and accurate portrayal of settlement distribution. The researcher was fortunate to be given access by the then Director of the surveying department of the Bolivian Geological Service (GEOBOL) to the unpublished geological sheet of the Achacachi area: this had been compiled in 1967 on the same scale as the topographical sheets.

Certain plans compiled at the direction of past Chuan hacendados, and more recently of the SNRA, were preserved intact in the expediente. These revealed many discrepancies and need to be considered in conjunction. The most accurate and valuable of them appeared to be a plan completed in 1957 (on a scale of 1:10,000) by a surveyor commissioned by the SNRA. An earlier plan on a scale of 1:20,000 is less reliable and incomplete: the surveyor concerned attributed this to a general lack of cooperation on the part of the local inhabitants and to unavoidable confusions arising from similarities in nomenclature.[17] In 1970 members of the community's cooperative requested the services of the SNRA in producing a plan clearly indicating the boundaries of the group's lands; the resultant map, obtained with difficulty because of political implications (and only at the intervention of SNRA officials) has been reproduced on page 115a partly to demonstrate the poor quality of mapping. In both Llamacachi and Chua Visalaya leaders maintained that certain respected individuals were in possession of old plans, demarcating plots of cultivable land and dwelling sites. The author pursued such advice hopefully, but after endless and fruitless quests concluded that even if such maps had ever existed they had long since disappeared or been destroyed.

A difficulty not anticipated was that of actually defining the boundaries of the two communities on the ground, for the purpose of mapping. Admittedly, this was no problem in the highly-prized environs of the lake and within the valley area of Chua Visalaya but, away from the main zones of settlement, where land becomes increasingly rugged and terrain unsuited to cultivation purposes, even the oldest inhabitants were dubious about limits. As a result of Llamacachi's turbulent history, boundaries have frequently been modified. Llamacacheños currently graze their sheep on Compi's hillside pasture lands and thus that particular boundary line assumes little significance. In Chua Visalaya different situations have arisen. In 1957 the adjoining communities of Pacharía and Pallareti forwarded petitions to the SNRA asserting that between 1900 and 1952 certain of their lands had been usurped and forcibly incorporated into Hacienda Chua by successive landowners. Although they were consequently awarded small tracts of bordering territory, boundary lines remain a bone of contention in this area. The Secretary of the Mobile Brigade (SNRA) operating in the lakeside region, referring to this unsatisfactory situation as recently as 1968, regretted that earlier attempts at boundary delimitation had had to be abandoned because of the general spirit of belligerency and threat of physical violence to surveyors.[18]

Unfortunately the present researcher's time was limited and accurate surveying, had the necessary equipment been at hand, would have necessitated considerable reductions in the time allotted for interviewing, thus detracting from the main purpose of the analysis. The author regrets such circumstances but hopes that shortcomings in the field of mapping will be afforded sympathetic consideration.

One invaluable aid to mapping and the making of comparisons must be mentioned i.e., the aerial photograph taken in 1956. This particular print (also procured with difficulty for obvious political reasons) was of import in numerous ways. The different patterns of land usage clearly demarcate the boundaries between Llamacachi and the neighbouring <u>haciendas</u> in the region of the lakeside; the photograph reveals the settlement pattern in the mid-1950s, enabling valid comparisons to be made with the present; amongst other things it emphasises the ruggedness of the terrain and the widespread

COMPI | LLAMACACHI | CHUA VISALAYA | CHUA CAYACOTA

LAKE TITICACA

Aerial photograph of the Chua/Llamacachi region 1956 (Instituto Geográfico Militar, La Paz)

occurrence of pre-Columbian hillside terraces; better than any map it shows the extent of totora (reed) beds and the incursions of the lake into Llamacachi's cultivable shorelands. At various stages of the text, photographs (printed from colour slides) are inserted, sometimes in an attempt to augment or reinforce information presented on maps. It is considered that in some cases colour photographs convey the features of the landscape more vividly than could any map.

(c) Structured interviews

A questionnaire to be applied in toto to all households of both communities was devised in La Paz and finalised with the aid of the translator: the questions are reproduced overleaf. They were designed to satisfy a number of requirements: to provide information on population structure, on land tenure and usage, on other forms of economic activity within the communities, on the general migratory process, on campesino opinions about social and economic change, local problems and needs, and on aspirations for the future. Answers and subsequent analyses of the findings constitute the major part of the present thesis. Every attempt was made to avoid questions likely to cause offence: numbers 9 and 14 posed the greatest problems. For a variety of reasons (some already specified) householders were frequently unwilling or unable to divulge the size of their holdings. Whilst sometimes it was deemed expedient to omit the question on family size, this topic usually stimulated lively discussion, revealed a remarkable diversity of viewpoints, and was significant in illustrating changing attitudes towards social and economic life.

Some of the difficulties confronting the interviewer have previously been mentioned. Although loss of time was frequently regretted, it was advisable to wait patiently whilst interpreter and informant discussed local affairs in Aymara before proceeding to interview on the above lines: little cooperation could have accrued from an abrupt approach. Usually the head of the household was interviewed, sometimes in conjunction with his wife or sons, but when the family head was not available and his wife willing to participate, this was welcomed as an alternative and often felt to be more rewarding. In a few isolated cases, entire households

General Questionnaire

Date of interview

Name and age of family head

(Person interviewed if different from above)

Location of house Number and appearance of buildings

1. How many people live in this house at the moment?

2. Who are they? What are their approximate ages?

3. Which members of the family are away from home at present?

4. Have there been any births in the family between the last two harvests?

5. Has any member of the household died during the same period? If so, at what age? Did he (she) visit the nurse in Huatajata?

6. Are there any children of school age not attending school at present? If so, why not?

7. How many members of the family speak Spanish? Did you ever attend school? Do you think education is important?

8. How many people in the household work most of the time in the fields?

9. How much land do you own or share? How many parcels and where? Do you own or rent land in other communities? Do you think that you have more or less land than your father and grandfather? Why?

10. What crops do you grow? What products do you sell? Which members of the family sell them? Where and how often? Do you sell greater quantities than you used to? Do you think your crop yields are higher nowadays? What do you do when your plants are diseased?

11. Do you use any fertilisers, pesticides etc? If not, why not?

12. How many animals do you keep? Are any of them jointly owned? Do you keep more animals than you used to do? What do you do when they are ill?

13. What other means does the family have of earning money? Do any members of the family go to work temporarily in La Paz or elsewhere during the rainy season?

14. What do you think is the ideal size of family? Why?

15. Where are the children who are absent from home?

Questionnaire continued

16. Why did they leave the community in the first place?

17. Do they intend to return? What do you think about it?

18. What sort of work do they do? Did they have difficulty in finding work? Do they help you at harvest time or on a financial basis?

19. Are you happy living here or would you prefer to move elsewhere if you had the opportunity? If so where? If you say your family is short of money why do you not move to the Yungas?

20. Do you have another house in La Paz or in another community?

21. What do you think have been the most important changes taking place of recent years?

22. Is life easier nowadays than it was?

23. What is the greatest problem in your household? What do you need most urgently?

24. What do you think is the most acute problem in the community? What is the community's greatest need at present?

25. (Only applicable to Chua Visalaya) Do you belong to either the cooperative or the syndicate? Why did you become a member?

were absent for no apparent reason on a number of occasions; consequently, material was compiled with the assistance of neighbours, although it was obviously impossible to obtain replies to the questions demanding the expression of personal opinions. Questioning was accomplished solely by the interpreter in a limited number of instances, where householders were known by her to be exceedingly suspicious and the author's presencedeemed inimical to the interviewing process; more than once this was so cleverly manoeuvred (without any papers being in evidence) that all essential information was gleaned without the participants' awareness of having acted as informants. Highly unorthodox methods had to be employed on the rare occasion e.g., twice when householders refused to divulge details about their livestock, a young relative of the interpreter counted the animals whilst supposedly retrieving a catapult from the enclosures adjacent to the outbuildings.

Additional interviews were conducted to obtain specialised information or when participants were eager to impart details other than those required by the questionnaire. The corregidor in Llamacachi, the general secretary of the syndicate and president of the cooperative (Chua Visalaya), local school teachers and the extension agent of the National Community Development Programme (a resident of Llamacachi) were the main people questioned about their work and community organisation. One of the Llamacacheño boys recently returned from military service and a younger girl (both attending weekly English classes, given by the researcher as a result of numerous requests) offered to write down their impressions of community life and their plans for the future: this was an interesting and enlightening contribution. Visitors to the communities, such as the Huatajatan nurse, the UN veterinary surgeons (see p. 46) and various government officials, sometimes volunteered valuable information and expert advice. Most of the remaining material was gathered in La Paz but useful data were also collected in the course of two visits to the nearby agricultural experimental station of Belén.

(d) Participant observation

Whilst the impossibility of intruding upon community life without causing some measure of disruption and modification is indisputable, the extent to which the individual outsider becomes 'accepted' within

the community framework is closely related to his own attitudes and behaviour. Living within Llamacachi, eating with local families, travelling by public transport, sharing community discomforts e.g., the need to collect water from distant wells or to rely on candles and kerosene lamps - all these activities appeared to meet with local approval and eased the process. Sometimes 'integration' was promoted in totally unintended ways; the ability to knit quickly is a prime example. Being a participant involved attending local markets, fiestas and an international fair at Casani (near Copacabana), being present at community meetings and functions, such as weddings and funerals, chatting with the womenfolk washing clothes in the river or with families working in the fields. (Obviously, since ceremonies and discussions are customarily conducted in Aymara, much of the observation would have been meaningless without the company and explanations of the interpreter). Not infrequently the author accompanied onion vendors to La Paz by one of Llamacachi's two trucks. Although the journey could take four hours to complete and became extremely irksome, it was regarded in the vicinity as one of the social highlights of the week - an occasion on which news could be exchanged and community affairs discussed. Parts of Saturday afternoons were sometimes spent observing transactions in the Avenida Montes market in La Paz, where Llamacachi rents a section of the pavement for the purpose of selling onions to Paceños.

(e) Information from La Paz

Documentary and statistical material

The main sources of such information are listed below.

Sección de Investigaciones Sociales, Servicio Nacional de Reforma Agraria for Expediente No. 4445A and for making available various publications on social and economic aspects of change in the post-reform period.

Banco Agrícola for information on 'La Cooperativa Agrícola Integral 'Chua' Limitada'.

Ministerio de Planificación y Coordinación for providing statistical data and for a copy of Revista de Planificación y Desarrollo: Análisis Crítico del Decenio de Desarrollo 1960-1970.

Instituto Geográfico Militar for the aerial photograph of the Chua-Llamacachi region and for the 1:50,000 topographical sheets.

Servicio Geológico de Bolivia for permission to make a copy of the unpublished geological map of the Achacachi area and for access to the thesis (1963) of F. Blanco V., entitled Estudio Geológico de la region sudoriental del Lago Titicaca, Provincias Manco Kapac y Omasuyos del Departamento de La Paz, República de Bolivia .

Servicio Nacional de Meteorología e Hidrología for reproducing statistics for the meteorological stations, Copacabana and Belen.

Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) for providing a copy of Inventaración de Recursos Naturales de Bolivia by I. Montes de O. and Dr. C. Brockman (1971).

Valuable information was also obtained from the United Nations, USAID/ Bolivia, the British Agricultural Mission and the British Embassy, La Paz.

Interviews and consultations

Acknowledgements have already been made to a number of Bolivian officials and overseas advisers. Below is a more comprehensive list of persons to whom the author is particularly indebtedfor information and advice.

Dr. Arnold and other veterinary surgeons of the Ministerio de Agricultura: Servicio Técnico Ganadero for general information on animal husbandry in the lakeside region and for visiting Chua Visalaya to inspect livestock.

Dr. A. Ballantyne of the British Agricultural Mission for advice on crop diseases and on soils.

Mr. G.F. Baumann, Director of the Peace Corps Programme in Bolivia from 1967 to 1971, for information on community development projects.

Father Tom Davy, Organiser of Proyecto Oxfam: Extensionistas Cooperativas, for information about the functioning of the Oxfam project. Father Davy was also consulted on a visit to Oxford in 1972.

Dr. V. Paz Estenssoro for answering a number of searching questions on MNR policies and economic development in Bolivia.

Ings. S. Rivas V. and R. Mercado C. of GEOBOL for information on the geology and soils of the lakeside region.

Dr. H. Romero B., Srs. L. Calderón and M. Mamani of the SNRA were frequently consulted and gave invaluable assistance in a number of ways. The author is indebted to K. Barnes von Marschall for advice on field work techniques and for translating a preliminary report into Spanish.

Mr. L. Vanderslice for information about research investigations in Jank'o Amaya (a community in close proximity to Llamacachi).

(f) Previous research work on the Lake Titicaca region

A general bibliography would be out of place at this preliminary stage of the thesis. Instead, the author will make reference only to publications (based on field investigations in the northern Altiplano and lakeside region) which have proved particularly helpful.

Publications of the pre-reform period

H.G. Dion, Agriculture in the Altiplano of Bolivia (Washington FAO: Development Paper No.4, 1950).

G.M. McBride, The Agrarian Indian Communities of Highland Bolivia (New York, 1921).

Ministerio de Agricultura, Ganadería y Colonización, Estudio socio-económico en las provincias de Omasuyos, Ingavi y Los Andes del Departamento de La Paz (La Paz, 1946).

Post-reform publications on the lakeside region

H.C. and J-M. Buechler, The Bolivian Aymara (New York, 1971).

J-M. Buechler, Peasant Marketing and Social Revolution in the State of La Paz (McGill University, 1972).

M. Burke, An Analysis of the Bolivian Land Reform by means of a Comparison between Peruvian haciendas and Bolivian ex-haciendas (University of Pittsburgh, 1967).

W.E. Carter, Aymara Communities and the Bolivian Agrarian Reform (Gainesville, 1964).

M.F. de Lucca D., El sistema de la Tenencia de la Tierra en las Originarias Comunidades de la Provincia Manco Capac, Departamento de La Paz (SNRA, La Paz, 1970).

Recent publications on social and economic changes

R.J. Alexander, The Bolivian National Revolution (New Jersey, 1958).

R.J. Clark, Problems and Conflict over Land Ownership in Bolivia (Land Tenure Center, University of Wisconsin, 1969).
Land Reform in Bolivia (USAID/Bolivia and Land Tenure Center, University of Wisconsin, 1970).
Reforma Agraria y Integración Campesina en la Economía Boliviana (SNRA, La Paz, 1971).

D.B. Heath, C.J. Erasmus, H.C. Buechler, Land Reform and Social Revolution in Bolivia (New York, 1969).

W.J. McEwen, Changing Rural Bolivia (Final Anthropological Report for Peace Corps /RISM Bolivia Project, 1969).

A. Omran, W.J. McEwen, H. Zaki et al., Epidemiological Studies in Bolivia (Final Report for the Peace Corps/RISM Bolivia Project, 1967).

Ministerio de Planificación y Coordinación, Revista de Planificación y Desarrollo: Análisis Crítico del Decenio de Desarrollo 1960-1970 (La Paz, 1971).

D.A. Preston, 'The Revolutionary Landscape of Highland Bolivia', Geographical Journal 135 (March, 1969).

Sección de Investigaciones Sociales, SNRA, Evaluación de la Reforma Agraria: Cap. Vll Efectos Sociales y Culturales de la Reforma Agraria (La Paz, 1970).

Additionally, the author has gained invaluable information from various papers and articles written by the following: Professor R.J. Clark (USAID/Land Tenure Center, University of Wisconsin); Dr. D.B. Heath (Peace Corps/RISM Project); K. Barnes von Marschall (Peace Corps/RISM Project and the SNRA); Dr. R.W. Patch (American Universities Field Staff) and Dr. D.A. Preston (Inter-American Committee for Agricultural Development (CIDA) and the University of Leeds).

Footnotes and References - Chapter II

1. Awarded by the Royal Society from the 20th International Geographical Congress Fund.

2. H.C. and J-M. Buechler, The Bolivian Aymara (Case Studies in Cultural Anthropology, Syracuse University, 1971).

3. This was provided by the Federación Departamental de Trabajadores Campesinos de La Paz.

4. Because of the prior dismissal of all Peace Corps personnel and obvious similarities in appearance, the author was officially advised to be prepared for problems created by such confusions.

5. Fears of this nature arose from various anthropological investigations carried out in the lakeside area; such intrusions were naturally resented.

6. They were asked to stop the fighting, to negotiate a peace settlement between the two factions, to provide immediate medical assistance, to petition the SNRA for a further land commission and to accompany seriously injured campesinos to the Red Cross headquarters in La Paz.

7. This was a survey (by the Ministry of Agriculture and Colonization) of 39 haciendas in the northern Altiplano and lakeside region.

8. M. Burke, 'Land Reform and its Effect upon Production and Productivity in the Lake Titicaca Region', Economic Development and Cultural Change (1970). Burke claimed that in nearly every Bolivian ex-hacienda within his region of study (the eastern margins of Lake Titicaca) population had increased by between 50 and 100 per cent since 1953.

9. The figure of 308, quoted in The Bolivian Aymara (1971), was based on field investigations of the late 1960s.

10. The census was made for the National Community Development Programme (NCDP), which came into being in 1964.

11. An expediente is a dossier compiled by the SNRA as a preliminary to land redistribution. Each expediente contains accumulated documents relating to the estate concerned.

12. W.E. Carter, Aymara Communities and the Bolivian Agrarian Reform (Gainesville, 1964), p.5.

13. This was in connection with the Research Institute for the Study of Man (RISM)/Peace Corps epidemiological survey and the publication of Changing Rural Bolivia (A Final Anthropological Report for the Peace Corps/RISM Bolivia Project, 1969).

14. The said patrón (a wealthy North American) had apparently been drowned in mysterious circumstances in the late 1950s. According to local opinion, the manager of the estate had subsequently been imprisoned for reputedly assassinating the Bolivian administrador (after accusing the latter of murdering the landlord and 'over-dipping' a number of hacienda sheep).

Footnotes and References - Chapter II (continued)

15. The mayordomo was the hacienda official who managed the estate in the absence of the patrón. In the lakeside region, he was invariably a mestizo or blanco.

16. The corregidor was in hacienda times the mestizo ruling a cantón. In the post-reform period, the corregidor acts as aide to the cantonal intendente, the person now vested with judicial and police powers.

17. Today this constitutes no less a problem - 25 of 32 members of the Visalayan section of Cooperativa Chua Integral Limitada are named Mamani, either maternally or paternally - in some cases, both.

18. '.... Tanto los campesinos de las ex-haciendas como los comunarios.... se encontraban en un ánimo de beligerancia asonados seguramente por dirigentes y para evitar roces y hechos sangrientos, tanto la Brigada... tuvo que suspender dicha delimitación y alindorimiento, fuera de haber tenido buena voluntad en solucionar éste problema que viene mantenido desde hace muchos años atrás.....'

CHUA VISALAYA AND LLAMACACHI

CHAPTER III - THE PHYSICAL BACKGROUND: LIMITING FACTORS

The regional setting

Chua Visalaya and Llamacachi are located at the intersection of latitude 16° 11' south with longitude 68° 46' west. They are situated in close proximity to the Republic's western boundary line with Peru and centrally in terms of Bolivia's latitudinal extent. A cursory glance at the map might lead one to define their position as adjacent to the south eastern shorelines of the world's allegedly highest navigable lake - Lago Titicaca, alternatively known as El Lago Sagrado (the Sacred Lake) and locally as Veñay Marca. This description lacks precision: the communities in fact adjoin the eastern edges of El Lago Chico (Huiñaymarca), which is almost completely separated - at the Tiquina Straits the lake is less than one mile in width - by the sharp promontories of the Santiago de Huata and Copacabana peninsulas from the much larger and deeper Lago Grande i.e., Lake Titicaca proper. Traditionally, movements of armies and merchandise proceeded along the more amenable south-western shoreline of the lake, purposely avoiding the problematic, irregular margins in the area under consideration. Whereas the Peruvian shorelands gradually merge into an extensive, monotonous, dry meseta, interrupted only by the occasional deeply-incised river valley, east of the lake the land rises abruptly and spectacularly to the lofty summits of the Andean Cordillera Real. Permanently snow-covered Illampú (Ancohuma), at 21,522' Bolivia's highest peak, lies less than 40 miles north-east of the communities. It forms an integral part of a serranía (the most northerly of five such ridges) of Palaeozoic massifs, resting on a granitic core and trending in a south-easterly direction (as does the lake) from the Peruvian border to the Pass of Luribay in the environs of La Paz. Averaging over 18,000' for more than 100 miles, this ridge functions as an important climatic divide and no less as a human one, in that it acts as an almost insuperable barrier to communication and thereby isolates the eastern cordilleran slopes, deeply scored by tributaries draining towards Amazonia, from the densely peopled northern Altiplano and lakeside region.

Reference was made on page 28 to the seemingly intractable problem of delimiting Chua Visalaya and Llamacachi with any measure of accuracy. Territorial adjustments resulting from the expansion and reorganisation of haciendas have been partially to blame for such difficulties. For example, in the mid-nineteenth century, Llamacachi was a section of the much larger comunidad originaria Tauca; subsequently the other three components of the community were alienated by Compeño landlords and at the turn of the century, after a bitter struggle for survival as a separate entity, Llamacachi came temporarily (for a period of nine years) under the control of Hacienda Chua.

One of the most reliable guides to present-day boundaries is El Plano de la Propiedad, Chua Visalaya drawn by an SNRA surveyor in 1957. On this, the total area of Chua Visalaya is stated as being 2276.5425 hectares (approx. 5625 acres) and the following subdivisions are made:

Area cultivated by the hacienda	40.8700 hectares
Area cultivated by colonos	87.4423 hectares
Area of aynokas (see page 84)	630.0000 hectares
Area occupied by school buildings and sports field	2.5950 hectares
Area of incultivable land	1515.6352 hectares
Total -	2276.5425 hectares

From the map (reproduced overleaf), it will be noted that much of the terraced hillside area adjacent to western Visalaya lies within the confines of Compi rather, than as might be expected, in Llamacachi. On the aerial photograph a part of the latter's boundary line is clearly defined i.e., it coincides with the eastern limits of the then large-field system of Hacienda Compi. Thus on paper the community of Llamacachi would appear to be much smaller in total area than contiguous Chua Visalaya - to be literally 'squeezed' between two extensive ex-haciendas. Without elaborating further the author could be accused of attempting non-viable and meaningless comparisons. In defence it must be explained that in the lakeside region total land area figures are entirely misleading: it is realistic to think only in terms of potentially cultivable land, where boundary lines are well defined and of vital significance. Thus the greater part of Chua Visalayan terrain (see above) is completely unsuited to cultivation and is, on the contrary, almost as widely grazed by Llamacacheño livestock as by Visalayan. Moreover, as previously mentioned,

Llamacacheños enjoy free access to the pasture lands of neighbouring Compi. Although Llamacachi's cultivable land only comprises about 75 hectares (Buechlers, 1971)[1], the community's tract of intensively cultivated, highly productive land south of the through-road does in actual fact exceed that of Chua Visalaya. In any case, it does not represent the total area devoted to arable farming by the community: it will be shown that a number of families have access to parcelas (land plots) elsewhere. For example, in 1971 the translator's father was cultivating two parcelas in Llamacachi itself, but also two in Compi, two in Cawaya (originally a section of Tauca community) and one in Chua Visalaya - all as a result of mutually agreed anticrético[2] arrangements. Obviously, whether describing environmental factors or economic activities, it is valueless to approach the communities as units separated from each other by rigid boundary lines.

The map of the lakeside region (page 18a) illustrates the spatial relationships between Llamacachi/Chua Visalaya and various nucleated settlements with which important social, economic and political links have been established - or extended - in the post-revolutionary period. In the immediate neighbourhood are situated the cantonal centres of Huatajata and Jank'o Amaya (Jankho Amaya). The former, a lakeside community several miles east of Chua, operates an ever-expanding weekly market, has a well-developed cash economy based on fishing, pig breeding and onion growing, and derives considerable prestige from accommodating a thriving Bolivian Yacht Club and providing the starting point of hydrofoil excursions for tourists: the rising status of Huatajata in the general lakeside zone can be judged from the fact that 'bus company advertisements in daily newspapers make reference only to Huatajata and Copacabana as scheduled stops on the eastern route from La Paz to Puno (Peru) and also from the fact that during the researcher's stay in Llamacachi, certificates were presented at the Huatajatan secondary school by an ex-President. Jank'o Amaya, lying inland in a position where the road from Huarina to Copacabana veers south and a badly-maintained loose-surface road continues northwards to Santiago de Huata and Achacachi, also has a flourishing market. Both markets are frequented by campesinos from Llamacachi and Chua Visalaya and in both places seeds and artificial fertilisers may be purchased from stores managed by representatives

of the NCDP. Additionally, Huatajata offers the nearest available medical services and several children from the communities under investigation attend its highly-esteemed secondary school.

About 15 miles east of Chua and 45 miles north west of La Paz, at the most easterly point of the lake, is located the old mestizo township of Huarina: it is at the centre of Huarina that the road from the city bifurcates. One branch continues through the town to Achacachi, the capital of Omasuyos, in which province Chua Visalaya and Llamacachi are both situated. At the time of the National Revolution Achacachi was a focal point of campesino political activity in the northern Altiplano region: it maintains a wide reputation for unrest and belligerency. (Rumours of "hombres de Achacachi" coming actively to participate in the Visalayan land struggle provoked genuine fear amongst both factions). Whilst Achacachi is nowadays easily accessible by road (via Huarina), the journey - a strenuous one - can also be completed within a day by walking over the mountains. Two miles north west of the provincial capital is El Estación Experimental del Altiplano, Belén, which has been staffed since 1948[3] by an international team of agricultural experts. The station conducts experiments on crops and in animal husbandry, incorporates the NCDP's central office for the provinces of Omasuyos, Los Andes, Manco Kapac and Larecaja, and organises the retail sale of seeds and livestock to campesinos: since 1968, the affiliated Institute has offered a four years' course on practical farming. The westerly road from Huarina clings to the lake shore, passing through Huatajata and the two communities, and so on to the Tiquina Straits, negotiated by flat-bottomed ferry boats, except at times when strong winds make the crossing dangerous. The track winds on to Copacabana, which originally served as a place of recreation for the Inca royal family; it is now a centre of pilgrimage and is developing as a tourist resort both for Paceños and foreign visitors. Once past the town the significant link is made with the main route from La Paz: this follows the western shoreline of the lake and ultimately bears westwards in the general direction of Arequipa, Peru's third largest city.

Altitude

Under normal circumstances it would be deemed premature and

unnecessary to introduce altitude as a separate theme at this juncture: in the special case of highland Bolivia, altitude merits extraordinary treatment. To what extent great elevations above sea level impose limitations on settlement and agricultural activities is an issue traditionally provoking marked divergences of opinion: exaggerations and misconceptions arising from it are hard to dispel. Undoubtedly height places restrictions on plant life but frequently problems and failures are falsely attributed to the supposedly detrimental effects of altitude: in certain respects, altitude may actually function beneficially e.g., in the prevention of disease spread by insect vectors.

Carter (1971)[4] asserts that the surface of Lake Titicaca lies about 12,592' above sea level. This - assuming original survey work for the 1:50,000 topographical sheets to have been accurate - overstates the actual elevation: on the said sheets, land contiguous to the lake is shown as lying below 3,900 m (12,796') above sea level and the approximate surface level of the water is marked as 3,810 m (12,500') above sea level. Discrepancies of this order in no way detract from the exceptional altitude of the Altiplano and general lakeside region. As the map (p. 50a) illustrates, large tracts of land in Chua Visalaya and Llamacachi exceed heights of 4,000 m (13,124'): the summit of Cerro Jipi, the highest eminence in the llama pasturelands, lies at 4,559 m (approximately 14,958'). It is not surprising that local campesinos express pride in inhabiting 'the roof of the world', nor that some genuinely believe their petitions receive preferential attention because (so they say) proximity to the heavens and the existence of clear skies facilitate communications with God and with the Aymara spirit world.

The general limitations placed by altitude on the natural vegetation and on crop cultivation are obvious. Granted that temperature falls about 1°F for each rise in height of 300' (adiabatic lapse rate) one would expect a considerable reduction of sea level temperatures in this part of Bolivia. Whereas Cuiabá (16° south, 56° west and only 541' above sea level) in the Brazilian Mato Grosso exhibits an average monthly temperature of 80°F (27°C), the corresponding figure for Belén (16° south, 68° west and 12,534'

above sea level) is only 45°F (7°C), frost being imminent in every month of the year. Since plant growth is also a function of soils and climate in the broader sense, it will receive consideration later in the chapter.

A popular misconception stems from the misplaced belief that high altitudes are inevitably inimical to health and every visitor must be prepared to endure extreme discomforts from soroche (mountain sickness) and digestive disturbances: contemporary TV documentaries, affirming that each and every step on the Altiplano is a struggle for very life, do little to dissipate such notions. Protagonists of these viewpoints contend that through the centuries, upland Indians have become physiologically adapted to an almost unique environment i.e., they have evolved expanded lung cages permitting slower and deeper breathing, and presently have 40 per cent more red corpuscles in their blood than the normal quantity. Thus it is maintained that whilst a deficiency in atmospheric oxygen causes respiratory difficulties in the newcomer to the Altiplano, conversely it is virtually impossible for the upland Indian, in consequence of his physical adaptations to high living, to become acclimatized to the much lower Yungas valleys - that colonization projects in the lowlands can never provide effective means of alleviating population pressure in overpopulated highland regions.

Both aspects of this argument lack scientific foundation. Balcazar (1937)[5] asserted that because physiologically La Paz at a height of 12,000' (barometric pressure 490.4°) is equivalent to an altitude of about 5,500' in the Alps, much of the so-called 'discomfort' accrues from suggestibility and a too rapid change from the atmospheric conditions of the Pacific coast. Failures of colonization schemes in the post-revolutionary period have not resulted from the impossibility of acclimatizing to a completely alien natural environment: it has been conclusively established that even in pre-colonial times Aymara colonies existed in coastal regions. Rather one must take into account such factors as deeply-engrained emotional attachments to the Altiplano and a general reluctance to migrate from the homeland, the necessity for growing an entirely different range of crops (tropical as distinct from temperate), inadequate communication lines and marketing facilities,

The improved lakeside road from Huarina to Chua Visalaya and Llamacachi (see map p.18a). Fatal accidents frequently occur as a result of truck drivers overtaking whilst their vision is impaired by dust clouds, and colliding with oncoming vehicles.

In complete contrast, a section of the La Paz-Chulumani (Sud Yungas) road - a tortuous, perilous track descending more than 10,000' in a distance of less than 50 miles and, not unnaturally, greatly feared by lakeside campesinos.

and the lack of a health programme enabling colonists to receive protection by immunization from tropical diseases.[6] Undeniably 'contagio' (resembling pneumonia) and various chest and lung infirmities, all accepted as commonplace in the communities under observation, are induced by excessive cold at high altitudes, yet more protective clothing against the cold nights and improved sanitation could do much to ameliorate such health conditions. Furthermore, whilst TB remains rife and is usually directly linked with elevation, the RISM/Peace Corps team concluded that, at least in Bolivia, altitude and climate do not affect the prevalence of TB infection - the major determinants are socio-economic in essence.[7]

In favour of settlement at high altitudes, the same survey emphasised that low temperature - especially in tropical latitudes - is an important element in controlling disease. Whereas in Bolivia any region below 5,000' is considered as a potential yellow fever zone and in some parts of the lowlands malaria is still endemic, on the Altiplano and in the environs of the lake insects are generally unable to withstand the rigours of the climate and thus pose few problems. This is a redeeming feature in view of the fact that many watercourses are not permanent and stagnant water is often in evidence. (In a region lacking sanitation and in which the water table approaches the surface, hollows created by the removal of earth for constructional purposes could furnish ideal breeding grounds for insects such as mosquitoes). Similarly, the Altiplano is spared most crop diseases caused by soil-borne parasites.

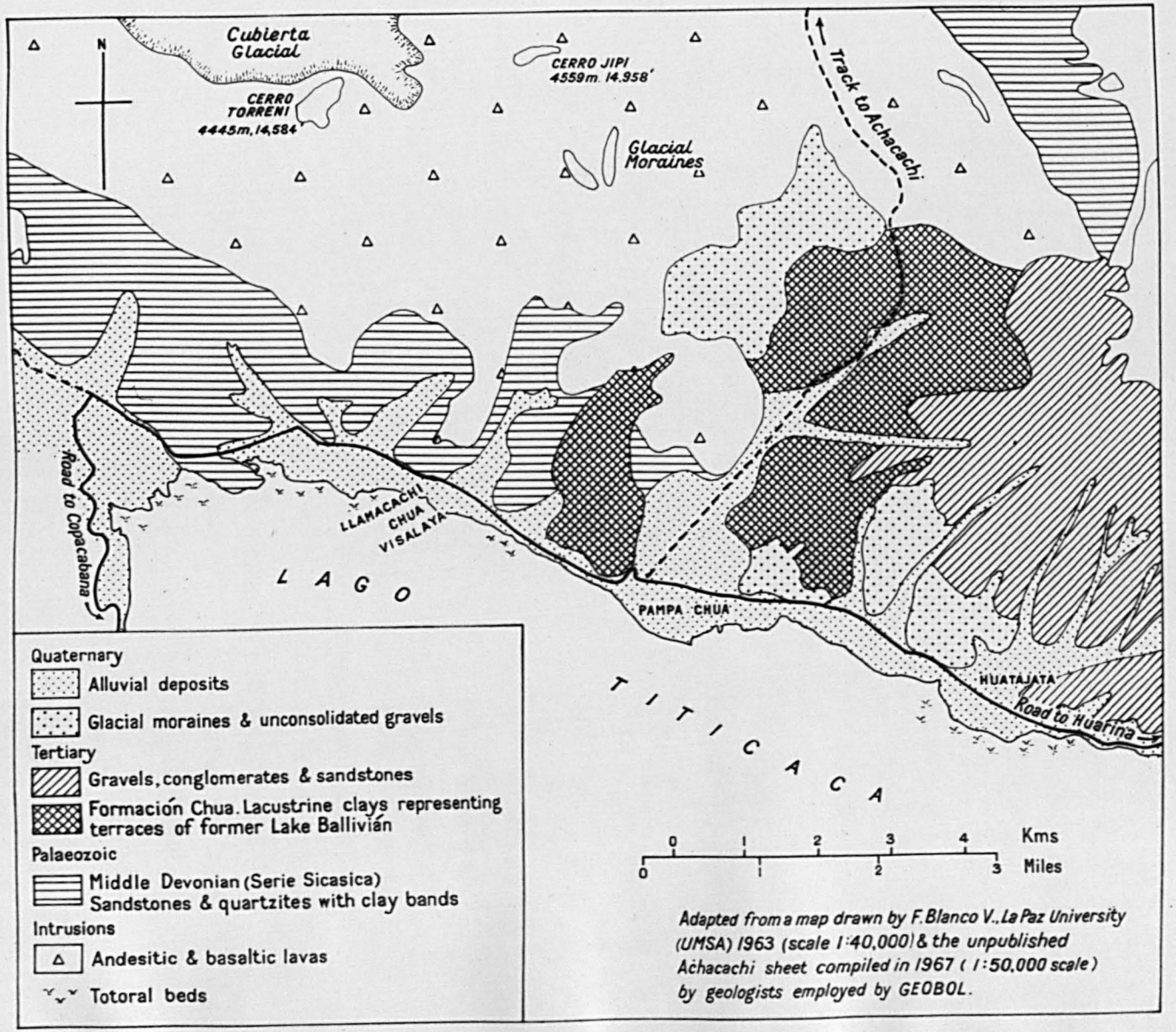
Agronomists working with the Bolivian Ministry of Agriculture, with USAID and with the British Agricultural Mission were consulted about the relationship between livestock breeding and high altitude. More than one asserted that respiratory problems and low fertility levels in animals - both widely accepted as logical consequences of life at high altitudes - impose severe restrictions on the commercialisation of animal production. One was convinced that, with the exception of sheep, only the cavy (guinea pig) and wild duck, both indigenous to the area, could be reared profitably and that to introduce good pedigree stock to certain parts of the Altiplano and lakeside area involves wasteful expenditure because of the insurmountable difficulties of acclimatization. It cannot be denied

that the thinness of the air may be an important controlling factor e.g., for some types of poultry the oxygen concentration is too low for economic hatching percentages and production therefore impracticable. On the other hand, from its foundation Belén has carried out tests on different breeds of animals and has achieved creditable results with Holstein and Brown Swiss cattle, with Romney Marsh and Corriedale sheep, and more recently with New Hampshire hens. If it were so problematic to raise animals efficiently in the lakeside region, it is strange that the expediente for Chua should yield evidence such as the following: in the 1940s and early 1950s, the North American patrón obtained numerous national prizes for the remarkable quality of his stock e.g., in 1947 one of his Romney Marsh sheep was supreme champion and five years later he won the reserve championship with a Corriedale sheep and first prize with a Holstein bull. In 1954 the SNRA veterinary surgeon analysing the agricultural potentials of the estate wrote ... 'the property has better economic conditions for the exploitation of the livestock industry ... for orienting its activities towards the breeding of pedigree stock for sale throughout Bolivia, towards a milk industry, the production of wool for the textile industry and meat production...' Mortality in lakeside animals may certainly result from infirmities associated with lung disorders but more often is due to poor care and attention. This fact was borne out by the results of samples taken from Chua Visalayan stock in August 1971: the veterinary surgeons concerned reported that no animal investigated was suffering from disease and concluded that the main reasons for such widespread losses were undernourishment and debility.

Geology and soils

As the geological map illustrates, the oldest rocks manifesting themselves at surface level in the Chua/Llamacachi region date from the middle Devonian period. This particular rock series, resting concordantly on lower Devonian strata, is known to Bolivian geologists as Serie Sicasica and covers wide expanses of the Santiago de Huata peninsula. In the locality being studied, the middle Devonian strata form the eastern side of the Jank'o Amaya anticline and are inclined at an angle of about 50° in a north-easterly direction. Mainly comprising medium-grained sandstones and quartzites, with occasional intercalating softer clay bands, they are on the whole

Chua Visalaya/Llamacachi Region: Geological



resistant to weathering and give rise to well defined 'hog backs', which approach the shoreline of the lake almost at right angles. The settlement of Chua Visalaya lies in the valley separating two such physical features, whilst Llamacachi straggles the more westerly scarp. From the aerial photograph it is obvious that in pre-Columbian days hillsides corresponding to the Devonian outcrops were intensively and carefully cultivated: walled terraces up to 4000 metres (approx. 13,124') obliterate the natural surface relief. Today some of the lower terraces are utilized but even these are generally regarded as marginal for most purposes. The photograph (page 20a) demonstrates the shallowness and rocky aspect of the porous soils: sparse clumps of poor grass are insufficient to bind together soil particles, and centuries of exposure to erosive agents, especially strong winds and sudden flashes, combined with uncontrolled grazing, have rendered many terraces virtually sterile. However, according to the resident campesinos, the main limiting factor lies not in the nature of the soil itself but rather in the unreliability of rainfall from October to April and the difficulties in the ensuing dry season of irrigating terraces at appreciable distances from the valley floor.

Along the eastern borders of Chua Visalaya and further east in Chua Grande (the wider valley drained by Rio Charoma Hahuira) partially consolidated sediments attain a thickness of 30 metres and are believed to represent terraces of the much more extensive ancient Lake Ballivián. It is thought that towards the close of the Tertiary era, beds of mud and clay were laid down horizontally in quiet lacustrine waters: to the residual material has been applied the local name Formación Chua (Tch). In the western part of Chua Grande the formation appears to have been breached and superimposed by extrusive volcanic rocks.

The final phase of Andean orogenic activity took place in Plio-Pleistocene times and was accompanied by widespread faulting; block faulting created the tectonic depression now occupied by Lake Titicaca. This was also the period during which vulcanicity occurred on a large scale. A lack of pyroclastic material suggests that volcanic activity was of a non-violent nature: fine-grained basaltic and andesitic extrusions obscure extensive areas of the Devonian strata and

sometimes reach a depth of 200 metres. On various plans of the old hacienda, these lava mesetas are classified as 'incultivable pasture lands': distance from settlement sites, increased altitude, bad drainage including the formation of iron pans, and rock outcrops all help to inhibit cultivation - except for very sporadic patches of quinua and bitter potatoes (both tolerant of basic soils and frost). Elsewhere, if not totally neglected, such areas are devoted to extensive, untended llama pasturing. During the prolonged dry season when grass on the hillsides near the communities is either non-existent or parched - "no hay pasto"-and sometimes in the rainy months when the valley lands are under crops, sheep are walked considerable distances into the cerros (hills): child-shepherds may remain for several weeks, temporarily living in rough stone mountain huts.

As shown on the geological map, the shorelands and lakeside valleys of the Chua Visalaya/Llamacachi region (largely corresponding to areas under present-day cultivation) are superficially covered by Quaternary deposits. These deposits are of varied origins: riverine, glacial, fluvio-glacial and lacustrine. In some cases rivers have spread fans of gravel around the bases of hill slopes. Much of the valley material of Chua Visalaya is glacial or fluvio-glacial: glaciers gouged out the lava plateaus and subsequently glaciers and rivers transported morainic material towards the lake. (Angular fragments of volcanic rocks measuring up to 30 cms (approx. 1') in diameter have in this way been strewn over sections of the valley floor). Homogeneous alluvial clays were left behind by the retreating lake: today, inundation and associated lacustrine deposition is a vital factor in the economic livelihood of the lakeside communities. Flooding, occurring on the average once every five years, may submerge nearly all land between the lake and the main road (according to the translator, in January 1972 even the road was flooded) and signify temporary disaster to certain campesinos, whilst the film of alluvium remaining after the water's withdrawal implies a partial replenishment of soil fertility and hence increased production for the following year.

On the map, Quaternary deposits are barely differentiated: it would be difficult to do so since there has been much admixture.

Along the restricted orillas (shorelands) of Chua Cayacota, gravels make cultivation impracticable: similarly, near the river banks in Chua Visalaya gravels predominate. Even in the old hacienda fields north of the road there are considerable accumulations of large stones. Sometimes these have been gathered and placed in low piles at the edge of parcelas of land or have been used in the construction of animal enclosures, but it is difficult to understand why there has never apparently been a concerted effort to transport all such rocks and stones to the valley sides, thereby extending the area of effective cultivation (according to the resident campesinos, such stones mask poor patches of land but obviously they are only 'poor' because of the actual surface cover of stones). In parts of the valley clays, providing the basic material for adobes and outhouses, are in evidence: unless irrigated during the dry season these soils become concrete-like and seamed with deep cracks. Elsewhere the soil assumes a loamy appearance and in certain patches sand (from the erosion of the Devonian sandstones and quartzites) has been deposited by streams and winds to form the characteristic soil. In the large tract of land south of the road i.e., the area subject to inundation by the lake, stones pose far less a problem and the surface becomes more uniform, alluvial clays predominating. Immediately adjacent to the lake, cultivation is precarious: at certain times of the year the land is waterlogged, during the dry season it is impregnated with salt - the only suitable usage of such areas is as totorales (reed beds).

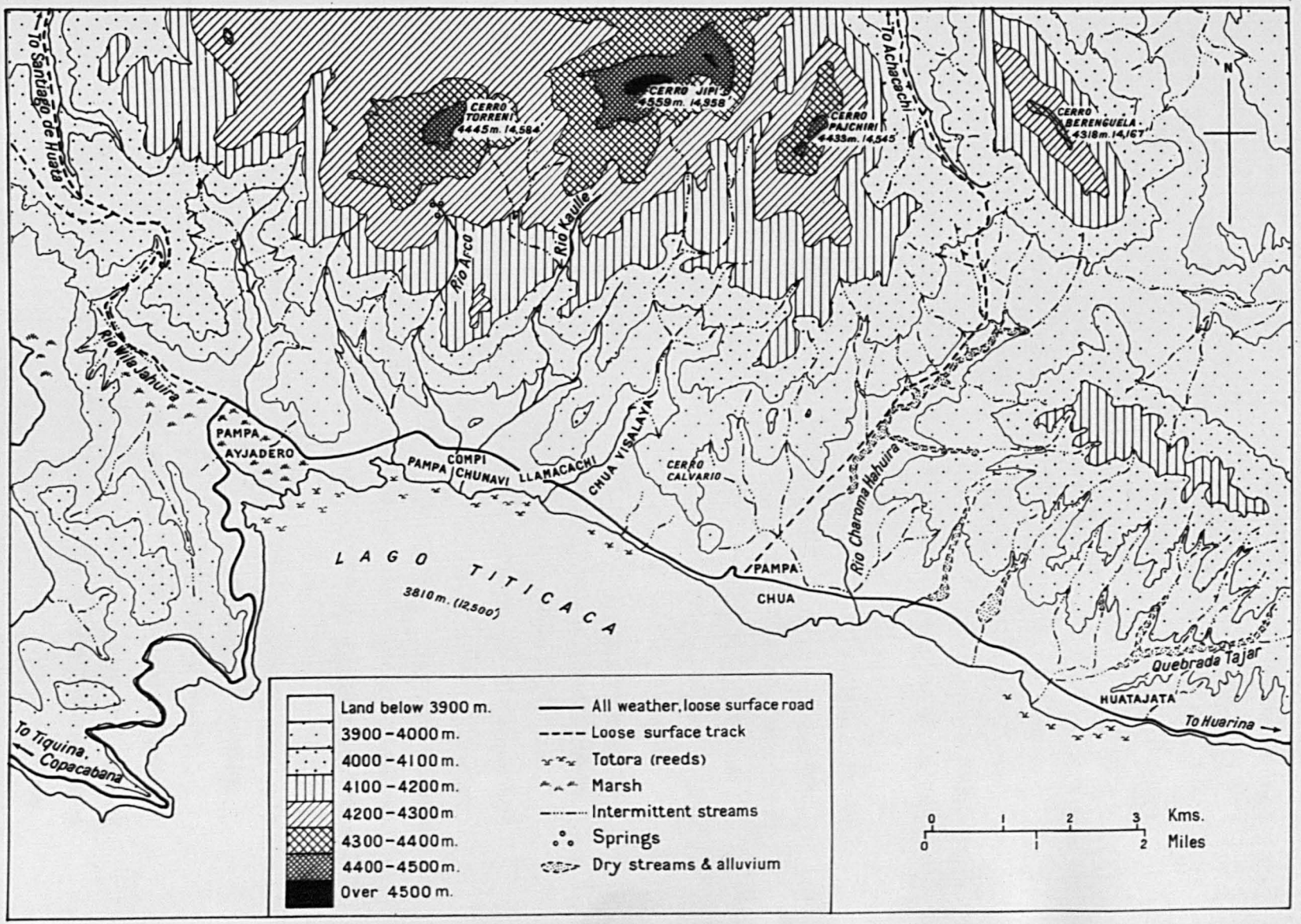
The Banco Agrícola's 1964 survey of Chua, stressed the difficulty of classifying local soils: 'From the point of view of its chemical composition, the lack of an analysis makes it impossible to classify the type of predominant soil'. It proceeded to assess the shoreland soils as third- and fourth-grade ones, whereas the SNRA survey of 1954 had classified them as first-grade. Even in the absence of a detailed chemical analysis, certain facts are self-evident. In common with the soils of the northern Altiplano those of the area in question are generally deficient in organic matter; this regrettable situation is emphasised in areas beyond the limits of lacustrine inundation. (Whereas no campesino can recall a period when lakeside land remained fallow for more than a few months, in the hacienda valley lands of Chua Visalaya three years 'en descanso'

(fallow) traditionally followed four years of production). Limitations on crop cultivation are imposed by lack of nitrogen and shortage of phosporus: deficiencies of the latter in the herbage may also be a restraining factor in livestock growth and (according to Dion, 1950)[8] contribute towards the low fertility rates in some animals. In the past, although farmyard manure was scarce (in the absence of timber it was primarily valued as a source of fuel and used for cooking purposes) certain rigid rotation patterns of cultivation, incorporating leguminous crops especially broad beans, were adhered to. Today, whilst rotation systems are gradually disintegrating as subsistence agriculture is superseded by cash farming, artifical fertilisers are readily available and can assist in counteracting mineral shortages, thereby stimulating plant development. Artificial fertilisers are widely used in the production of potatoes and onions in Llamacachi: in hacienda times they were intensively applied by the hacendado of Chua Visalaya but at present, with few exceptions, their usage is restricted to certain cooperative fields. The vital issue of soil erosion and degeneration and the urgent need for a conservation policy in an area demonstrating such acute population pressure on limited land resources, will receive lengthier consideration at a later stage.

Relief and drainage

Along the north eastern shoreline of the Santiago de Huata peninsula, where totoral growth is well developed (up to 5 miles in width), an already expansive plateau surface is being gradually extended by lacustrine sedimentation. Contrariwise, along the southern rim of the peninsula the terrain rises so suddenly and steeply from the lake that at certain points e.g., Chua Cayacota, it has been difficult to find sufficient space between the hillsides and the land liable to flood for constructing even a narrow road. With the exception of the immediate orillas and several valleys such as those of Compi and Chua Visalaya, widening as they approach the lake, level surfaces are few and far between. Where they do occur, as north of Cerro Jipi in the slight depression of Pampa Renquellhuisa (occupied by glacial lakes, the largest being Laguna Totorani, at a height of 14,371' above sea level), they are virtually inaccessible, frequently waterlogged and well beyond the normal limits of cultivation for most temperate crops. Within the general area the

Chua Visalaya/Llamacachi Region: Physical



over-all impression of surface relief is one of extreme ruggedness.

Northwards one approaches the large expanse of basalt and andesite - the area described by an SNRA surveyor (1954) as being 'compuesta de terrenos totalmente pedregoso, rocas, y escarpas inaprovechables' (formed of totally stony lands, rocks and uncultivable scarps). In this area what was presumably in former times a flattened lava plateau has been carved by glaciers and glacial rivers into blocks or mesetas. Relief attains its maximum elevation in Cerro Jipi, a mountain sacred by reason of its very height. Around the steepened slopes of such mountains, where erosion and frost shattering have been maximised, there are large rock-strewn patches and in places sheer vertical cliffs of andesite are exposed.

Within the general region of study a dendritic drainage pattern has evolved, all rivers and tributaries gravitating towards Lake Titicaca, which acts as the local base level of erosion. As the map illustrates, the majority of watercourses are intermittent i.e., they flow only during the rainy season and when invigorated by the melting snows of the cordillera. More often than not, streams marked as 'permanent' on the topographical sheets scarcely merit the classification. The one draining Chua Visalaya is extremely sluggish during the late winter months, and in years when the summer rains are delayed degenerates into a series of disconnected pools: conversely, in times of exceptionally heavy precipitation and sudden rain storms, it can overflow its banks. Thus in December 1971 (according to the translator) flow was of sufficient strength for the river to transport branches and even small eucalyptus trunks.

Although on the 1:50,000 topographical sheets springs are only shown as occurring on the slopes of Cerro Torreni and in western Chua Grande - in both instances near to the junction between Devonian sandstones and volcanic outcrops - they are by no means confined to these two localities; for example, springs and spring sapping are widely in evidence on the hillside at the head of Chua Visalaya's valley. Of recent years disputes about the allocation of water from the stream passing through Visalaya, and subsequently across Llamacachi's lakeside fields, have grown in intensity, Llamacacheños accusing their neighbours of withdrawing too much

water for domestic and irrigation purposes and damming the stream for the preparation of chuño (frozen and dehydrated potatoes), thereby severely limiting the quantity of water available for irrigation at the later stage. With this in mind, various Llamacacheños approached the researcher about the possibility of obtaining expert advice on the feasibility of constructing a small reservoir (in one of the mountain areas where springs are numerous) from which water could be pumped down to the community. When river water is in short supply, campesinas in Llamacachi are obliged to transport water from the lake for domestic and irrigation purposes. In view of the almost level surface of the tract of land between the lake and the road, it would seem an easier and more economic proposition communally to purchase and erect a simple pump at the lake edge, as a preliminary to channelling water to the thirsty fields. (Although the salt concentration in Lake Titicaca is probably higher than that in the rivers entering it (Ahlfeld,[9] however, estimates the lake's salinity as only '0,465 gr. de NaCl'), according to resident campesinos and from observations, usage of the lake water appears to have no adverse effects on arable farming).

Stagnant green water in disused or badly-maintained irrigation ditches, in river beds and hollows (from which earth has been removed for adobes) poses certain problems. The Ministry of Agriculture attributes outbreaks of liverfluke within the general area directly to this: currently, the NCDP encourages TDCs[10] to fumigate such waters with Folidol M40, but in fact this is not always done. For domestic purposes water is still drawn from open earthen wells. (Several womenfolk state that their basic problems in rearing young children arise from the necessity of bathing them in cold contaminated water). Families in eastern Llamacachi rely primarily on one such well near the river bed and the boundary between the two communities: towards the end of the dry season, when the water level lies more than six feet below the surface, the well has to be abandoned and water carried from a second opening at about 250 yards distance from the road.

Lake Titicaca

Completely dominating the landscape and to a large extent dictating the economic behaviour of those living beside it, is

Llamas owned by Visalayan campesinos roaming freely in the pampas north of the community i.e., terrain defined as 'incultivable terreno de pastoreo' on hacienda plans (p.40a). Llamas are bought by ex-colonos before Easter (p.128), used for transporting field produce at harvest time then sold to local butchers who subsequently trade the dried meat in Yungeño towns.

Summit of Cerro Jipi (14,598') held sacred by Aymara communities in the general area. Two ex-army cadets, the local representative of the NCDP (a Llamacacheño) and the researcher's translator are burning sacrifices to ward off evil spirits before praying for an abundant harvest. Achacachi, the provincial capital, is situated in the valley beyond.

Lake Titicaca itself. Psychologically it exerts an influence almost beyond the outsider's comprehension: the author was told a story of a local resident recently overturning in a balsa and onlookers declining to go to his aid, convinced that it was a privilege for him to be 'claimed' by the sacred lake. Several of the elderly campesinos gave as their main reason for not wishing to migrate, a reluctance to leave the lakeside rather than their own individual plots of land. It is hard to distinguish how far this is due to traditional attachment to the lake, how far to its moderating climatic and heliotherapic effects. One Llamacacheño, who had previously visited relatives near Oruro, said that although the campesinos there owned more land he did not envy them because they did not appear to be so happy - "the weather is colder and they have no lake like us".

Whilst El Lago Grande attains a maximum depth of 1500', according to Ahlfeld, at no point is the water of Huiñaymarca more than 20' deep. If this surprisingly low figure is correct, his hypothesis, that El Lago Chico will gradually disappear as a result of continuous sedimentation at the margins, cannot be dismissed lightly. On the other hand, whereas Ahlfeld et al. are convinced that the lake is shrinking, post-1946 statistical records indicate a general rise and inundation of certain orillas which once submerged are difficult to reclaim, even by planting totora to fix the sediments. Whether or not the lake is slowly diminishing is thus open to speculation, but seasonal fluctuations in surface level (in response to melting cordilleran snows) are proven: records kept by the Southern Railways of Peru point to an average surface level fluctuation in the order of 80 cm (approx. 2' 8") but give a figure of 16' (equivalent to Ahlfeld's total depth for Huiñaymarca) for maximum extreme differences of level. In Llamacachi and Chua Visalaya flooding constitutes a major, ever-present threat to farming: it can destroy young crops making them useless for anything but animal fodder. Damage is most serious to families whose only cultivable lands lie within the flooded area; to them it can only mean a prolongation of the period of food shortage commonly termed 'la miseria'. The few adobe dwellings south of the roadside have to be completely abandoned when flooding is imminent. But conversely, as has already been stated, the floodwaters leave rich alluvium in their wake and this is welcomed as a natural means of replenishing soil fertility.

There appears never to have been any attempt to prevent flooding by constructing any form of protective barrier; in their fatalistic manner the campesinos accept flooding as an unavoidable occurrence of life, ordained by supernatural powers.

The relationship between the lake and climatic elements is an intimate one. By reason of its vast expanse, the lake assumes the nature and properties of an ocean or sea. It exerts an equalising effect upon the lands adjacent to it, enabling temperate crops to be grown at far higher altitudes than would normally be practicable; secondly, it stimulates crop development by increasing precipitation. A comparison (pp. 55-6) of the meteorological data for Belén (inland) and Copacabana (beside the lake) ideally demonstrates both aspects.

Whilst Lake Titicaca thus provides more favourable conditions for agrarian pursuits than those found elsewhere on the Bolivian Altiplano, even apart from flooding it can indirectly wreak havoc in lakeside communities. Maintaining a constant temperature of 10.4°C (51°F), in marked contrast to the considerable diurnal range experienced by the neighbouring land mass, the lake creates its own system of land and sea breezes. Strong outflowing day-time winds disturb the lake surface, sometimes making it hazardous for boats and prohibiting crossings at the Straits of Tiquina. In the early evening, land breezes, predominantly northerly and north-westerly in direction, frequently approach gale force. In the early months of her stay in the communities, the author treated accounts of 'hurricanes' sceptically but in October 1971 such a freak wind - referred to in national newspapers as a 'huracán' - developed over part of Huatajata, killed many animals, destroyed crops and razed more than 40 adobe buildings to the ground. Devastation was of such magnitude that an article in El Diario was entitled 'Crearon comité para reconstruir Huatajata', (and the National Community Development Service (SNDC) offered to replace 208 hojas de calamina (corrugated iron sheets for roofing purposes). Obviously, if damage on this scale can be created by local winds, unprotected thin soils are highly vulnerable, as are cereal crops valued for their above-ground growth. (A sizeable lakeside field of barley was observed on one occasion only; in that particular instance the stalks had been flattened by strong winds).

Climate

The author is indebted to the National Meteorological and Hydrological Service for making available statistical data from the weather stations El Belén (16° 03' south, 68° 41' west, 3820 m (12,534') above sea level) and Copacabana (16° 10' south, 69° 05' west, 3841 m (12,603') above sea level). (For the former, the statistical record from 1960 to 1970 is complete and reliable, whereas in the case of Copacabana there are admittedly certain unavoidable gaps for the years 1962 and 1963). Although the two stations lie on virtually the same latitude and are situated less than 30 miles apart, they exhibit marked differences in terms of temperature and precipitation. Lacking statistical data specifically from the Chua/Llamacachi region, the Agricultural Bank's 1964 survey of Chua Visalaya relied exclusively on statistics from Belén: this cannot be justified in view of Visalaya's lakeside location i.e., one would expect the community's microclimate to be similar to that of Copacabana rather than to that of an inland station - even one lying less than two miles from the lake shore, as does Belén. The following statistics yield abundant proof of Lake Titicaca's modifications to temperatures in its immediate environs.

Temperature figures for the period 1960 to 1970	Copacabana (lakeside)	El Belén (inland)
Mean temperature for January	9.6°C	9.2°C
Mean temperature for July	8.0°C	3.6°C
Mean maximum for January	15.4°C	14.7°C
Mean maximum for July	13.2°C	13.1°C
Mean minimum for January	6.5°C	3.4°C
Mean minimum for July	2.8°C	-5.9°C
Extreme maximum temperature	20.0°C (several occasions)	21.0°C (October, 1961)
Extreme minimum temperature	-1.5°C	-13.0°C
Average frost days per annum	55 (all from April to October)	168 (range from 133 to 180)

The vital figures with relation to cultivation are the winter minima underlined. Although there is little variation in maximum temperatures, it can be seen that away from the direct influence of the lake the actual temperature range widens appreciably and liability to frost damage during the growing season assumes greater

significance. Even within close proximity of the lake e.g., the north-south valley of Chua Visalaya, diurnal range especially in the dry season is considerable: in the day time there is intensive insolation from a cloudless, luminous sky whilst at night rapid radiation occurs and cold air drains down to the valley bottom, which thus acts as a frost pocket. Actual day temperatures within the valley are largely controlled by orientation with respect to the sun: the eastward facing hillside enjoys warm, sunny mornings and experiences dramatic temperature reductions as the effects of the sun's powerful actinic rays are replaced by those of shade, whereas the reverse situation is true of the opposing scarp and during the winter months ice or stagnant water may not be dispersed until early afternoon. Llamacachi's microclimate is different: the area of settlement is well sheltered from land winds by the steep slope of Cerro Picasa and being closer to the lakeside than that of Visalaya feels the benefit of the lake's equalising influence to a greater extent. The optimum region of cultivation from the point of view of temperatures obviously lies between the road and the lake (the area most highly valued from all angles), away from frost pockets and where freezing point is rarely reached and crop growth can continue throughout the entire year.

Lake Titicaca also modifies precipitation. The Santiago de Huata peninsula lies in the rain shadow of the Eastern Cordillera (interrupting the passage of the south-east trade winds) and is characterised by dry winters and wet summers. Rainfall is strongly concentrated in the months from October to April (more than 80 per cent at both meteorological stations), generally reaching a maximum in the months of January and February. But whilst Belén has an annual mean rainfall of 477 mm (18.8"), the corresponding figure for Copacabana is as high as 787.9 mm (31.2"). Although rainfall is thus increased in the whereabouts of the lake, it must be stressed that the highly seasonal and relatively unreliable nature of precipitation constitutes a major problem in the absence of comprehensive irrigation systems. Thus whereas in 1960 954.0 mm (37.6") rain were recorded for Copacabana four years later the total was only 582 mm (22.9") - far below average. Drought remains a major hazard to lakeside cultivators and even short delays in the summer rains can imply serious hardship in

the following year; there is undeniably a close relationship between crop yields and rainfall. When campesinos are asked what returns they expect from the land, they always give two widely differing figures: a peasant may plant 1.5 arrobas (1 arroba = 25 lbs) of potatoes on a small plot of land and expect a yield of 2 costales (1 costal = 4 arrobas) in a 'mal año' i.e., one of inadequate rainfall, and 4 or 4.5 costales in a 'buen año', one of sufficient rainfall. The manner in which precipitation occurs is also a significant factor: sudden rainstorms cause flashing, temporary waterlogging on the terraces, gully erosion on other hillsides, and much rain is rapidly dissipated through the thin, absorbant soils.

Tormentas de graniza (hailstorms) constitute a hazard of similar magnitude. Whereas the lake is 'benevolent' in so many respects, it is unfortunately a truism that hailstorms are more prevalent in localities adjoining the lakeshore than those further inland. According to the Belén records, hailstorms occurred there on only 8 occasions in 10 years: on the other hand, the average number of hailstorms per year in Copacabana is 6 (most storms being confined to the period from October to April). This would appear to be an understatement: in Llamacachi, two short but crop-damaging storms were experienced on consecutive days in mid-September 1971, whilst only two are on record at Copacabana for the month of September in the entire ten-year period. In Chua Visalaya and Llamacachi hail is dreaded and considered as a curse on the community for which the spirit world must be appeased; in one example, the only proof of whether or not a girl had induced an abortion, thereby committing an 'unnatural' act, was held to lie in whether or not there occurred a harmful hailstorm in the ensuing month. It is significant that more brujos' (magicians') supplications are concerned with drought and hail than with any other community problem.

Thus whereas the lakeside communities enjoy a more congenial climate than their counterparts on the dry, bleak, windswept Altiplano, the natural base of life is nonetheless precarious: social, political and economic conditions may change but the campesino remains under constant threat of natural hazards, especially lacustrine flooding, drought, hail and strong winds. Whilst improved irrigation facilities could diminish fears of drought, hail and

and 'hurricanes' are uncontrollable phenomena and no attempt will be made to prevent flooding since longer-term improvements to the soil are believed to compensate for temporary discomforts.

Natural vegetation and cultivated crops

More favourable climatic conditions than those experienced in other parts of the Bolivian Altiplano are responsible for the relatively rich natural vegetation of the lakeside region: in contrast to the isolated clumps of coarse, bristly ichu grass (stipa pungens or paja brava), characteristic of so much of the puna, xerophytic flora along the lake margin is abundant and varied.

Although herbs and natural grasses predominate, one of two autochthonous trees (Ahlfeld, 1969) kishuara ('olivo silvestre de los incas') abounds in Llamacachi as does the colourfully-flowering shrub kantuta (the national flower): both are also tended in the community as garden plants. On the lower hillsides and especially on the sheltered sides of stone-walled hill tracks, herbs grow in profusion. All have local Aymara names and many are highly valued for their medicinal properties: some are widely respected as curatives for muscular pains and chest disorders, others are used in bathing young children, one is fed to dry cows to induce lactation, and three different herbs are imbibed in maté form to terminate unwanted pregnancies. Yareta (Azorella biloba), preferring volcanic soils, and thola (lepidophyllum cuadrangulare), more suited to sandstones, are two hardy shrubs also found within the area and closely associated with the Devonian and basaltic-andesitic outcrops.

According to the Banco Agrícola's 1964 survey, the dominant grasses in the valley of Chua Visalaya and on the adjacent scarps are 'la graminea Calamagrostis sp. la cebadilla (Brumus Unioloidos), 'Orcko chijji', 'Khachu chijji' y el Nordeum Andicola' - all grasses of medium coarseness and of limited nutritional value. (The 1954 SNRA survey of Chua Visalaya estimated that a cow, without any additional sources of fodder, required 7 hectares of pasture land for grazing purposes, and each sheep at least one hectare). Such grass becomes progressively parched and brown in the dry season and

of little if any fodder value. Traditionally, dried grass was used for thatching purposes but with the modern widespread usage of calamina roofing, it is nowadays mainly utilized for binding together adobe bricks, as fuel for cooking, for storing chuño and tunta (white chuño), for packing (e.g., eggs for Paceño markets), for covering nursery beds of onions, and it is sometimes burnt with totora, field stubble and farmyard manure etc., in preparation for planting potatoes or onions. On the puna, at some distance from the community settlement areas e.g., on the high slopes of Cerros Jipi and Torreni, the much coarser, spiky ichu grass occurs, usually in the form of cushions, separated by thin stony soils and growing up to a height of 18". In the past, ichu also provided valuable thatching material but today its usage is limited to forage for llamas and more rarely sheep (it is normally considered too coarse for the latter).

Highly-valued totoral beds are more extensive in Llamacachi than in Chua (see aerial photograph). In the former, they attain a maximum width of about 85 yards and patches are individually owned: less fortunate families buy donkey-loads of totora for a charge of several pesos.[11] In Chua Visalaya where according to the 1970 plan drawn for the cooperative, totora covered 11.5 hectares) ownership of totora in 1964 passed to the cooperative and recent attempts by syndicate members to remove stalks from the lakeside have increased the pre-existent friction between the two groups and culminated in legal action. To maintain a constant supply totora needs cultivating, but in the communities this is rarely done (campesinos do not consider it necessary) and cutting is sporadic. When green, totora stalks, measuring up to 8' in length, can be cut for animal fodder; campesinos insist that, whilst not as nutritious as alfalfa, they are more beneficial than most natural grasses within the area. The white pith of the stem is sometimes consumed by local residents; this is likely to occur in years of poor harvest and enforced food shortage. Half-dry totora is utilized in the manufacture of balsa boats,[12] for thatching and as a fuel for cooking, whilst the oldest stalks and stubble help to provide a fertilising ash. An additional and important source of cattle and sheep fodder is a weed growing on the lake floor and locally called chanko (changa): it is removed with the aid of balsas and long poles and trailed to the lake edge.

'Marias' made from totora by Llamacacheño comunarios. If treated with care these modified balsas are serviceable for at least six months (p.94).

Llamacacheño trailing chanko, a lake weed valued as animal fodder.

Whilst Belén, in conjunction with the forestry section of the UN, is currently engaged in experimentation with various tree species, as yet the only tree to have been successfully introduced on a wide scale in the northern Altiplano is the drought-resistant eucalyptus: the aerial photograph illustrates that by the mid-1950s the eucalyptus had become well-established in the communities. In Chua Visalaya trees already formed avenues along the main road and lined tracks inland, whilst others were grouped in a plantation near the hacienda house: the Agricultural Bank's survey (1964) listed '347 eucaliptos adultos y 694 eucaliptos viejos', mentioning that many of the latter had diameters in the order of 0.50 metre. From the inventory of machinery on the hacienda it would seem that the said trees were mainly prized for their timber value; whether intentionally or not, apart from any aesthetic consideration they have acted as a windbreak and a check on soil erosion and have effectively demarcated certain boundaries. It is strongly to be deprecated that, now their financial worth has been recognised, they are being recklessly felled by the cooperativa for sale as pit props to Mina Matilde (the recently opened and only sizeable zinc mine in Bolivia, about 8 miles north east of Ancoraimes.), without any concern for conservation and the future.[13] This action has also provoked strong disagreement within the community. In neighbouring Llamacachi, according to the corregidor, eucalyptus trees were introduced in the 1930s, following the examples of the hacendados of Chua and Compi. In the community they were planted to provide fuel, for timber from which farm implements e.g., the 'Mediterranean' plough, and hollowed-out fishing boats could be made; their foliage is still esteemed for its medicinal properties.[14] The same person maintains that the introduction of the eucalyptus whilst generally acknowledged as a success, has on the other hand intensified irrigation problems by lowering the water table; he claims that as a direct result of planting trees behind his holding, both of his old wells have completely dried out. Apart from the eucalyptus, Chua hacienda also experimented with pine trees and willows: in 1964 there were '53 pinos, 27 sauces y 8 sauces nimbre'. Whereas the former were cut for timber, the willows, planted in a sheltered row between the hacienda buildings and the orillas, appear to have served no economic purpose and today remain untouched, witness to the fact

that in well-favoured lakeside localities trees other than eucalyptus can flourish. One of the more unexpected innovations in Llamacachi is the garden plot: almost half of the community's households have introduced shrubs - even roses were observed - and several more 'prosperous' families have planted pines and fir trees. In some instances, timber is cut into small sticks, then bundled for sale locally and in Batallas, but often trees appear to be grown only for their pleasing effects and are a source of pride and achievement.

Of recent years lakeside crop cultivation has undergone unprecedented reorganisation in Llamacachi; this is immediately apparent from comparing old and new rotation systems. Formerly, as in neighbouring hacienda shorelands, a four-year course was strictly observed - potatoes, oca (oxalis crenata), broad beans and barley/wheat: today campesinos insist that they follow a six-year sequence i.e., potatoes, oca, onions, broad beans, barley, onions - although one is inclined to believe that in some fields onions are grown even more frequently. This phenomenon will receive further attention later; at present it is only necessary briefly to consider the great variety of crops able to withstand such adverse altitudinal and edaphic conditions and traditionally cultivated here.

Up to the last few years 'sweet' potatoes, indigenous to the northern Altiplano, constituted the dominant crop of the lakeside zone. Currently, local varieties and improved ones e.g., Sani Imilla, grow in the valley bottom, especially near to buildings where frost is considered less of a menace, and on the lower hillside terraces. They are stored and mostly eaten in dehydrated form as chuño and tunta.[15] Bitter potatoes (papa amarga or papa luki), more tolerant of frost and alkalinity, were traditionally cultivated on the stone-faced terraces. Together with papa lisa, isañu (Tropaeolum tuberosum), oca (an edible tuber rich in almedin and able to grow between 3000 and 4000 metres above sea level), potatoes have for countless generations provided the staple diet of the peasantry in both comunidad and hacienda. Quinua (Chenopodium quinoa), a cereal high in protein content, is also native to the area and like the smaller grained cañahui (Altriplex cañahui) is well adapted to withstand frost and drought: they can

both survive at an altitude of 4,000 m (above 12,000') and their grains are used to enrich vegetable soups. From quinua the potent chicha is brewed: old quinua stalks are burnt and, together with water, the resultant ash is added to coca, to make the stimulant more appetising and harden the tongue.

Some of the problems involved in cereal production have already been discussed, especially those related to climate. In hacienda times wheat was cultivated in Chua Visalaya, as were barley and to a lesser extent oats. Nowadays cultivation of these cereals is limited. Sometimes rows of habas (broad beans) and barley alternate, the beans according protection to the latter. In Llamacachi barley is occasionally planted beside nursery beds of onions, in this case the intention being to protect the onions and provide additional fodder. Broad beans yield well on the shorelands and are a valuable source of food for human consumption; their stubble is burnt to return nitrogen to the ground or used as animal fodder or cooking fuel. Several of the more progressive Llamacacheños have successfully experimented with radishes and carrots, but have abandoned them in favour of onions (for reasons later explained). Onions were introduced to the area in the pre-reform period: they take about seven months to reach maturity in the lakeside region and can be planted at any time of the year - some Llamacacheños are beginning to calculate carefully the optimum season for planting, bearing in mind known periods of shortage in Paceño markets.

All the above crops can be raised profitably although it must not be forgotten that yield is closely correlated with supply of irrigation water during the dry season and with the application of fertilisers, whether natural or artificial. All types of crops are subject to disease e.g., in 1971, barley grain was rendered worthless by excessive carbonisation and potatoes were badly blighted. Yet crop diseases are not primarily attributable to limiting climatic factors but rather, as Ministry of Agriculture officials frequently point out, to the original planting of already infected seeds.

Footnotes and References - Chapter III

1. H.C. and J-M. Buechler, The Bolivian Aymara (Syracuse University, 1971), p.2

2. Arrangements whereby creditors enjoy usufruct rights to certain plots of land (belonging to the debtors) in partial payment of financial debts.

3. Belén and three other experimental stations were originally established as a result of the formation in 1948 of the Inter-American Agricultural Service - a joint undertaking by the Bolivian and US governments to provide assistance in agricultural research, extension, mechanization and credit. Belén was intended to concentrate experimentation on sheep and potatoes: the station was extended in 1963 with the financial aid of the Inter-American Committee of the Alliance for Progress.

4. W. Carter, Bolivia: A Profile (New York, 1971) p.7.

5. Balcazar's conclusions were based on the findings of a 1937 Argentine scientific mission to study physiological effects of altitude in Bolivia. His book Epidemiología boliviana was published in La Paz in 1946.

6. The RISM/Peace Corps team, reporting in 1967 (Epidemiological Studies in Bolivia) stressed the importance of this aspect.

7. The Baptist nurse in Huatajata relates the prevalence of TB in this part of the lake region to a serious outbreak of typhoid fever in 1942.

8. H.G. Dion, Agriculture in the Altiplano of Bolivia (Washington Development Paper No.4, 1950).

9. F.E. Ahlfeld, Geografía Física de Bolivia (Enciclopedia Boliviana, La Paz - Cochabamba, 1969), p.108. Later references are to the same work.

10. Extension agents (Trabajadores de Desarrollo de la Comunidad) of the National Community Development Programme. Presently 18 TDCs and 4 supervisors operate in the four provinces previously mentioned as having their central office at Belén.

11. In 1971, before devaluation of the peso, the exchange rate was in the order of 28 Bolivian pesos i.e., $ b.28.00 to £1 ($ b.12.00 to US $ 1.0).

12. One of the most interesting innovations in Llamacachi is the manufacture of 'marias' i.e., balsa boats each with a single pointed end: according to Llamacacheños the maria is unique to their community and certainly none were observed in neighbouring communities.

13. Campesinos are legally required to plant as many eucalyptus trees as they cut down, but in fact a large number of these saplings had died and not been replaced.

14. Potions are concocted from eucalyptus leaves for inducing abortions: the leaves are also in frequent usage as substitutes for bandages.

Footnotes and References - Chapter III continued

15. Sani Imilla potatoes are not in fact used for chuño: they are too large and have too high a moisture content (D.A. Preston).

CHAPTER IV - HISTORICAL CONTRASTS

A prerequisite for interpreting post-revolutionary change in Llamacachi and Chua Visalaya is an understanding of their markedly divergent historical backgrounds. At the time of the National Revolution the peasant population of Chua Visalaya was still subject to the hacienda régime and to the abuses of the accompanying colonato reciprocal obligations system, whereas Llamacachi had from time immemorial (except for a brief interlude - see page 40) retained its cherished independence as a comunidad originaria (freeholding). In the writer's opinion contemporary inequalities in terms of rates of development and acceptance of innovations are intimately related to this rigid pre-reform distinction between hacienda and comunidad. On the one hand the impact created by the now defunct Hacienda Chua remains a force to be contended with, impeding attempts to adjust and adapt to new social, political and economic situations; conversely, prolonged periods of enforced struggle for very survival have imbued neighbouring Llamacacheños with a strong sense of determination and initiative, enabling them to take maximum advantage of novel opportunities in the post-revolutionary period. Before reflecting on the former patterns of life of the communities in question and on recent historical events, it would seem appropriate to trace the nineteenth-century extension of the Bolivian hacienda system, with particular reference to the lakeside region, and at the same time to consider its disastrous implications for pre-existing freeholdings occupying favourable terrain.

Extension of the hacienda system in the nineteenth century

It has been estimated that at the date of Bolivian Independence (1825) an area exceeding two thirds of all territory then settled was occupied by some 11,000 comunidades originarias i.e., Indian freeholdings still dominated the rural scene at the beginning of the Republican era. Indeed, according to Antezana (1971),[1] 'las comunidades fueron, en gran medida, la base social sobre la que se fundió la república' (the communities were in a large measure the social base on which the republic was founded). As a result of Bolívar's 1825 decree, aimed primarily at integrating the Indian population into the national monetary economy by abolishing

communal property and entitling owners of holdings to dispose of them at will, thousands of peasants entailed or sold their newly-created plots to unscrupulous speculators before the bill could be revoked and further sale of any indigenous property before 1850 prohibited. Nevertheless, an agricultural census of 1847 recorded 11,000 extant comunidades - a figure identical to the 1825 estimation. Of 79,267 heads of families classified as comunarios, 49,293 were said to own parcels of land and the remainder were categorised as landless forasteros: the total comunario population was assessed at approximately 500,000 i.e., of a national total of 1,378,896 (1845 National Census return). The years from 1825 to 1864 in fact mark an interim phase in Bolivia's social history; It was a period in which few legislative measures impinging on Indian communities were enacted but during which the controversy over 'el problema rural' became increasingly bitter. Whilst the majority of city dwellers (protagonists of 'la nacional' viewpoint) were convinced that apart from its gross social injustices any governmental action to further the landowners' cause could only constitute a retrogressive step towards feudalism and colonialism, a minority group of wealthy hacendados and political opportunists (exponents of 'la colonial' ideology)[2] were intent on extending and developing large estates by usurping comunidades originarias and converting free indios into virtually enslaved colonos.

In the face of such powerful opposition the pro-comunitaria movement had little prospect of ultimate victory: landowning influences in Government grew ever more vociferous and eventually in 1864 hacendados found their 'Salvador de la Patria' in the most despicable and barbaric of all Bolivian caudillos, General Mariano Melgarejo. (Antezana asserts that his Presidency heralded a second Bolivian Republic and initiated a period of ninety years during which all legislation was designed to extend and consolidate the feudal régime and attack those who tried to replace it by a democratic system). The most vindictive of Melgarejo's decrees, issued in 1866, proclaimed that since all lands occupied by Indians legally pertained to the State - Bolívar had declared them masters of the lands they possessed - they would be required to pay a tax in order to obtain legal titles. Few comunarios, even had they been made aware of the injunction, could have paid the specified sum within the sixty days

allotted and thus more than 100,000 peasants were deprived of their ancestral lands in direct consequence. Once set in motion, sustained by the solidarity of the landowners and their close associations with the ruling 'Rosca' (literally 'thread', but a term commonly used to denote the Bolivian oligarchy), the alienation of properties proceeded unchecked long after the assassination of Melgarejo (1871). McBride (1921),[3] comparing figures from the revisitas indigenales of 1854 with those from the 1900 land tax returns, concluded that between these two dates there had been a rapid and unprecedented decrease in communal holdings: in some provinces, including Inquisivi and Caupolicán (two provinces of La Paz Department) more than 75 per cent of Indian properties had been usurped.

Thus by 1952 the landholding structure in Bolivia had become 'one of the more extremely concentrated structures in Latin America' (Clark, 1970).[4] The 1950 Agricultural Census recorded a total of 82,598 separately-registered holdings for the entire country: of these 7,924 (9.6 per cent) were parcels of 200 hectares or more - one exceeded 800,000 hectares - together accounting for 74 per cent of the total area reported and 62 per cent of all land cultivated that year. By contrast, 50,483 (61 per cent) were smaller than 5 hectares, comprised 0.28 per cent of the total area reported and represented 8.1 per cent of the cultivated land. It has already been seen that, so widespread had been the alienation of Indian freeholdings and their subsequent incorporation into private properties, that in all only 3,783 had survived in their traditional form, these being confined almost exclusively to the plateau Departments of La Paz, Oruro and Potosí. The following figures yield further proof of the complete monopolization of rural Bolivia by the hacienda system:

Methods of land cultivation expressed in percentages

Semifeudal cultivation	90.54
Properties worked by their owners	1.50
Properties worked with the aid of wage-earners	2.44
Rented properties	2.66
Properties of Indian communities	2.86

(Dirección Nacional de Estadística y Censos, Ministerio de Hacienda, La Paz 1950)

The Lake Titicaca region

In the Lake Titicaca region alienation of Indian communities was rampant in the late nineteenth century. The area was favourably located in close proximity to the major markets for agricultural produce i.e,, the mines of the Cordillera Real and the growing urban population of La Paz.[5] Moderating climatic influences and more amenable edaphic conditions than those encountered in any other part of the Bolivian Altiplano had attracted even the earliest Spanish settlers. By the twentieth century there were few if any lakeside hacendados without stately residences in La Paz; many were involved in lucrative businesses and professions, visiting their rural properties only at harvest time.[6] Whereas in the Yungas settlement was sparse and usurping landlords were obliged to proffer minimal wages as inducements in attempts to secure labour, in the lakeside region the existence of a dense Indian population made it wholly unnecessary to introduce remuneration; here, alternative opportunities for employment were at a minimum and hacendados could depend on the immobility of manpower. Indeed colonos were regarded as part of the real estate and frequently landlords purchased properties in order to acquire additional labour supplies rather than land for cultivation.

On occasions when resistance in achieving their ambitions was encountered by hacendados, deliberate and systematic massacres were carried out by regular forces sent into the countryside specifically for this purpose. In 1869, at San Pedro de Tiquina (see map p.18a), 600 comunarios lost their lives in a valiant struggle to recover ancestral holdings from rapacious landlords: shortly afterwards government troops massacred 2000 peasants at Ancoraimes, partly as a warning to other would-be offenders. From time to time peasant resistance made a strong impact nationally e.g., the popular highland uprising led by Zarate Willka (1898-9) was instrumental in bringing a Liberal government to power.[7]

Ruthless usurpation of a comunidad originaria normally signified utter destitution for the displaced comunarios. A limited number of more enterprising families and less frequently even entire communities retreated hurriedly to rocky, almost inaccessible mountainsides - areas isolated from communication lines, sometimes approaching

the very limits of cultivation and thus of negligible interest to the landowning class. In such localities dispossessed comunarios managed to eke out a meagre existence under adverse climatic conditions but at least exempt from the victimizations of the hacienda system. Amongst such scattered groups banditry was essential to survival and in the late nineteenth century, Bolivian prisons were filled with ousted comunarios and colonos convicted of pillage and similar petty crimes (the prison at Achacachi attained a maximum of 400 such offenders). For most comunarios, the only alternative to withdrawal into inhospitable enclaves was submission to the demands of the usurping landlords - acceptance of usufruct rights to minute patches of land on which a modicum of crops could be grown and agreement to the full implications of the exacting colonato system. Few and far between are examples of lakeside communities able to withstand the coercions of hacendados. It is against this turbulent background that Llamacachi's successful and fascinating past must be seen.

Llamacachi's struggle for survival as a comunidad originaria

In the absence of documentary evidence it is impossible to establish the age of Llamacachi (referred to as Yamacachi in certain nineteenth-century records pertaining to Hacienda Chua) with any precision: it may have originated as an Aymara community in pre-Incan times. Certainly the maze of walled terraces within the general area suggests the existence of a dense population in the dim and distant past. For present purposes it is expedient to restrict attention to the Republican era; in doing so it is realistic to regard Llamacachi as an integral component of the Compi complex of estancias and comunidades rather than as an isolated unit.

It would appear that in the mid-nineteenth century, two of the five sections of present-day Compi (Compi proper and Capilaya) constituted haciendas under separate ownership: simultaneously, the remaining sections of Tauca proper, Kalamaya (Khala Amaya) and Cawaya, together with Llamacachi, formed the larger comunidad, Tauca. During the latter part of the century Compi proper and Capilaya amalgamated and successive hacendados endeavoured to augment the merged landholding by encroachments on adjacent Tauca. Thus was initiated a protracted period of bitter antagonism:

despite violent resistance, only Llamacachi and a few comunarios of Tauca and Kalamaya managed to stave off the tremendous pressures of Hacienda Compi. 'For several years the area was plagued by pitched battles between comunarios of the free communities and colonos of the haciendas' (RISM/Peace Corps).[8] Essentially this was a struggle over land ownership but the dispute was intensified by friction amongst rival heirs to the Compi estate, some of whom incited comunarios in their bold attempts to regain possession of expropriated plots of land. Finally the comunarios were compelled to succumb and acknowledge defeat: with the exception of Llamacachi itself, all free land of estancias between Chua and Jank'o Amaya was assimilated by Hacienda Compi and all comunarios, apart from Llamacacheños, were forced to yield to the rank injustices of the colonato system.

Not only did Llamacacheños engage in armed combat against hacendados of Compi but between 1889 and 1900 the community was also constrained to resist the advances of its other neighbour, Hacienda Chua. At one stage in the hostilities a ruthless patrón of Chua exercised such compulsion that all but one family in Llamacachi sold their parcels of land to him. Paradoxically, this setback invigorated their determination and led to their behaving in such a refractory manner, especially by precipitating discord amongst the resident colono population, that after nine years of constant feud the despairing landlord was relieved to restore comunidad lands. The chronicle of events affords a rare example of official aid being enlisted against an unscrupulous hacendado: in response to the complaints of Llamacacheño elders, soldiers were despatched from Achacachi and a provincial judge visited the patrón concerned to warn against further violations.[9]

In subsequent decades landlords of both Chua and Compi tried to intervene intermittently in community affairs, especially to prevent political organisation and the construction of primary schools, both of which in their opinion might have inimical repercussions on their own estates. In Llamacachi cooperation was not forthcoming: as one comunario remarked to the author, "we refused to bow down to the patrón like burros". Indeed, Llamacachi is to be admired for its audacious spirit and stubborn perseverence throughout the prolonged

period of expansion and consolidation of haciendas.

The history of Hacienda Chua

Although it is probable that much of the lakeside area was granted in encomienda (protectorate) in early colonial times and made the transition to hacienda-type ownership in the seventeenth century, the earliest documents preserved in the files of Expediente No. 4445A refer to the year 1832. At that date Chuan property was owned by a certain José Ballivián and presumably included all the estancias of Chua, viz., Chua Visalaya, Chua Cocani, Chua Grande, Chua Cayacota (Caya Khota), Marca Chua, Chua Coripata and Chua Kilani (Quelani). The estate appears to have been in the possession of the same family until 1908 when a descendant of the above sold 'Chua y sus anexos - Lajachi y Corpasilaya' to a Señor B. Cornejo, for a sum of 228,000 bolivianos. In 1921, as cancellation of a debt, the property passed into the Ernest family in whose charge it remained up to the post-revolutionary period. One is led to believe that prior to 1939 all Chuan estancias were under single ownership but there is evidence that in that year the property was divided and the section known as Marca Chua assigned to a separate branch of the family.

It has already been seen that in the late nineteenth century unsuccessful attempts had been made to acquire the coveted lakeshore lands of neighbouring Llamacachi. Elsewhere Hacienda Chua met with better fortunes: in 1957 comunarios of two adjoining comunidades (see page 28), claiming that they held titles from the year 1645, presented a petition to the SNRA against the then patrón of Chua 'por usurpación de tierras de dichas comunidades para agrandar la Hacienda Chua' (for usurpation of the lands of the said communities to enlarge Hacienda Chua). Likewise Corpachilaya (Corpasilaya) made a claim against the estate and was in 1959 awarded 46.6500 hectares of the land previously expropriated by hacendados of Chua.

On the plan compiled for the SNRA in 1957, Chua Visalaya (incorporating the smaller sections of Coripata and Cayacota) appears as a separate property but was in fact held at the time in conjunction with Chua Cocani. In March 1959, in accordance with the Decreto Ley de la Reforma Agraria, Resolución Suprema

No. 84494 declared 'la propiedad como empresa agrícola ganadera, consolidando en favor de la propietario la extensión de 3101.1700 hectareas de terreno de pastoreo' (the property as an agricultural livestock enterprise, consolidating in favour of the property an area of 3101.1700 hectares (7660 acres) of pasture land). The implications of these transactions i.e., of the acquisition of highly-prized ex-hacienda lands by one section of the Visalayan populace at the expense of the majority of ex-colonos who, as a result of the supreme resolution, merely gained titles to the minute sayañas (houseplots) they had traditionally cultivated, can well be imagined and will be discussed at length in subsequent chapters.

Pre-revolutionary links between Chua Visalaya and Llamacachi

Although Llamacacheño comunarios were not exempt from obligations to the Roman Catholic Church and to provincial officialdom (e.g., the jilakata[10] was required to collect annual taxes from each family and attend regular consultations with the corregidor for Cantón Santiago de Huata) only indirectly were they subject to the hacienda system. Inter-community ties stemmed for the most part from marriages between members of neighbouring settlements. On the whole marriage was endogomous: according to Heath et al.[11] this constituted 'one of the main integrative factors in Indian communities' (the other being the political hierarchy linked with the complex system of fiesta sponsorship). However there were countless opportunities for Visalayans and Llamacacheños to meet at local ferias (markets) and whilst herding animals on the adjacent hillsides, and inter-marriage did take place, albeit infrequently. On occasions, a Visalayan colono found it possible to gain title through marriage to plots of land in the free community; in this event he was sometimes able to move temporarily to the house of his parents-in-law in order either to escape the patrón's punishment for some 'misdemeanour' or to avoid his turn at some of the more exacting personal services, in which case he would return to the hacienda once there was no longer any danger of enlistment. If the comunaria's family was devoid of male heirs, the land she inherited might be sufficient to permit her colono husband to free himself entirely from the colonato system and take up permanent residence in Llamacachi. Conversely, marriage to a Visalayan girl was one means whereby a landless, or virtually landless, Llamacacheño comunario could secure access to cultivable terrain.

Older Llamacacheños recall days when they helped relatives in both Chua and Compi to complete various hacienda tasks on time: in Compi such assistance was invaluable since by 1950 a persona (a colono supposedly with access to 9 hectares of cultivable land) was required to furnish the hacienda with four workers for six days every week and many families unable to comply with such stringent obligations had either to accept smaller pieces of land or seek help outside the immediate family. On the other hand, as and when time permitted, and especially when food shortage was most pronounced in 'la miseria', Visalayan colonos would work for short periods in Llamacacheño fields (as ex-colonos do today), receiving payment in kind.

It has been seen that certain innovations in Chua e.g., the cultivation of the eucalyptus tree, had been imitated in Llamacachi. As a result of the activities of the last Chuan patrón, inter-community links were substantially strengthened in the years immediately preceding the National Revolution. In 1950 the said landlord rented the property of Compi; subsequently he mechanized the estate and reduced the hours of labour demanded of Compi's colono families. One of the most progressive of the pre-reform lakeside hacendados, he seems to have been respected as such in Llamacachi e.g., one comunario commented that "the patrón worked his men hard but he was a fair-minded man and Chua was the best-run finca (estate) in Omasuyos province". He it was in fact who inaugurated today's flourishing yachting club in Huatajata and on the lakeshore of Cayacota constructed a pier and established a small but well-equipped boat yard, Astillero Titicaca. In the early 1950s this enterprise was employing several skilled Paceno mechanics and thirty local men, thus affording a welcome opportunity for a few Llamacacheños to engage in non-agricultural remunerative pursuits.

However, it must be added that prolonged periods of struggle for very survival as an independent entity had instilled intense feelings of mistrust and arrogance in the inhabitants of Llamacachi and in the main the colono was considered an unwelcome intruder. Both comunarios of Llamacachi and colonos of Chua Visalaya belonged to the lowest category of a rigid class structure - la indiada - but the former, perhaps because they and their ancestors had demonstrated a 'superiority'

by resisting the pressures of hacendados of both Chua and Compi, retained a higher social standing within the group and generally despised their less fortunate neighbours. Traditional sentiments of antagonism die hard and it is not uncommon even today for comunarios of Llamacachi to refer disparagingly to Visalayans as "hombres de llamas" or even as "incomprensibles".

The dual economy of pre-reform Chua Visalaya

(a) Hacienda Chua

Whilst in the pre-revolutionary period there were marked dissimilarities in the economic activities and general living standards of Llamacacheño comunarios and Visalayan colonos, contrasts actually within the confines of Hacienda Chua were far more striking. No lakeside estate could have exhibited a more clearly defined 'dual economy' than did Chua in the late 1940s and 1950s. Although the present dissertation is concerned essentially with socio-economic changes affecting Aymara communities, obviously it is impossible to make valid comparisons with pre-reform days if all reference to the operations of the hacienda is omitted. The colonato system claimed most of the working time and the energies of the Visalayan peasantry: the hacienda controlled almost every sphere of peasant existence. Before turning to the subsistence level agriculture of the colonos and their obligations towards the hacendado, it is fitting to describe the organisation and economic functioning of the estate at the critical time of the National Revolution. Much of the statistical evidence used by way of illustration does in fact date from 1954, during which year a comprehensive SNRA survey was undertaken as a preliminary to land redistribution. It has already been stated that the supreme resolution relating to Chua was not finalised until 1959 - some Visalayan campesinos allege that legal proceedings were delayed by the patrón's bribing of the secretario general of the newly-created sindicato - and indeed on this estate the only immediate response to the Agrarian Reform Law Decree was the introduction of wage labour. (After August, 1953, the hacendado of Chua paid each peasant worker the stipulated sum of 350 Bs. per month). Otherwise the hacienda performed much as before until declared an empresa agrícola ganadera six years later.

Expediente references to the surface dimensions of Hacienda Chua are as confusing and contradictory as is the indiscriminate usage of

the terms hacienda and propiedad. The figures occurring with the greatest frequency are as follows: Chua Visalaya/Chua Cocani i.e., the property in toto, 5599.7650 hectares (approx. 13,832 acres); Chua Visalaya alone, 2276.5425 hectares (5625 acres). By way of comparison, the four lakeside ex-haciendas of Burke's study (1970)[12] averaged 3670 hectares (9065 acres). Perusal of the 1957 plan of Chua Visalaya (reproduced on page 40a) would seem to substantiate such affirmations as: 'Ownership of a hacienda in the pre-reform days could not be taken at face value, [then]. Though the landlord had legal title to its entire area he was in fact limited to an impressively small portion of it. The rest was exploited by and for the peasant' (Carter, 1964).[13] 'The Bolivian haciendas were to a much greater degree [i.e., than Peruvian ones] mere agglomerations of small Indian sayañas' (Burke, page 423). Whereas the sayañas of Visalayan colonos occupied 87.4423 hectares (42.1063 hectares in Chua Visalaya proper) only 40.8700 hectares - less than 2 per cent of the total area 2276.5425 hectares - were cultivated (or at least cultivable) by the hacienda. Such bare facts create misleading impressions. The acute pressure on cultivable land and excessive fragmentation of colono houseplots were vital elements of pre-revolutionary peasant life, nor should it be forgotten that the said 40 hectares of hacienda terrain represented by far the most fertile and potentially productive sections of the estate. The aerial photograph (page 28a) illustrates the fact that the orillas were split into large fields, each devoted to a single crop; this accords with statements made by ex-colonos. On these shorelands continuous crop production was based on the traditional four-year rotation system (potatoes, oca, broad beans and barley) with some modification e.g., oats or wheat sometimes replaced barley. On the Indian hillside sayañas, a similar pattern was followed, not because it was deemed desirable to dispense with the fallow period (a two- or three-year fallow period was always observed in the hacienda's valley fields), but from absolute necessity. Whereas colonos were forced by circumstance to cultivate continuously all or most of the plots of terrain to which they had been granted access on the hacienda, considerable importance was attached to animal husbandry and parts of the valley were retained as ahijadero (pasture land), exclusively for the grazing of the landlord's livestock. This predilection for pasturing animals in a central place, where soils

could be carefully protected from infection and contact with diseased creole stock avoided, is more than understandable in view of the high quality of hacienda stock (page 80).

It is difficult to reconcile such remarks as: 'que actualmente predomina la explotación agrícola' (an observation made in the 1954 SNRA report implying that arable farming predominated), with e.g., 'la mayor parte los terrenos de Hacienda Chua lo utilizan para pastoreo no así para la agricultura como en Chua Cocani' (the opinion of an SNRA surveyor in 1957 that animal husbandry assumed greater significance). Furthermore it is impossible to estimate pre-reform crop yields without precise indication of the actual area under cultivation at any particular point in time; 1954 production figures for the two estancias are recorded in the expediente but pose a number of insoluble problems and cannot be accepted at face value. The total quantities are given in quintals as 3000 qq. of potatoes, 8000 qq. of barley grain, 1500 qq. of broad beans and 1000 qq. of oats. Assuming one quintal to be the equivalent of 100 pounds,[14] the following tonnages can be derived: 134 tons of potatoes, 357 of barley grain, 67 of broad beans and 45 of oats. Burke has recently computed average productivity statistics for the major crops in his area of study; it is useful to take his example of potato yields for the purpose of comparison. He deduced that Bolivian campesinos in the lakeside zone obtain on average 4,494 lbs. of potatoes from each hectare planted; the corresponding figures for Peruvian campesinos and Peruvian hacendados are given as 4,758 and 10,073 respectively i.e. even the highest figures represent little in excess of 4 tons per hectare. Dion (1950)[15] assessed the average potato yield per hectare on the Altiplano to be in the order of 2.5 tons. Relating these figures to Chua's 134 tons of potatoes, one is bound to conclude that (a) a much larger area was in fact under cultivation than hacienda plans portray (this seems unlikely), (b) yields were exceptionally high or (c) the figures are wholly inaccurate; the truth probably lies in modifications of (b) and (c). Barley statistics are even more suspect especially as it is widely agreed amongst campesinos that the main emphasis in the hacienda was always on potatoes: a 1948 telegram refers to a shipment of 40 sacks of seed

potatoes via Mollendo (Peru) from New York. Wheat was also grown on the property; this is clear from a bill (also dated 1948) sent from La Paz for 460 kilograms of Klein Success grain and the same quantity of Sinvalocho grain. Before 1954 onions had been incorporated into the hacienda's cropping system but only on a small scale. The Banco Agrícola's later and more credible inventory of Chua's assets implies a marked decline in crop production in the decade after the National Revolution i.e., assuming the earlier figures to be reasonably accurate. Even so, the fact that a total of 1793 qq. (about 80 tons) of potatoes were harvested on the empresa agrícola in 1964 indicates that yields were considerably in excess of Burke's present-day averages. The statistics also refute the earlier allegations that Chua Cocani was more oriented towards arable farming than was Visalaya; in addition they reveal what proportions of the crops produced were consumed on the estate and what surpluses were available for sale in La Paz or to middlemen from the city or Huatajata.

Crops	Chua Visalaya		Chua Cocani	
	Total	For sale	Total	For sale
Sani Imilla potatoes	406 qq.	256 qq.	120 qq.	44 qq.
Different types of potatoes	497	447 (mixed)	651	326
Bitter potatoes	119	94	-	-
Oca	270	230	42	32
Broad beans	60	52	17	2
Bladed barley	12	-	-	-
Barley grain	-	-	18	-
White quinua	-		7	6
Total values	$ b. 40.212,00		$ b. 16.116,00	

Most surplus produce was sold directly from the hacienda's aljería (storehouse/shop) in La Paz. In former years it had been transported by mules and llamas - a journey taking colonos two or three days to complete - but in the years preceding the National Revolution crops were delivered by the patrón's Chevrolet lorry. In the 1950s a second vehicle (a 'Ford, tipo militar') was acquired for the express purpose of transporting hacienda crops, dairy produce and meat.

'Until 1952 [then] one could characterize the agricultural or

rural sector in Bolivia as static, for no new innovations in work relations between landlord and peasant had taken place, and there had been no general acceptance of new agricultural techniques' (Clark, p.8). A comparison of the general situation with the pre-reform conditions in Chua can only lead to the conclusion that this particular hacienda was atypical in a number of ways. This fact was accorded official recognition by the supreme resolution's classification of Hacienda Chua as an empresa agrícola i.e., a holding 'distinguished by employing wage labour, by being fully mechanized or by using improved agricultural methods on a large scale' (Agrarian Reform Law Decree). From whatever angle the hacienda is viewed, it is clearly apparent that at the time of the National Revolution the property was being farmed intensively, on extremely progressive lines. A glance at the 1954 inventory of estate machinery indicates an accumulation of mechanical equipment almost incredible by Bolivian standards. In addition, the patrón was periodically, and after 1948 in conjunction with the agricultural station of Belén, experimenting with different plant varieties e.g., in 1954 three patches (10.5 hectares in all) of land were sown with alfalfa, the inference later being drawn that the said grass was ill-suited to local climatic conditions. Attention was also being paid to the replenishment of soil minerals, and artificial fertilisers and pesticides lavishly applied: the expediente contains various bills for large quantities of superphosphates from the Instituto Químico Boliviano (the Bolivian Chemical Institute). To a certain extent, specialisation of labour was in operation; two ex-colonos said they had been trained as tractor drivers. Irrigation channels were extended and preserved in a good state of repair; one 3 kilometres-long channel, with transverse ditches, adequately irrigated most hacienda lands under cultivation in Chua Visalaya.

The high quality of livestock in Hacienda Chua has previously received mention. Whilst successful production was partially attributable to the initial purchase of prime pedigree stock e.g., in 1945 Barbour (the North American patrón) had imported 25 Romney Marsh and 5 Oxford Downs sheep from Argentina, efficient animal husbandry on the estate was equally significant. This situation also appears to have been exceptional. According to Burke, 'Unlike the present-day Peruvian hacendados, the pre-reform Bolivian

1948 Consignment to Gordon Barbour from the Barvia Company, New York

1 Agricultural fumigator with 4 channels
1 Pump for wells, with piping
1 Lot: materials for agriculture and beekeeping, including 2 presses for making beeswax, accessories etc.
1 Lot: household goods, china, curtain material, linoleum, carpets etc.
1 second-hand roller (for road works)
1 second-hand sailing boat
1 motor-launch, small cruiser type
1 motor-launch for fishing
1 Lot: materials for navigation and fishing, including lifebelts, compass, cables, chain, loudhailers, reflectors, hardware, anchors, lines, fishhooks etc.
1 Lot: seeds and bulbs and small trees for agriculture and horticulture

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Chua Estate - An Inventory of Machinery November, 1954

1 D-4 Caterpillar tractor withhydraulic system, power connection and towbar
1 International tractor - Farmall H. de Ruedas
1 John Deere combiner-selector
1 'Red River' threshing machine
1 7 ton. Chevrolet truck
3 Willys jeeps with towbars
4 disc harrows
3 disc ploughs
1 ditch digger
1 'muck spreader'
2 Martillos saw-mills
1 grain selector
1 husker and pulper - for peas, broad beans?
1 loading craft
1 cultivator
1 potato-sowing machine
1 grain drill
2 potato harvesters
1 3" water pump with petrol engine and 500 metres of hose
1 shearing machine with three cutters and a petrol engine
1 silage machine with engine
1 strawbaling machine and engine
Tools - various
1 300 gall. sprayer with engine Total value: 50,600,000.00 Bols.

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hacendados owned a much smaller proportion of the number of livestock on the estates. In addition their sheep and cattle were nearly all of the degenerate criollo breed' (1970, page 427). The Bolivian Ministry of Agriculture's 1946 survey of 39 haciendas in Omasuyos, Inquisivi and Los Andes, found that with the exception of two haciendas 'all of the remainder had only 800 Merino and Corriedale sheep and virtually no better breed of cattle'.

Sheep assumed prime importance in Hacienda Chua's pastoral activities; according to the animal census of November 1954 (SNRA), Chua Visalaya/Chua Cocani possessed in all 2276 sheep. None of these were less than 50 per cent pedigree and 201 were of first class pedigree Romney Marsh stock. The flock was systematically split (on the bases of age and sex) into seven groups; two of these were normally pastured in Visalaya and the other five in Cocani. A rigorous selection was made annually to separate for sale any animals with defects: all sheep were dipped twice every year and a 'hospital' permanently maintained. Wool was sold regularly to mestizos from Huatajata, and Huatajatans also visited the estate to purchase carcases. At the time of the SNRA census, 70 pedigree cattle (43 Holstein and 27 Brown Swiss) were owned by the hacendado. Of the total number only three were bulls (one being 'Carnation', the national Holstein champion) and 46 were dairy cattle i.e., the emphasis was on rearing cows for milk and dairy produce rather than bullocks for beef or for ploughing - in marked contrast to past and present Aymara practices. Pigs were also of prime quality: 5 Duroc Jersey boars had been procured from Cochabamba and the hacienda also numbered 72 pedigree sows amongst its livestock. Large consignments of anti-swine fever vaccines were obtained in 1950 and 1954 from the Barvia Company, New York, as from time to time were various animal medicines. It has been said that animals normally grazed valley lands; campesinos frequently maintain that in hacienda days "the valley was white with sheep" but 'como en la hacienda no hay campo suficiente, se le da a todo el ganado una ración suplementario de alimento concentrado de afrecho, granos, cebada, avena, torta de girasol y heno' (i.e., the SNRA report stressed that in view of the shortage of grazing land all livestock were fed a supplementary ration of bran, grains, sunflower cake and hay).

In association with its pastoral activities the hacienda operated a small dairy adjacent to the casa hacienda. The 1964 inventory refers to '6 prensas de queso con sus pesas' (6 cheese presses with weights); ex-colonos say that in the early 1950s ten large 'Argentinian' cheeses were made daily from sheep milk and this agrees with the expediente's statement that about 300 cheeses were sold each month. Butter was also made in the dairy by wives of colonos. Dairy products were subsequently sold to middlemen from Huatajata or taken by jeep to the aljería in La Paz.

Such heavy investment in livestock, good seeds, fertilisers, mechanical equipment etc. was rare in pre-revolutionary times. It is difficult to ascertain how far modernisation was due to the activities of one individual patrón, seemingly a man of dynamic personality and perception (in addition to considerable wealth) and how far efficient management had been characteristic of former days; unfortunately, the expediente contains few details of hacienda operations before 1944. It is unlikely that the said patrón was motivated by an eagerness to improve the hard lot of the indios under his care but certainly he realised that to be assured of their optimum cooperation it was essential to avoid stretching the colonato system to its uttermost limits (page 73). His colonos were bound to benefit from some of his expeditures e.g., the provision of animal medicaments to prevent the spread of certain contagious diseases through creole stock. Also he appears to have displayed more concern about the actual organisation of the estate than was typical: it has been estimated that on the Altiplano '90 per cent of the large landowners were absentee landlords who lived in urban centers or abroad and left operations of their farms to managers' (Clark, page 4). The non-agricultural interests of this same hacendado have already been mentioned. Boating activities would seem to have accelerated in the late 1940s (see the assignment of equipment for 1948, page 79). At that time in fact the patrón had elaborate plans for creating a free port along the Chuan shoreline and for developing a tourist industry both in Huatajata and Chua. In the later 1950s, in collaboration with the hacendado of Marca Chua, he even began constructing a motel on the waterfront. It is interesting to reflect on what might have happened had this patrón not drowned in mysterious circumstances, hence the empresa agrícola not subsequently been mortgaged to the

Agricultural Bank and thus not become available for purchase by the Cooperativa Integral 'Chua' Limitada.

(b) The subsistence agriculture of the colonos

The colonato system was basically an arrangement whereby a hacendado granted usufruct rights to small plots of terrain and permitted his tenants to pasture livestock on waste tracts and certain fallow lands; in return, the colonos and their families were obliged to work without remuneration for the estate, supplying animals and tools where necessary, and also were expected to render various personal and domestic services to the landlord and his family both in the casa hacienda and the city house.

In Hacienda Chua, as was usual in most haciendas of the lakeside area, colonos belonged to one of four categories depending on the number of obligations they fulfilled and the amount of weekly labour their families provided. A few Visalayan campesinos said that they had been mayorunis (working one day per week and consequently granted access to minute parcels of cultivable land) and others, yanapacos (with access to larger plots in return for performing additional tasks). By far the majority of household heads had been either medias personas or personas; frequently, as his family grew and its labour potential increased, a colono had graduated from media to full persona. Chuan ex-colonos stated that in order to retain access to 9 hectares of land, four members of a persona's family had as a rule been expected to contribute three days non-salaried work per week (every Monday, Tuesday, Wednesday and sometimes Thursday) and to provide full-time labour at peak periods, such as planting, weeding and harvesting; for the media persona, who was entitled to utilize $4\frac{1}{2}$ hectares, the duties had been halved. Ex-colonos claim that on hacienda work days they had found it necessary to rise before 4 a.m. to complete their own farming chores before walking to the hacienda fields.

Twenty acres of land might have the appearance of being sufficient to satisfy the requirements of a peasant family, but certainly in the case of Chua the figure should not be taken at face value - it is in fact completely meaningless. A critical pressure on land was as much a dominant feature of economic life in hacienda times as it is today

and no colono had access to an amount of cultivable land even approaching 9 hectares. As before, the figures contained in the expediente are conflicting but an overall picture of man-land relationships does emerge from various surveys made in the 1950s: whereas the 1950 National Census returns appear to have omitted mention of Chua, four years later a local census was attempted in connection with the sindicato's petition for land reallocation. SNRA surveyors recorded 509 campesinos (implying all peasants over the age of 18) as residents of Chua Visalaya/Chua Cocani and stated that, of these, 284 were without sayañas (houseplots). Simultaneously it was advanced that 2543.7350 hectares (6,283 acres) of the total 5599.7650 hectares (13,832 acres) should eventually be made available to the peasant population viz., that each of the 509 campesinos should be awarded 4 hectares and the remaining 508 hectares be retained as collective pasture land and 'zona escolar' (school area) - all this conjecturing, regardless of the fact that much of the terrain in question was totally unsuited to arable activities.

On the sayañas, the patrón exercised little control in terms of crop cultivation and inheritance patterns, which approximated to those of Llamacachi and remain relatively unchanged today; no evidence was encountered of the last patrón having interferred in family quarrels etc. over sayaña ownership. According to the 1957 plan of Chua Visalaya (page 40a), of the 87,4423 hectares classified as sayañas or 'terreno de ex-colonos', 42.1063 were held by 110 families in Visalaya proper, 22.7600 by 34 Coripatans and 22.5780 by 71 Cayacotans i.e., the dwellings, outhouses and farmlands of as many as 215 families were limited to about the same number of acres. In addition, 34 ex-colonos were said to be landless - a figure at variance with the 1954 estimation. The surveyors concluded that campesinos on the two estancias exceeded 800 in number, giving a density of 1000 people per square kilometre (2590 per square mile) of cultivated land, and that each head of family held from 3000 to 4000 square metres of sayaña land. (By way of comparison, the 1946 Ministry of Agriculture's study of 39 haciendas had arrived at an average population density of 35 per square mile). In a list produced subsequently, only one of the 110 family heads is shown as being the possessor of a houseplot exceeding one hectare in size.

The 1957 plan of Chua Visalaya gives the total area of aynokas as 630 hectares (1556 acres); it should not be forgotten that large sections of this terraced zone lay above the limits of cultivation for even the hardiest of temperate crops, and that soils were generally thin and stony and presented almost insuperable irrigation problems. A 1956 SNRA document, concerned with the proposed land parcelization, commented as follows: 'All the aynoka lands..... were excessively subdivided because colonos and their sons worked the same plots. In this zone the parcels cultivated by each of the campesinos have become extremely fragmented with the result that some campesinos hold larger plots and others, very reduced ones'.

In view of the various discrepancies in statistical data it is obviously impossible to deduce precise man-land ratios in pre-reform days. From the above however, it is clear that pressure of population on cultivable land was excessive. Colono plots were indeed highly fragmented - one Chua Visalayan had 16 kallpas (plots), another 15 - and cultivation of these scattered patches was marginal. Some campesinos said that one reason why as colonos they had wanted large families was in order to be able to satisfy more hacienda obligations thereby gaining access to additional plots in the aynokas: this only frustrated the situation. Apart from marriage to a Llamacacheño comunaria, one of the few means of acquiring land was to assume part of the work load of another colono in exchange for the usage of a plot to which the employing colono had access. But in most cases, even had the colono been able to gain access to other parcels of land, it would have been of little advantage: hacienda tasks engaged most of his working time and he often found it extremely difficult to complete farming operations in his own fields, especially since peak agricultural periods on the hacienda naturally coincided with those on his own holding.

Moreover, aynoka plots could be confiscated for 'misdemeanours'; in Visalaya one ex-colono had lostg access to land after several diseased hacienda sheep had died during his term as camana (guardian) and a widow, recently returned to the community, alleged that her family had been deprived of access to land and forced to leave the estate because her husband had attended the First National Indian Congress in 1945.[16]

Even in pre-revolutionary Huatajata, seasonal migration to the Yungas had become the customary pattern of life for many menfolk; peasants would leave the community to work for minimal wages on haciendas where labour was in short supply, thereby temporarily alleviating pressure on land and food at home. Huatajata's unique historical background favoured this freedom of movement. Early in the century a Canadian Baptist Mission had purchased the property (together with its then resident 47 colono families); before 1942 obligations to the estate had been discontinued and after that year titles of holdings were transferred to individual peasant families.[17] Similarly in Compi, migration had been a well-established feature of pre-revolutionary days. In contrast to the hacendado of Chua, the Compeño landlord owned other property: during their term as apiris, Compi's colonos were obliged to drive pigs and sheep down to the patrón's other estate near Sorata (north of Achacachi). Additionally, bands of colonos were sometimes sent to Sorata for prolonged labour spells. A few remained in the general region whilst, even by the 1930s, a number 'were always on the road' travelling with mules and transporting dried sheep and llama meat, potatoes and quinua from Compi to the Yungas (Buechler, 1972).[18] Other Compeños migrated to La Paz because of land shortages combined with the excessive hardships imposed by the last owner of Compi. (After 1953, the return of these émigrés, for the purpose of claiming lands they had at one time exploited, was to foment serious friction). Thus, in relation to Huatajata and Compi, the claim made by Buechler (page 309) that: 'Analysis reveals a number of continuities from the past, which were the foundations upon which present day regularities were built. Most important of these were the linkages between different ecological zones' - is irrefutable.

However, in Chua pre-reform migration appears to have played a minor role; in fact with the exception of the case previously quoted (the result of an eviction and not a spontaneous movement), ex-colonos were unable to recall examples of pre-reform migration. This situation could have been due partially to a lack of initiative bred of excessive paternalism (to be considered later); but the fact is also significant that, although many ex-colonos insist they were "worked almost to death", conditions were certainly less severe than in pre-1950 Compi.

Many ex-colonos openly admit to night-time robbery of chuño, broad beans etc. from hacienda fields, in the full awareness that discovery could result in loss of access to land and even to eviction: according to them such produce rightly belonged to them and sometimes offered the only means of averting starvation. Whereas the hacienda was primarily market-oriented, Chua's colonos never found it possible to think in terms other than subsistence requirements. Indeed, no campesino interviewed had in hacienda times regularly sold produce in local markets; such transactions had been restricted to isolated exchanges (sometimes at fiestas) of small quantities of eggs, cheese and meat. To all intents and purposes, the colono was an 'economic hermit'; he had virtually no contact with the world outside Chua except on the rare occasions (normally twice each year) when it was his turn to convey hacienda produce to the city.

On the sayañas, colonos were theoretically free to grow whatever crops they liked but this was hardly a liberty since they were forced by circumstances to produce what was considered most eseential to family needs and could not afford to observe the fallow period. Potatoes, papa lisa, oca, quinua, isañu, cañahui and broad beans were grown with most frequency. The contrast between farming methods on hacienda lands and on colono plots could not have been more extreme. On the sayañas the traditional wooden foot plough (taclla) was used. The more fortunate colonos employed oxen for ploughing purposes; sometimes these could be borrowed by neighbours if they agreed to provide a day's fodder. Otherwise a primitive digging-stick and a clod breaker (a stone attached to a stick handle) were the only implements in general usage; in any case, field size and the uneven nature of the terrain dictated hand labour. Old and unimproved varieties of seeds and potatoes were planted, regardless of whether they were already infected. Crop production on the terraced hillsides was entirely dependent on the summer rains: if they failed or rainfall was inadequate the result could be disastrous in terms of immediate food shortages and lack of seeds for the next year's planting. There was no possibility of purchasing artificial fertilisers, even had they desired to do so; farmyard manure was of greater value as a fuel and used in cooking. The only natural fertiliser added to the soil was taquia (sheep manure); this was collected in bayeta (coarse cloth) sacks from the higher pasture lands. Bean stalks

had to be burnt as fuel or fed to livestock; lakeside totorales belonged to the patrón and passage to and from the totora beds across hacienda fields was prohibited. Whether or not the colonos appreciated the need for conserving soil fertility, it was impossible to do so under the prevailing arrangements, hence soil degeneration became inevitable. One can only hazard a guess at crop yields; according to ex-colonos they were considerably less than those of the hacienda and bore no comparison with crops currently produced on cooperative fields to which artificial fertilisers have been applied.

It is unfortunate that no census relating to livestock owned by colono families was attempted in pre-reform times. Ex-colonos insist that today they keep more animals than in hacienda days; even so the present total number of sheep in the community does not approach the number formerly kept by the hacendado alone. Certainly the estate was atypical in that the colonos by no means owned 75 per cent of total stock numbers - according to Burke this was the normal procedure. Moreover, apart from a few sheep (lambs were occasionally given to colonos in return for outstanding services as shepherds), all animals kept by the tenant population were of inferior quality. They were grazed on the areas of common pasture in the aynokas and in zones marked as 'incultivable' on various hacienda plans. The only animals apparently kept in greater numbers than they are today were llamas; informants said that 'wealthy' personas had sometimes owned more than ten llamas, these being used primarily for transporting produce from the fields to the hacienda warehouse (a building adjacent to the hacienda house). No campesino stated that as a colono he had been in possession of a burro - as had frequently been the case in Llamacachi. Animal losses from disease were considered to have been more numerous than at present but accepted as inevitable. Women were asked whether they had in hacienda times woven aguayos[19] etc. for exchange or cash sales outside the community; all answered that due to a shortage of sheep and llama wool and insufficient time they had been unable to weave enough bayeta to clothe even their own immediate families adequately.

Apart from spending at least three days of each week working for the hacienda, every household was compelled to take its turn

at major rotative posts. These are too numerous to record in detail but some of the more time-consuming ones should be mentioned. These were: camana of fields, of chuño and tunta, and of the lake (supervisor of totora beds); awatiri or shepherd - in Chua an individual family was responsible for one group of sheep for the entire year, during which period members of the family lived in a large adobe 'casa de ovejas' (sheep house); mitani (cooking and cleaning in the casa hacienda); dairy duties involved making butter and cheese; aljiris transported produce from the estate to the city; pongueaje included tasks ranging from messenger service to construction and maintenance work on hacienda buildings. Failure to fulfil hacienda obligations successfully (e.g., by loss of goods en route to La Paz or wastage in the preparation of chuño) entailed fines of varying degrees of severity. On occasions a colono was made to pay a forfeit but the normal practice was for animals or produce to be expropriated. In Chua Visalaya campesinos insist that punishment was repeatedly of a physical nature; there are numerous references (sometimes supported by Llamacacheños) to the usage of a silver whip by the last mayordomo.

Appointed from the mestizo class (and disliked for this reason at the outset) the mayordomo managed the estate in the absence of the patrón; the last Paceño to occupy the position in Chua was exceedingly unpopular and certainly not respected beyond the boundaries of the estate, as was the patrón himself. Direct supervision of hacienda tasks was in the charge of a jilakata, assisted by an alcalde from each estancia. The jilakata was selected annually from and by the colono population but had to be approved by the hacendado (sometimes such an official would be retained for a number of years if he demonstrated loyalty to the landlord). Whereas in Llamacachi the jilakata's authority was drawn directly from the comunarios and he occupied an elevated position, his Chuan counterpart, although he judged minor offences and led ritual ceremonies, was very much an instrument of control, not expected to make decisions but instead given orders and obliged to see they were carried out, however unpopular they made him in the eyes of his fellow-colonos. By the 1940s both Chua and Compi had introduced a new administrative post into the hacienda's political structure; on each hacienda two sot'as (also from the colono section of the population) were appointed

to be directly responsible to the mayordomo. One advised him on fieldwork and the other distributed seeds, received the harvest and kept estate records.

The pre-revolutionary economy of Llamacachi

A general lack of pre-revolutionary demographic material makes it impossible to establish the man-land ratio in Llamacachi with any measure of accuracy; the researcher is obliged to rely almost exclusively on the memories of informants residing in the community. Whereas Burke (p.421) states that since the National Revolution population has increased between 50 and 100 per cent on nearly every ex-hacienda in his region of study, it seems more than likely that the reverse is true of Llamacachi i.e., that the pre-revolutionary resident population exceeded that of the present day. Numerous campesinos assert that although the total number of households remains relatively unchanged (today there are 63 households), families were usually larger in olden days, whilst out-migration was negligible. It would seem that only a few families and isolated individuals moved permanently to La Paz (these rare examples were attributed by the comunarios interviewed to a shortage of land and family disputes over land ownership), whereas an ever accelerating migration to the city is one of the outstanding features of the post-revolutionary scene. Some heads of households indeed complained that they are no longer able to complete all tasks necessary to the smooth running of their holdings because of family labour shortages created by children moving en masse to La Paz.

Whilst it was frequently maintained and can readily be believed that pressure of population on land resources was almost as excessive as it had been in Chua Visalaya, Llamacachi obviously possessed certain advantages. In the first place the comunarios were not subject to the abuses of the colonato system and thus were at liberty to expend their energies as they pleased; neither did they live in perpetual fear of deprivation of ancestral lands as did their less fortunate neighbours. Furthermore, whereas Chua Visalayan colonos were only permitted to exploit trifling plots of land on terraced hillsides, Llamacacheño families had access to the much more fertile, highly-valued tracts of flat land adjacent to the sacred lake.

From the aerial photograph it is clear that in the mid 1950s the orillas belonging to Llamacachi were intensively exploited, as they had been from time immemorial; the pattern of small, irregular fields contrasts vividly with those of the adjoining haciendas of Compi and Chua. Some families when interviewed claimed that they were in possession of land titles granted as a result of the 1883 revisitas indigenales but this could not be substantiated since, because of a multiplicity of inter-family land disputes (involving accusations of stealing, removal of stone boundary markers etc.) no householder revealed a willingness to produce written evidence. Two families (the Nabos and the Lauras) always appear to have owned more extensive landholdings than other Llamacacheños and were referred to as originarios; before the National Revolution, even their holdings had been considerably fragmented by repeated subdivision of parcelas on the death of household heads. In some extreme instances children were inheriting only a fardel of furrows in each of several plots. No comunario could recall a time when there had been an annual or any other regular form of field redistribution; by tradition these remained in the same families and rarely changed hands.

Methods of cultivation approximated to those of Visalaya e.g., the same crops were grown on the hillside terraces above the road and on household plots as in colono sayañas, whilst the normal four-year cropping system (potatoes, oca, broad beans and barley) was observed in the orillas, as it was on the colonos' aynoka kallpas. Although, according to comunarios, lakeshore lands were never left fallow for an entire year, land usage was not as intensive as today i.e., only one crop was cultivated annually rather than cropping being continuous as at present, with two crops being produced in one year or at least three in two years. Similarly, specific dates for particular farm operations were set aside by the jilakata (as they were on the hacienda) and associated with ritual ceremony e.g., threshing of quinua occurred on Corpus Christi (17th June), whilst all cultivation and weeding ceased at Candelaria (2nd February) since any further activity was deemed detrimental to plant growth. Likewise, potatoes formed the mainstay of the economy and diet; comunarios say that in earlier days "to be rich meant to have plenty of chacras (fields) and big crops of potatoes and broad beans". Onions had been introduced to the area in the decades preceding the

National Revolution (some comunarios insist that they were first brought from La Paz in the 1930s for medicinal purposes, others that a Peruvian wool dyer was responsible) but had assumed little importance prior to 1952. In common with Visalayan peasants, Llamacacheños planted unimproved seeds and kept them from year to year. According to the corregidor, past yields bear no comparison with present-day ones e.g., potatoes were small and often blighted. However, most Llamacacheños were of the opinion that crop yields, whilst much smaller than those from Hacienda Chua's orillas, on the other hand exceeded those obtained by Chuan colonos. This is only to be expected since, although an equilibrium between man and land was impossible in view of the dense population and acute pressure on cultivable soils, Llamacacheños were cultivating superior fields and had access to larger supplies of natural fertilisers: most appear to have fully appreciated the intimate relationship between the latter and crop yields. In pre-revolutionary times the majority of families had owned a patch of totora: in addition to providing fodder and material for thatching and boat building, the old stems were burnt together with field stubble, bean stalks and farmyard manure to replenish soil / fertility prior to potato planting. Some 'wealthier' comunarios applied sizeable quantities of taquia (sheep dung) to their plots of land; this was collected from the hill pastures by neighbouring colonos, who received small amounts of potatoes, oca etc. for their services. Irrigation of lakeside fields presented problems, especially in connection with the channelling of water from the stream passing through Chua Visalaya and subsequently across Llamacachi's lakeside terrain, but at least climatic and edaphic conditions were far more favourable than those on the Visalayan hillsides. When flooding of the orillas did occur - about once every five years - considerable suffering ensued within families solely dependent on produce from lakeside fields, especially if they had not managed to preserve any of the previous year's harvest. A few such people were able to supplement their meagre income by assisting on Compeño estancias with the June threshing of beans and barley (taking place between San Juan, 24th June, and San Pedro, 29th June); for this they were paid in kind by the colonos to whom they were giving help.

According to the corregidor and other trustworthy informants, comunario families had as a rule owned fewer animals in the 1940s

and early 1950s than they do today and pedigree stock was unknown within the community. Seemingly, no comunarios had owned llamas - they were considered as "poor men's animals"; transport was traditionally by mule and most families retained one of these. Fewer cattle were kept than at present; there was never the same necessity for keeping large numbers of oxen as in Chua Visalaya, where until the estate was fully mechanized each family had been obliged to provide animals for ploughing. Some Llamacacheño families had reared one such animal and borrowed another when necessary; others had not kept any. Most families raised guinea pigs for consumption at family fiestas, as they do today. Some people believed that possibly more pigs had been kept in the earlier period; these were bought by dealers from Huatajata, who subsequently sold the meat in the Yungas. Although families made small cheeses from sheep milk there was no tradition of manufacturing larger cheeses on a regular basis as in Hacienda Chua. Sheep wool for weaving purposes was sometimes obtained from colonos in Compi, generally in return for sacks of potatoes, oca and quinua. Forage for animals presented Llamacacheño comunarios with fewer problems than it did Chuan colonos: livestock was freely pastured on Compeño hillsides and when fodder was in short supply, particularly in the winter months, animals were grazed along the water front, their diet being supplemented by totora and the lake weed, chanko.

Whilst it could be said that pre-revolutionary Llamacachi was essentially subsistence-oriented and some families always lived close to starvation point (especially during 'la miseria'), marketing activities were already developing on a much broader scale than among Visalayan colonos. Whereas in Visalaya size of plots, work and service loads largely precluded production for marketing purposes, and in any case adobe dwellings straggled the rocky hillsides, far distant from the main thoroughfare, Llamacachi was free to engage in marketing pursuits and most comunarios lived adjacent to the Copacabana-La Paz road, which was widened in the early 1940s. Whenever crop yields were favourable enough to provide a reasonable surplus, richer Llamacacheños would sell chuño, potatoes and oca in Paceño markets; between 1937 and 1953 eleven major markets were established in La Paz, facilitating such negotiations. In the 1930s all transportation was by mule but during the early 1940s three lorries were

making daily journeys between Copacabana and La Paz and a few Llamacacheños began using the new mode of transport. By about 1947 Hacienda Compi owned two trucks and this means of travel became well established and closely associated with the replacement of men by womenfolk as the principal vendors. Whilst cash was rarely used in transactions involving Visalayan colonos, although Llamacacheños were accustomed to bartering at local fiestas and ferias (the weekly fairs of Jank'o Amaya, Huarina and Achacachi all operated in the pre-reform period) for essentials such as wool, salt, dyes, pots and coca, most marketing activities in the city were on a cash basis. These early market negotiations in La Paz can be directly related to the community's contacts with the Huatajatan Baptist Mission. The primary school established in Compi in 1943, and one afterwards opened in Chua Visalaya, provided the opportunity for learning Spanish, nowadays deemed vital to successful city marketing. In addition, by the 1950s a great number of comunarios (perhaps the majority) had become members of the Baptist church and this had already had its impact on the traditional fiesta system: Baptists were unwilling to spend their money on alcohol and contribute their surplus foodstuffs, preferring to make investments of a more durable nature. Refusal to participate in drinking bouts and to finance community fiestas inevitably created discord within the community and also between Llamacachi and the estancias of Compi. (No less today are Llamacacheños indiscriminately categorised as anti-social campesinos. An odd - perhaps envious - remark of a Compeño clearly illustrates the point: "I do not like the men of Llamacachi - they are rich evangelistas and eat frogs").

Although the pre-revolutionary economy of Llamacachi was essentially agricultural and out-migration was at a minimum, pressure on limited land resources and freedom of activity had encouraged some measure of diversification. Unlike the colonos of Visalaya, Llamacacheños engaged in fishing, albeit on a small scale. The lake had not by then been stocked with the celebrated trout-salmon, thus comunarios were mainly concerned with catching small edible fish such as karachi, boga, suche and mauri; these were consumed within the community or bartered at local markets. An innovation apparently unique in Llamacachi and clearly demonstrating the community's initiative has already been mentioned on page 63 Llamacacheños

claim that the 'maria' (an incomplete balsa boat) is as serviceable as the traditional two-pointed balsa and can be made with much less effort: although nobody can remember when 'marias' were first made, the consensus of opinion indicates the late 1940s. It has also been seen that a few comunarios, including the corregidor, were employed by Astillero Titicaca in the late 1940s and 1950s. Whilst contacts between the community and Yungeño markets had not been as widespread as those involving Compeños they had certainly become established in the years preceding the National Revolution; for example, as a means of financing household and community fiestas, a few non-Baptists had made infrequent trips to the Yungas to sell dried meat. Thus, by 1952 subsistence agriculture still predominated but some Llamacacheños were already actively participating in marketing outside the local area and the foundations of the post-revolutionary economy were undoubtedly in evidence.

'La miseria'

'La miseria', an expression commonly used in present-day Chua Visalaya to denote the November-April rainy season during which food supplies are gradually exhausted and life becomes a constant struggle, admirably epitomizes the social conditions endured by the great majority of Llamacacheño and all Visalayan families in the pre-revolutionary period. A few less-destitute Llamacacheño families enjoyed slightly more favourable living standards (in terms of food and shelter) than their neighbours, but all families accepted the natural hazards of flood, tempest, hailstorm and drought with a traditional fatalism, as they did infant mortality and disease (whether in human beings, animals or crops). McBride, after visiting the lakeside area, wrote in 1921 (p.4) that 'most of the Indians, though with few wants and well schooled in thrift by hard necessity, are constantly on the verge of starvation, and the failure of a single year's crops brings them face to face with actual famine'; this situation remained virtually unchanged some thirty years later.

Food and health

Unfortunately no epidemiological surveys were undertaken in the immediate area prior to the National Revolution but most ex-colonos and comunarios are adamant about the differences between past and present rates of food consumption. Even the most poorly endowed

inhabitants of both communities, still living on a subsistence diet, refer to their modern mode of existence as "la vida linda" (the 'genteel' life). All residents maintain that they ate less food and were sustained by a much more monotonous diet in days gone by. Most food was traditionally consumed in the form of soups which were based on potatoes and their derivatives and sometimes highly seasoned with aji to make them more palatable. The first meal of the day comprised barley or quinua and chuño soup; in the early afternoon, whilst field work was temporarily halted, colonos and comunarios would eat cold oca, broad beans and chuño (carried to the fields in aguayos), whilst at night time another soup meal, based on combinations of barley, beans, quinua, papa lisa, potatoes and chuño, was normally consumed. Meat, cheese, eggs and milk were but rarely included in the diet and protein deficiency was ubiquitous. Charqui (dried meat) and broth were infrequently eaten in Llamacachi as were small lake fish (the main source of protein for some Llamacachenos) but most families only had access to small quantities of meat at fiesta time. Whilst in Chua Visalaya eggs could have provided a valuable source of protein (most families kept a few hens), they were regularly collected by the colono whose turn it was to act as aljiri and subsequently transported to La Paz for sale for the landlord's benefit. In the absence of a seasonal migration to the Yungas or to the city it is difficult to appreciate how some colono families actually survived years of crop shortage or total failure and how various Llamacacheño households obtained sufficient food for bare subsistence requirements on occasions when floods devastated their crops, though at least (unlike the colonos) they had access to the pith of totora stalks. It is hardly surprising that many colonos resorted to robbery of hacienda produce nor that the position of camana de productos has been retained by Visalaya's cooperative. In the years prior to the National Revolution, bread was being purchased in La Paz by some Llamacacheño vendors, but sugar, coffee, noodles and rice - all in every-day usage at the present time - were still alien to all but a few peasants. Locally brewed chicha was the staple beverage and cheap alcohol was heavily imbibed at fiestas. Coca (frequently mixed with quinua ash) helped to counteract deficiencies in alimentation; it was masticated by all to afford indifference to hunger, pain, cold and weariness and became a basic necessity of life. On the hacienda its supply depended on the whims

of the hacendado or mayordomo; several aged ex-colonos say that their main problem today lies in a shortage of cash for the purchase of coca to which they are addicted.

All cooking was done outside in the sun or inside the adobe dwelling - in both cases on a low clay stove, fired by straw or dung; the only available utensils for cooking and eating were likewise of clay or, less frequently, eucalyptus wood. Many older womenfolk attribute a life-long cough (c'ajja) to the very smoky atmosphere engendered by cooking activities, although it is likely that the remedy applied i.e., putting animal fat on the throat and rubbing with black sheep wool, irritated rather than improved the situation. Water was often contaminated by livestock but never boiled before usage: according to the Huatajatan Baptist nurse this was probably the root cause of a bad epidemic of typhus fever spreading along the lakeside in 1942. Many local residents died from the disease and others developed advanced TB in consequence. Medical aid was available (the Huatajatan clinic had been opened early in the 1920s) but very few Visalayans or Llamacacheños had the minimal financial resources to pay for treatment or were indeed willing to place their faith in such medical cures, preferring to rely on the customary herbal remedies or potions concocted by the communities' brujos (magicians) or curanderos (curer healing with herbs). For the elderly people stricken by disease and debility, death was sometimes a welcome escape; there was nothing to prevent unscrupulous neighbours, and even their own children, from stealing produce and expropriating their parcels of land. Whilst infant mortality remains high, it was, according to the Baptist nurse, much more prolific in the past and was accepted as the natural course of events; many children surviving the first year of life succumbed during the 'dangerous years' (the years between one and five) to pneumonia, measles or dysentry from which they were unlikely to recover, or died from undernourishment or poisonous herbs. Whilst large families were generally valued as a source of labour and a means whereby rapacious neighbours' attempts to steal land could be thwarted, mothers had sometimes breast-fed their youngest children for more than three years, believing this an effective method of preventing further pregnancies. Girl twins in both communities were regarded as a curse and were smothered at birth or allowed to die from inadequate

sustenance. Little respect was shown to the womenfolk; some wives had died from being kicked in the stomach in an attempt to induce termination of pregnancies, whilst single girls not infrequently died from efforts to abort themselves by means of drinking herbal concoctions.

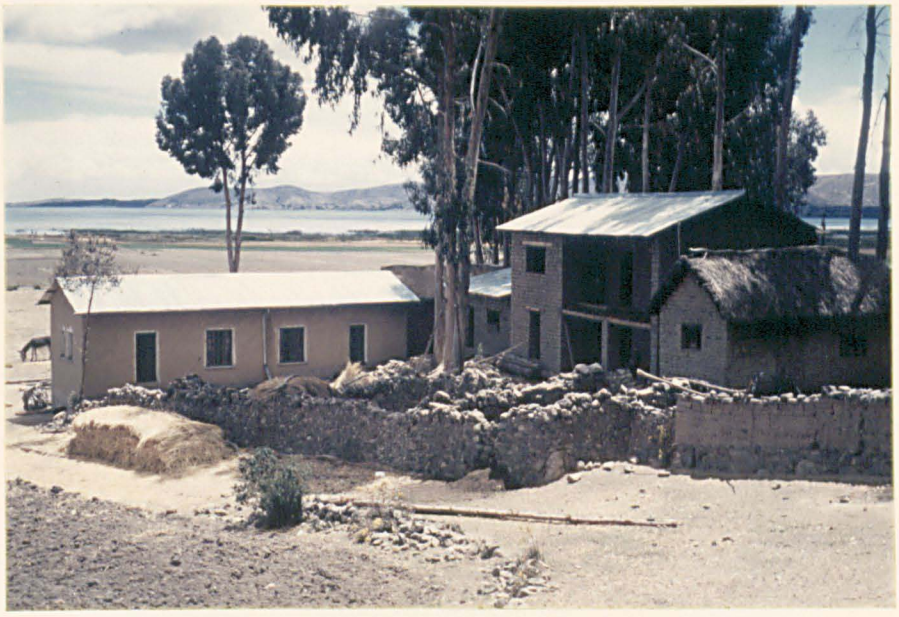
Marriage

Marriages were usually (as they often are today) arranged by fathers, with land and livestock prospects uppermost in mind. Several informants sadly insisted that "no había amor aquí en el campo" (implying that personal feelings assumed no importance in marriage arrangements). Residence was patrilocal, the young couple living for several months with the groom's family before building their own dwelling on the family compound - an occasion marked by much ritual ceremony and involving cooperation of an aini nature.[20] In both communities, one or several animals (assuming the family owned them) would habitually be given in dowry by the girl's parents; the young couple would be granted access to a few furrows of land in one or all of the parental chacras or would share-crop with the father and inherit land on his death, the amount depending on the number of children in the family. Girls sometimes received smaller portions of land whilst illegitimate children (numerous in the pre-revolutionary era) usually suffered considerable hardships and remained outside the inheritance pattern.

Housing

Old adobes exist side by side with their replacements, being currently utilised for storage, cooking and sheltering animals (especially guinea pigs). They contrast sharply with Chua Visalaya's casa hacienda, which is today in a bad state of repair and used partly as a warehouse by the cooperative and for its reunions. The hacienda house was situated adjacent to the main road, on valuable land above the area susceptible to lake flooding; it was a fairly elaborate construction as evidenced by the Banco Agrícola's 1964 inventory: 'a residence built in a modern architectural style, with three bedrooms, a dining room, a bar (all with wooden floors), a bathroom with mosaic tiles, a kitchen with cement flooring... complete with drinking water installations.. electric lighting and

Chua Visalaya's casa hacienda, derelict since the late 1950s. Members of Chua's cooperativa are summoned to meetings in the forecourt by the old hacienda bell. The picture illustrates some of the expensive farm implements bought in the last days of the estate and subsequently allowed to fall into a state of disrepair.



Modern housing in Llamacachi. The old thatched adobe houses guinea pigs, provisions and tools. In 1971 the family was living in the single-storeyed, tin-roofed building but intended to use this for cooking and storage once the elegant, two-storeyed structure was completed.

drainage'. Simultaneously, Visalayan colonos were being compelled to build their small one-roomed adobe dwellings at great distance from the road and beyond the moderating climatic influences of the lake, on the steeply inclined, rocky hillsides. Settlement was generally dispersed, each family building at the centre of the ancestral sayaña. Some of the oldest colono houses have solid rock foundations but most are constructed entirely of adobe, more typical than the usage of adobe bricks being the solid wall facings. Buildings lacked windows and chimneys, and low doors helped to conserve some of the heat generated by cooking. All activities proceeded within the single small room; one section would be set aside for storage and cooking, whereas the other end was occupied by 'beds' - raised sleeping areas constructed from adobe and covered with dried grass, all extra clothing and any available animal hides. Apart from this, no furniture was in evidence. Roofs were of thatched straw. There was little incentive to expend much energy on improving housing conditions since the colonos lived under constant threat of being evicted in the event of displeasing the hacendado.

In Llamacachi comunarios were at liberty to build away from the inhospitable rocky terraces. Settlement in the freeholding was more nucleated; this may originally have been partly for protective reasons but acute shortage of building space made it almost inevitable. Although a number of adobes were constructed along the lake side of the main road, the majority of families lived on houseplots above the road, where the hill slope afforded shelter from strong winds blowing towards the lake. A few buildings south of the through-road (and marked by eucalyptus groupings on the aerial photograph) had to be abandoned in times of flooding and refuge sought with relatives elsewhere in the community. Thatching in Llamacachi was more often of totora than dried grass but otherwise conditions inside the dwellings approximated to those of Visalaya. Apart from the casa hacienda, all housing in both communities was sub-standard: the tremendous differences between past and present adobe buildings, both in terms of size and building techniques, reflect changing standards of living more dramatically than does any other feature of today's landscape.

Clothing

In pre-revolutionary days only the best-endowed families of Llamacachi were able to make regular purchases of clothing articles

outside the community. Apart from special fiesta costumes (handed down from generation to generation), clothing was usually made at home from coarse but strong bayeta material, dyed with herbs and earths. By tradition the womenfolk used simple handlooms for weaving, whilst some of the menfolk wove lengths of bayeta on Mediterranean foot looms. Women normally wore thick polleras (skirts) and dark mantas (shawls) over blouses of rough cloth or, less often, cotton. In the years preceding the National Revolution men customarily wore grey, black or brown bell-bottomed trousers (frequently patched), rough shirts, llama wool ponchos, plus lluchu head covers (woollen hats in imitation of the helmets originally worn by the Spanish conquerors); shoes were not used. Clothing, apart from that sported on festive occasions, was drab and generally inadequate. Hacienda tasks and lack of financial resources to obtain Peruvian dyes, precluded the womenfolk of Chua Visalaya from making colourful aguayos as they do today. Sewing-machines - in common with transistors and bicycles - had no part in the pre-revolutionary scene.

Fiestas

Feast days provided a welcome break from an otherwise hard and monotonous life, and the fiesta hierarchy a means of social stratification. In Chua Visalaya and to a certain extent in Llamacachi prestige was largely determined, apart from the possession of land and stock, by the ability and willingness of individuals to sponsor community fiestas. Marca Chua traditionally held a festival on 3rd/4th October and Chua Visalaya one a few days later. Todos Santos (1st November) was celebrated by all communities both on a family and community basis. In Compi the major fiestas took place on the Día de San Pedro (29th June) and La Merced (24th September); Llamacacheños frequently acted as sponsors on the former occasion. According to campesinos there were far more of the smaller local fiestas in pre-revolutionary times than there are today. It has been seen that by the 1950s the traditional fiesta system had already provoked dissension amongst the Baptists and non-Baptist members of Llamacachi; the community as a whole deprecated the situation as it did any form of disunity providing a reason for neighbouring colonos to 'look down' on it. In Chua Visalaya the fiesta system still afforded temporary alleviation from the physical hardships of life: it was an occasion for excessive drinking and brawling. Campesinos of both Chua and

Llamacachi contend that hacendados of Chua were eager to support such gatherings because it was in their interest to promote and maintain internal strife (providing this did not interfere with work performance); it focussed feelings of resentment and antagonism on groups within the colono sub-stratum, thereby diverting attention from the landlords and the hated institution they represented.

Education

A central government decree of 1929 had required all hacendados with more than 25 resident Indians on their estates to furnish adequate facilities for the education of the children of their tenants. This ruling they were unwilling to comply with, fearing it would widen the colonos' horizons and precipitate mass rural migration to the city, thus disrupting the 'equilibrium' on their properties; as Paz Estenssoro remarked, 'The peasant was better exploited as an ignorant worker than as one who knew his rights'. Not even the jilakata of Chua Visalaya was allowed to make meaningful decisions or exercise initiative in the operations of the hacienda; colonos who did reveal any inclinations towards modifying the status quo e.g., by attending the First National Indian Congress (see page 103) were deemed potentially dangerous and consequently evicted. As has been stated, against the patrón's wishes the Baptist Mission had in 1943 built a primary school in Compi and shortly afterwards one in Chua Visalaya; records kept by the nurse show 60 to 70 children as being on the original role of the latter though few attended with any regularity (girls especially were kept at home for cooking and herding tasks). The last patrón of Compi actively obstructed the opening of an all-grade elementary school and would not permit the children from his estate to attend the one in Huatajata. According to Visalayans, the hacendado of Chua did not encourage attendance at the Baptist school but did not forcibly prevent it. They insist however, that if any member of the colono populace was discovered communicating in Spanish, he was whipped by the mayordomo or likely to lose his tongue or a limb (whilst the former may have been true there was no actual evidence of inhumane mutilations). The importance of education, especially of a rudimentary knowledge of Spanish as a means of gaining entry to the outside economic world, was already widely appreciated in Llamacachi; a few progressive comunarios had in the 1940s invited

teachers to their homes to instruct all interested but for a variety of reasons (mainly financial) the experiment failed. Until 1958 Llamacacheños had to rely on the local inadequate primary schools and any young man who was particularly keen to be further educated was obliged to undertake the daily return journey to Huatajata by foot. Many of the elderly comunarios say they regret this lack of formal education more than most adverse features of pre-revolutionary life; often they assert that "we were like burros" or "indiobrutos".

This was the general social and economic background against which the changes of the last two decades must be viewed. In Chua Visalaya life had continued at subsistence level from time immemorial and living standards had remained virtually sub-human. In neighbouring Llamacachi a few families were more favourably disposed, but for the majority the base of life was no less precarious than on the hacienda and any upward mobility, whether social, political or economic, was out of the question.

Footnotes and References - Chapter IV

1. L. Antezana E., El fedualismo de Melgarejo y la Reforma Agraria (La Paz, 1971) p.9. Later references are to the same book.

2. These are terms used by Antezana: he refers to the hacendados as 'anti-nationalists' because, apart from their 'anti-national' rural programme, they were opposed to the protection of Bolivian trade and more than willing to place the control of mineral exploitation in foreign hands.

3. G.M. McBride, The Aymara Indian Communities of Highland Bolivia (New York, 1921) p.26.

4. R.J. Clark, Land Reform in Bolivia (USAID/Bolivia and Wisconsin, 1970) p.4. Other references are to the same work.

5. In fact, if statistics from the nineteenth-century population censuses are to be believed, the population of La Paz actually decreased from 471,200 in 1854 to 312,700 in 1882 (the ill-fated War of the Pacific, 1879-83, may have been a contributory factor), before rising to 446,500 at the turn of the century.

6. This was in order to ascertain the amount of produce harvested and thus be able to hold the mayordomo and administrative staff accountable for its transference to the city aljería (storehouse/shop).

7. Willka's success was short-lived; subsequent regimes ignored former promises of justice to the indios and Willka was himself assassinated.

8. W.J. McEwen, Changing Rural Bolivia (Final Anthropological Report for the Peace Corps/RISM Bolivia Project, 1969), p.247.

9. Hacendados habitually controlled politics at provincial level; one suspects that in this isolated instance there must have been some personal feud or rivalry between the hacendado and the provincial judge.

10. On the hacienda the jilakata was the task master who directed field work; he was directly responsible to the mayordomo. In the free community, the jilakata was the 'headman' and held office for one year.

11. D.B. Heath, C.J. Erasmus & H.C. Buechler, Land Reform and Social Revolution in Bolivia (New York, 1969).

12. M. Burke, 'Land Reform and Its Effect upon Production and Productivity in the Lake Titicaca Region', Economic Development and Cultural Change (April, 1970) p.418.

13. W.E. Carter, Aymara Communities and the Bolivian Agrarian Reform (Gainesville, 1964) p.71.

14. This is questionable: the Buechlers assert that 1 quintal as used in pre-reform hacienda accounts represents 100 lbs., whereas the Bank of London and South America (BOLSA) states that in the Latin American context, a quintal is the equivalent of 4 arrobas i.e., 46 kgs. or 101.36 lbs. It is also plausible that hacienda records allude to the metric quintal i.e., 100 kgs., in which case the tonnage should be doubled.

Footnotes and References - Chapter IV continued

15. H.G. Dion, Agriculture in the Altiplano of Bolivia (Washington FAO: Development Paper No.4, 1950).

16. El Primer Congreso Nacional Indigenal, called by President Villaroel and organised by the Indian leader, Luis Ramos Quevedo, stipulated that pongueaje (see page 88) should be abolished. The negative reaction of the landlords after the Congress provoked 'huelgas de brazos caídos' (sit-down strikes) in Tarija, Potosí and Oruro.

17. Before they were granted titles the tenants had, over a five-year period, to prove their worthiness by producing better crops and constructing new adobes.

18. J-M. Buechler, Peasant Marketing and Social Revolution in the State of La Paz (McGill University, 1972).

19. Aguayos are the cloths (usually two strips of brilliantly-coloured woven material stitched together) in which babies, potatoes etc. are bundled and transported on the backs of females.

20. Aini (ayni) was the traditional pattern of labour exchange; it used to be restricted to the extended family but currently sometimes involves most members of a community syndicate.

CHAPTER V - SOCIAL AND ECONOMIC CHANGE WITHIN LLAMACACHI AND CHUA VISALAYA

Chapters V and VI are devoted to straightforward accounts of post-revolutionary changes affecting the two lakeside communities and to comparative descriptions of contemporary community life. No attempt is made at this stage either to analyse the factors responsible for change or to elaborate on the multiple obstacles and problems impeding the change process; considerations of the psychological impact of the Revolution and of changing campesino attitudes and values are likewise excluded. Furthermore, although unquestionably 'the level of political integration of the peasantry is one of the most impressionable changes produced by the Revolution' (Marschall, 1970),[1] since the present study is predominantly socio-economic in orientation, political issues will receive but scant mention. (Alexander, 1958; Malloy, 1967; Patch, 1961; Zondag, 1968; Carter, 1971, et al. have written profusely and creditably on the fascinating subject of post-1952 political change at community level).[2] However, politics are bound to interpolate on occasions when they become inseparable from the social and economic aspects of change under review: community decision making, the quest for status as cantonal capital, and Chua Visalaya's seemingly intractable land problem adequately illustrate the point.

The present chapter is concerned primarily with social and economic changes taking place inside the physical boundaries of the two communities, whereas Chapter VI focuses attention on changing relationships with the outside world i.e., on social contacts and marketing activities within the local region, on interactions between Llamacachi/Chua Visalaya and La Paz, and on the complex process of migration. Such a subdivision is convenient but purely arbitrary. As was stressed at the outset, it is no longer feasible to approach lakeside communities as isolated, self-contained units; today their very survival depends on the intricate and delicately-balanced network of ties with migrants residing in the city and with Paceño markets.

Social and economic change are not wholly interdependent. Whilst the latter normally constitutes a prerequisite for the former (improve-

ments in social conditions and general living standards thereby reflecting economic change), economic development does not of itself guarantee social adjustment. Application of artificial fertilisers, purchase of pedigree stock and increased participation in marketing activities are easily observed traits and clearly indicative of agricultural progress: social adaptations are on the whole far more difficult to detect. Material possessions are frequently regarded as the prime, if not the sole, indicators of social change; their existence certainly implies a rise in purchasing power but is insufficient proof of the amelioration of living standards. For example, the construction of Chua Visalaya's primary school did not ensure that all local children of primary school age would regularly attend the school once it was built; on the contrary, absenteeism poses no less a problem in this particular ex-hacienda than in others of the lakeside region; similarly, the mere availability of medical supplies in Huatajata and the erection by the Peace Corps of latrines adjacent to the Chuan school do not furnish conclusive evidence of changes in campesino attitudes and improvements in health and sanitation. Peace Corps/RISM research workers, conducting investigations in the late 1960s, devised an exceedingly involved questionnaire for the purpose of interpreting social change in selected communities. The SNRA (1970),[3] in an attempt to categorise rural provinces according to 'el nivel de vida actual' (four such 'levels of life' were identified, the lowest, 'el cinturon de pobreza' i.e., 'the belt of poverty', being restricted to the southerly Departments of Chuquisaca and Potosí), based their assessments on what they considered the three major indicators of social change viz. food, housing and domestic equipment. More specifically, they were intent on discovering how many times (in the course of a week) families were accustomed to consume meat, the proportion of homes with one or more windows and tin roofs, and the number of households with wooden or metal beds, primus stoves, kerosene lamps, bicycles and transistors.

To attempt a description of post-revolutionary change in the ex-hacienda without yielding precedence to modifications in the land tenure structure and the eradication of the colonato system is totally inconceivable. It is an unfortunate truism that Chua Visalaya's land question pervades community life: it is responsible for a complete

lack of cohesion (discord occasionally culminating in outbreaks of physical violence and serious bodily injury), to a large extent accounts for the community's lagging far behind neighbouring Llamacachi in the economic field, and indeed impinges on almost every facet of social and economic life within the ex-hacienda. In view of this fact, and partly for the reasons previously advanced, it is logical to concentrate first on the various aspects of economic change at community level. Contrasted historical backgrounds, recent legislative measures peculiar to Chua Visalaya, and marked differences in rates of adaptation and adjustment to post-1952 conditions, dictate that Llamacachi and Chua Visalaya be accorded separate treatment. Whilst the more widespread occurrence in Llamacachi of prized material possessions - especially the transistor, the bicycle and the kerosene lamp (in the SNRA's opinion (1970), the three major status symbols in rural communities) - suggests that living standards have improved more dramatically in the comunidad, similarities in the sphere of social change are ubiquitous. Hence from this angle it becomes practicable to examine the two communities together, noting any discrepancies or contrasts as they become apparent.

It is interesting to pause momentarily and speculate on the differences which the seasoned traveller McBride might have observed had he returned to this section of the lakeside half a century after his original journeyings (1921). One conjectures that he would have been impressed by marked improvements in the size and structure of adobe dwellings, by the disappearance of the hacienda system (less obvious in Chua Visalaya than on the majority of ex-haciendas, where hacienda fields have been excessively fragmented), by the intensification in land usage and the emphasis on growing onions at the expense of the potato, by road widening and the associated transformation of transport media, by the introduction of the eucalyptus tree, and by the innovation of roadside stores, selling a wide variety of wares, many of them foreign to the Altiplano/lakeside region of the early 1920s. One imagines that McBride would have been astounded at the degree of out-migration from a comunidad such as Llamacachi; in 1921 he had stated dogmatically that 'even the inducement of good wages in the cities, at mines or upon the railroads, can seldom uproot these devoted farmers [he was writing exclusively about the comunario populace] from their little plots of land'.[4]

Outsiders visiting Llamacachi and Chua Visalaya during this researcher's stay in 1971, when invited to elaborate on the features of community life striking them most forcibly, invariably referred to the brightly-painted (green and white striped) primary school in Visalaya, to the 'sophisticated' adobe housing in parts of Llamacachi, to the large number of bicycles in the same community, to the healthy appearance of onion beds in Llamacachi's orillas and to the adoption of western-style clothing by numerous campesinos; the overall impression was one of increasing prosperity. The dangers implicit in basing judgments solely on superficial observations is obvious; factors vital to an understanding of the functioning of the communities do not necessarily manifest themselves at surface level - they may remain entirely obscured from view. In the present instance, brief glimpses of community life can give little or no indication of the pressure of population on limited cultivable soils, of the accelerating rate of migration to the city, of the deep-rooted mistrust and total lack of cohesion confounding Chua Visalaya's development, or of the abysmal standards of health and hygiene common to both communities.

Demographic change

El Censo de Población de la República de Bolivia, levantado el día 5 de septiembre de 1950 (the 1950 Bolivian National Census) might be expected to provide an ideal starting point for investigations into post-revolutionary population changes. Unfortunately such is not the case: deficiencies of the statistical material preserved in Ministerio de Hacienda y Estadística (Ministry of Finance and Statistics) master files have already been noted. Direct references to Llamacachi and Chua are nowhere in evidence; indeed there is no assurance of population statistics for the two communities being included in the totals for Santiago de Huata, to which cantón both hacienda and comunidad owed allegiance in pre-reform days. For a variety of reasons - not least, the active resistance of local residents - census officials calculated a 6 per cent margin of error in figures relating to the rural sectors of Santiago de Huata. Cantonal totals were deduced as follows: urban dwellers 948; rural dwellers 15,152; total population 16,100. The Dirección General de Estadística y Censos (the Central Office of Statistics and Censuses) projected that over the subsequent decade the cantón's population would rise from 16,100 to

about 18,870 i.e., by approximately 17 per cent. In the absence of data from later censuses - the only one taken in the post-revolutionary period (1970) was confined to the urban area of La Paz - it is impossible to establish the measure of accuracy of the projection.

The Bolivian Ministry of Agriculture's 1946 survey of 39 haciendas 'en las provincias de Omasuyos, Ingavi y Los Andes' assessed the average population density in the study area as 35 persons per square mile. According to the 1950 National Census returns, the total population of Omasuyos, the fifth smallest (2065 sq. kms.) of Departamento de La Paz's 19 provinces, was 64,784 - a figure exceeded only in the provinces of La Paz, Camacho and Ingavi. The density of rural population in Omasuyos was estimated as 28.23 per sq. km. (73 per sq. ml.) i.e., more than twice the figure quoted above. Rural density was in fact the fourth highest in the Department: it was only slightly less than in the smaller provinces of Camacho and Los Andes, but merely half that of Manco Kapac (52.85 per sq. km. or 137 per sq. ml.).[5]

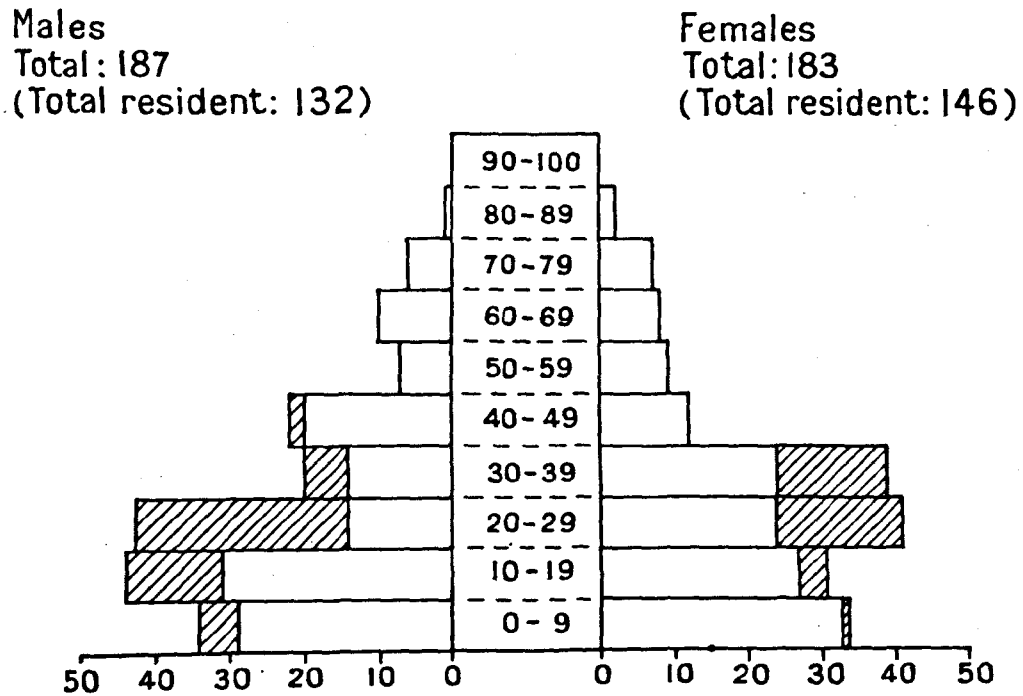
'A cursory investigation of a number of other ex-hacienda [i.e. other than the four ex-haciendas of Burke's main study] expedientes in the archives of the Consejo Nacional de la Reforma Agraria reveals that population has increased between 50 per cent and 100 per cent on nearly every ex-hacienda in the region' (Burke, 1970, p.421). Either the SNRA surveyors operating in Burke's field study area were considerably less remiss than their colleagues working in the environs of Chua, or Burke's investigations were 'cursory' in the extreme i.e., based on recorded totals regardless of, for example, whether past and present boundaries coincide precisely, or of the fact that such counts normally excluded campesinos under the age of 18. The population figures derived from Chua's 1957-8 SNRA survey permit no such deductions to be made; they are worthless for the purposes of comparison. The total of 800 'ex-colonos' omits minors and unquestionably (although this is not stated) does not refer exclusively to the estancia, Chua Visalaya. Burke continued on page 421: 'In addition to the natural increase in population on these ex-estates, there has been a substantial migration to these lands from the indigenous communities, villages and cities'. Such a situation

contrasts markedly with that obtaining in the Chua/Compi region; large scale immigration has certainly not been a characteristic feature of the post-revolutionary period here.

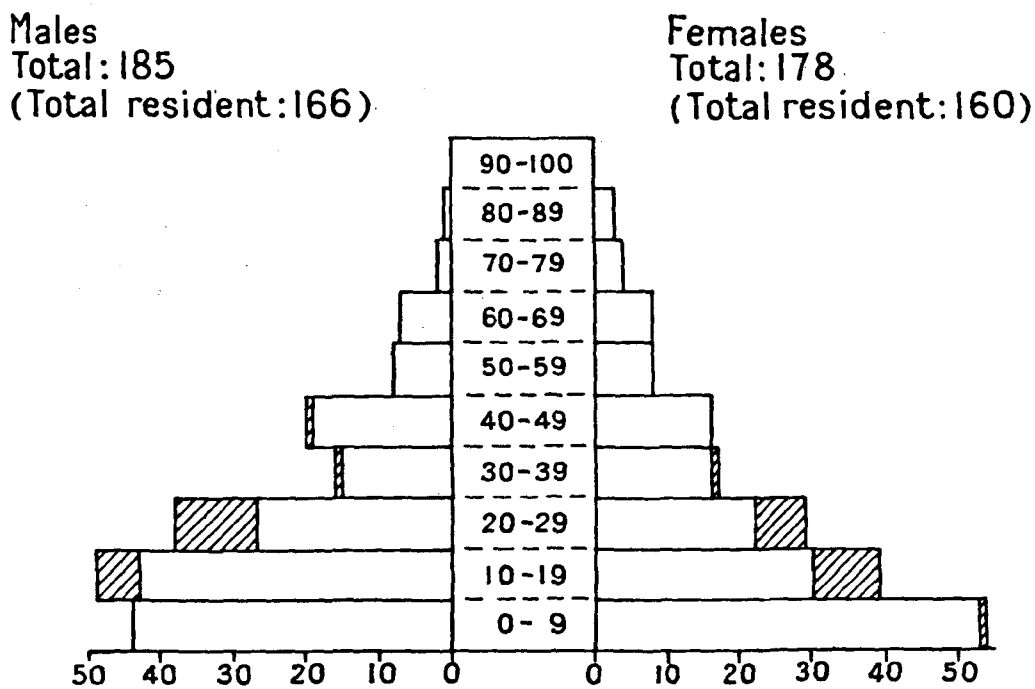
The first known recorded count of Llamacacheños relates to the year 1965: Peace Corps members then estimated the total population to be 223; 143 adults (73 males, 68 females) and 80 children. The Buechlers in the late 1960s (date unspecified) arrived at a figure of 308:[6] such an abrupt rise (38 per cent) in the course of a few years seems unlikely. In view of the author's 1971 count of 278, the Buechlers' figure would seem more credible, the subsequent decline in population (30) being easily explained by the increased rate of outward migration.

Many campesinos insist that families were larger in olden times and that more people lived in the communities than at present - several informants in Chua Visalaya recalled one family with 19 children - but, according to the Huatajatan nurse, the number of births per family usually bore little relation to actual family size. She estimates that although today the average number of children born per family is in the order of 10 to 12, only 4 to 6 of these are expected to survive 'the dangerous years': in the pre-revolutionary era, the rate of infant mortality was even higher. (Birth and death rates will be considered at greater length in connection with changes in health and sanitation). On the other hand, outward migration was negligible in both Chua Visalaya and Llamacachi, whereas (as the figures below demonstrate) a quarter of Llamacachi's present-day population lives beyond the physical boundaries of the community. Lacking reliable documented material one is bound to conclude that if indeed the total populations of the two communities have increased during the last two decades, there is no reason to suppose that they have risen substantially, certainly not to the extent of doubling; they may even have decreased slightly.

In the 1971 the ex-hacienda contained some 72 households and a total resident population of 326 (166 males, 160 females): in addition 37 Visalayans (19 males and 18 females) were residing outside the community of their birth; by far the majority of these migrants were permanently settled in La Paz. The average size of household was 4.3, less than



Age-Sex Pyramid, Llamacachi 1971



Age-Sex Pyramid, Chua Visalaya 1971

anticipated (according to Burke (1970, page 419) the average size of household on the Bolivian ex-haciendas of the lakeside region is 5.75 persons). At the same time, 63 households in adjacent Llamacachi were occupied by 278 people (132 males, 146 females) i.e., this figure includes the ever-increasing number of onion vendors spending up to three nights per week in La Paz. It was ascertained that 92 Llamacacheños (55 males, 37 females) were living away from the community, again mostly in the primate city. The average size of household, 4.4 persons, was almost identical to that of Chua Visalaya.

The age and sex structures of the two population groups are illustrated by the accompanying population pyramids. When interviewed, campesinos frequently admitted to being uncertain of their precise age, thus a certain degree of error is inevitable. A tendency was observed for early middle-aged campesinas to understate their actual ages (this may account for sharp differences in the numbers of Llamacacheñas included in the bands 30-39 and 40-49), whilst some elderly people clearly exaggerated their age, one old man insisting that he had been born in the early 1860s. Burke has deduced that, on average, 55 per cent of the people resident in lakeside communities are under the age of 20; figures for Llamacachi and Chua Visalaya are lower, 43 per cent and 52 per cent respectively. In view of the fact that "es costumbre" (it's the habit) for children to start herding animals at the age of four or five, it is perhaps meaningless to speak in terms of the proportion of population actively employed. As the pyramids indicate, migration involves but few campesinos over the age of 40, and none over the age of 50.

Economic change in CHUA VISALAYA

Change in land tenure: the land question

The sequence of events occuring in Chua Visalaya as a direct result of land reform legislation cannot fail to fascinate the outsider: in terms of utter confusion and manifestations of physical violence Visalaya's recent history must rival that of any Bolivian ex-hacienda. Few ex-haciendas have bombarded the Consejo Nacional de la Reforma Agraria (the CNRA is the administrative body linking the SNRA with the National Government) with more petitions and counter accusations; rarely

have individual communities been the subject of so many official visits and government commissions. A number of embittered Visalayans, stubbornly refusing to acknowledge the painfully obvious fact that the only practicable solution lies in a greater degree of spontaneous migration from the community (thereby relieving existing chronic pressures on cultivable land), affirm that 'the land struggle' has become a fight for life or death - land or starvation. R.J. Clark has written a comprehensive paper entitled 'Problems and Conflicts over Land Ownership in Bolivia' (1969); whereas Clark shows that on most haciendas of the Altiplano the implementation of the Land Reform Decree unavoidably gave rise to one or several complications - conflicts between the ex-landlords and the peasants, conflict between the peasants and government authorities, conflicts within communities arising from land grabbing, competition for inheritances, intimidation of peasant leaders, subdivision of individual and communal lands, etc. - in Chua Visalaya all of these problems were, and many still are, in evidence. One has to concede that however commendable the radical programme of land reform motivated by the MNR in 1953, certainly in Chua Visalaya 'parcelación' has not resolved former conflicts over land ownership; on the contrary, it has intensified them and additional legislative measures in the 1960s have served to reinforce them further.

As has been mentioned, at the time of the National Revolution the provincial capital of Achacachi became a major focal point of peasant political activity: between April, 1952, and the actual signing of the Land Reform Decree (August, 1953) land invasions were rampant in the surrounding areas. In Chua Visalaya itself there was no serious attempt to seize hacienda lands: this may have been partly due to a lack of strong leadership and initiative within the peasant population (in many cases attacks on estate lands were organised by ex-colonos who had migrated to La Paz in pre-revolutionary days), although a number of Visalayan campesinos attribute their former passivity to the fact that they had respected the patrón both as a farmer and a landlord. After the passing of the agrarian reform bill, Visalayans assumed de facto ownership of the sayañas traditionally exploited by their families (this in fact implied no radical change in land tenure structures since landlords had rarely interfered with inheritance rights to sayaña plots). According to the 1954 SNRA survey of the property,

the patrón of Chua had without delay introduced remuneration for estate labour, in accordance with the decree: 'desde el 2 de agosto de 1953, la Hacienda Chua ha pagado a cada persona que ha trabajado en la propiedad su jornal, en estricto cumplimiento de la ley'. In neighbouring Compi 'the patrón adapted to the new situation by hiring ex-colonos to work the more fertile fields beside the lake and by arranging with other ex-colonos to sharecrop the less fertile lands away from the lake' (RISM/Peace Corps, 1969, page 287): this did not occur in Chua. As was demonstrated in Chapter IV, except for the innovation of wage-labour, hacienda agricultural activities proceeded until the late 1950s along well-established lines.

Chua Visalaya's peasant sindicato came into being in 1952 at the instigation of MNR party workers (representatives of the Ministry of Peasant Affairs) from La Paz. It would appear that from the beginning all families declared their loyalty to the group, which thus provided an unchallenged link between community and government authorities until the creation of the rival Cooperativa Agrícola Integral 'Chua' Limitada in 1964. The said syndicate was organised in the prescribed form: in the formative years 13 officials were elected to serve on an annual basis. At the present time only eight positions are regularly filled viz., general secretary (the chief spokesman and only individual empowered to act on behalf of the syndicate as a corporate entity), three secretaries directly concerned with the functioning of the group (i.e., the secretaries of relations, justice and records), secretaries for agriculture, education and sports, and the secretary responsible for taking minutes at syndicate meetings. As in Compi, 'Today only the positions of the secretaries-general and the secretaries of education and sports are significantly active. All the others have become empty of meaning and without functional importance. They carry no responsibilities, are difficult to fill, have no prestige value' (RISM/Peace Corps, 1969, page 289).

Although preliminary petitions for 'dotación' were drafted by the Visalayan sindicato with the assistance of the Ministry of Peasant Affairs as early as 1954, the passing of the relevant supreme resolution by the Sala Primera del CNRA dates to 1959 (Carter found (1964) that 'an average time of 4 years, 11 months, elapsed between the initial brief and final authorization for titles').[7] It has been suggested that

bribery of the secretario general of the sindicato (the same individual remained in office for a number of years) may have been in some measure to blame for the delay in Chua, but undoubtedly lack of peasant cooperation, threats of physical violence against SNRA surveyors, confusion over parental names etc., were significant factors. The legal proceedings of the intervening years are fully recorded in the expediente for Hacienda Chua. They make interesting reading but are too detailed and conflicting to be related in toto; it is necessary only to summarise them for the present purposes.

In 1954 the property was surveyed by SNRA employees; inventories of livestock, crops and equipment were compiled and the head of the Banco Agrícola's technical department vouched for the fact that Barbour (the North American patrón of Chua) had participated with considerable success in various national livestock shows. Simultaneously, a veterinary surgeon commissioned by the SNRA advised that Hacienda Chua was admirably suited for increased specialisation in stock production (see page 46), but observed that 'el mayor obvice que confronte actualmente la hacienda constituyen las interferencias en el trabajo que hacen los campesinos' (the greatest obstacle confronting the estate arises from work interferences by campesinos). Various accusations brought by adjacent comunidades against the Chuan estate for post-1900 usurpation of sections of their lands have already been referred to.

In 1955, the SNRA authorised two topographers to survey the property of Hacienda Chua and produce a plan complete with boundary lines and on which hacienda lands, aynokas and individual sayaña plots were to be clearly delimited. The said officials, whilst failing to compile the specified plan, established the total area of the Chuan estate (i.e., Chuas Visalaya and Cocani) as 5599.7650 hectares (approximately 13,832 acres) and the total number of resident campesinos under the age of 18 as 509,284 of these being landless. It was proposed that in toto 2543.7350 hectares (6588 acres) of land should ultimately be made available to the campesinos. Theoretically, each ex-colono was to be awarded 4 hectares, the remaining 507 to be retained as pasture land for common usage, and 2.5950 hectares set aside for school buildings and a playing field. On the SNRA plan completed in 1957 (page 40a) ancestral sayañas were plotted; it was recognised

that fragmentation had proceeded to such an extent that no dotado (the recipient of lands) could be granted legal title to sayaña parcels together exceeding 1.5 hectares. As the map shows, in Visalaya proper a mere 42.1063 hectares were to be parcelled amongst 110 family heads et al: furthermore many of the minute plots were classified as 'incultivables' e.g., D.M's holding comprised parcels of '0.4000 h., 0.0300 h. (incultivable), 0.0460 h. (incultivable), 0.0250 h. (incultivable), 0.0360 h. and 0.1050 h.' - total 0.6420 hectares. At the same time 'parts' of aynoka territory were to be subject to 'división igualitaría para todos los campesinos' (equal division amongst all peasants), regardless of the infertile, rocky nature of the land in question.

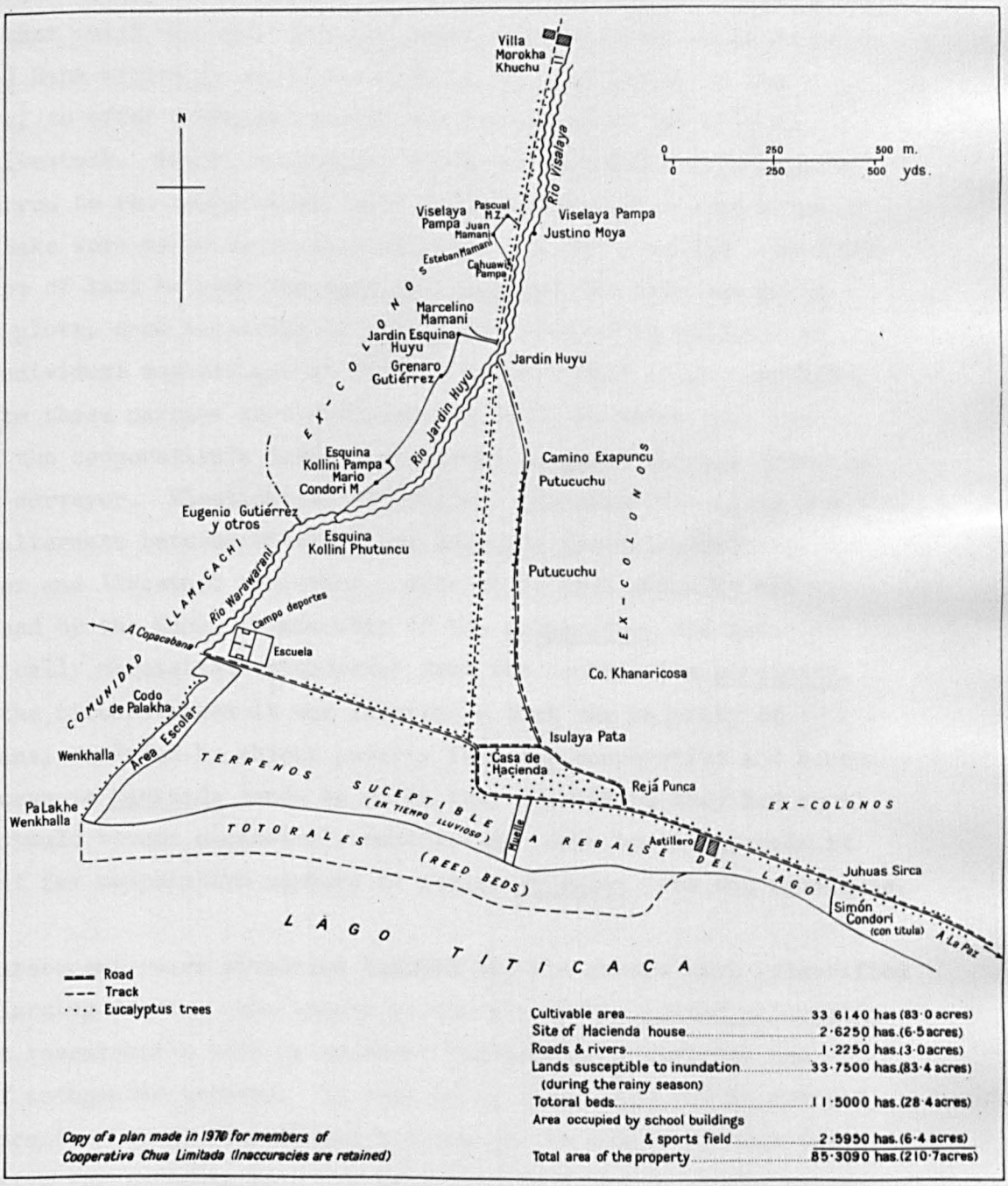
It has been seen that Resolución Suprema No.84494 (13 March, 1959) declared the property as an empresa agrícola ganadera: according to the Agricultural Bank's later documents, 1949.1500 hectares (5048 acres) of the said 5599.7650 were thereby allocated to the landlord - a figure totally at variance with the resolution's 'extensión de 3101.1700 hectareas' i.e., 8032 acres (discrepancies of this order must be largely attributed to the fact that 'parcelation' was never satisfactorily concluded within Chua Cocani. The expediente contains various letters dated 1967, 1968 and 1970, in which the surveyors previously involved in the complex process of assessment give numerous reasons for their suspension of work in Chua Cocani). Suffice it to mention that in Chua Visalaya the patrón retained only 39 hectares of cultivable land - albeit the community's most productive land. The supreme resolution categorised Chua Visalaya's lands as follows:

Sayañas and aynokas belonging to campesinos	244.5587 has.
Collective aynoka lands and pastoral lands belonging to ex-colonos	722.8836
School buildings and sports field	2.5950
Hacienda lands in Visalaya	39.3750
Rocky area and uncultivable pasture lands	1267.1302
(Cf. 1957 SNRA plan, page 40) Total	2276.5425 has.

Thus, as a result of land reform litigation, no peasant gained titles to land previously cultivated by the hacienda; the resolution merely legalised de facto ownership of fragmented plots of land. In 1961, the syndicate presented a petition to the CNRA attesting that at

least 32 ex-colonos had been granted insufficient land i.e., less than 4 hectares, even taking into account uncultivable aynoka plots. As late as 1967, six elders of Visalaya (including three syndicate officials) requested a total redistribution of parcels, claiming that 'ha existido una parcelación irregular, injusta ya que unos cuantos han sido favorecidos con tierras cultivables y otros han tenido lugares que son tierras esteriles' ('that some ex-colonos had been favoured with cultivable lands whereas others had been granted infertile parcels'). When asked to account for such inconsistencies the surveyors concerned replied that they had acted fairly to the best of their ability - they could not be expected to satisfy ex-colonos' needs in view of the 'superpoblación campesina' (overpopulation): at the same time the ex-colonos received an official reprimand for their refusal to collaborate with the SNRA in the 1950s. To the present day, disputes both within and between Visalayan families over legal ownership of sayaña and aynoka plots remain unresolved - a bitter source of friction. Letters from the Federación Departmental de Trabajadores Campesinos (Federation of Peasant Workers), headed 'la tierra es de quien la trabaja' (the land belongs to the man who works it) offer no consolation to campesinos living in a community where for some members there is no land to work, let alone own.

In theory, this distressing situation should have been alleviated by the transference to the community in 1964 of the 39 hectares of highly-prized lands formerly exploited by the hacendado. Had these orillas been equally subdivided amongst all ex-colonos over the age of 18 (regardless of the problems associated with minifundismo) or had they passed collectively into the hands of the entire community, such might have been the case. Unfortunately, the acquisition of land by 32 ex-colonos (the majority of these being drawn from Visalaya proper but a number from the integral sections of Coripata and Cayacota) has spelt disaster for the community as a whole; bearing in mind the inter-family friction, mistrust and frequent interruptions to work etc., it is doubtful whether even the privileged cooperative members have derived more than marginal benefits. Failing to find a single purchaser, the Banco Agrícola agreed in 1964 to sell the property to a cooperative 'organizada en base a 140 campesinos de las dos zonas de Cocani (108) y de Visalaya (32)' for a sum of $ b. 500,000.000 (approximately £18,000



Copy of a Plan drawn in 1970 for Cooperativa Chua Limitada

pre-devaluation rates). Although about 50 Visalayans expressed an early interest in the Bank's proposals, the down payment of $ b. 300.00 and the need for guaranteeing household goods, livestock and crops, reduced the effective membership of the cooperative. The agreement stated that until the year 1974 (by which date the debt would be paid in toto) Bank officials would be entitled to make visits to the property, to offer technical advice and to authorise the sale of crops/livestock. Lands, buildings, stock and machinery were legally transferred to the cooperative, with the proviso that fields adjacent to the lake were to be in no wise divided: in fact, in the late 1960s the tract of land between the casa hacienda and the lake was split into 32 plots, each measuring 12 surcos (furrows) x 12 metres - on which individual members are at liberty to grow what crops they like. Titles to these parcels were confirmed in 1970, in which year also a plan of the cooperative's lands (reproduced on page 115a) was drawn by an SNRA surveyor. Elections of officials - the president (this position was to alternate between Visalaya and Cocani), general secretary, treasurer and livestock secretary - were to be held annually and supervised by the Bank. Membership of the cooperativa did not automatically necessitate withdrawal from the community's sindicato, but in the circumstances it was inevitable that the majority of Visalayans, excluded by abject poverty from the cooperative and hence from access to hacienda lands to which they considered they had equal claim, should become excessively embittered; open hostility made it expedient for cooperative members to resign en masse from the syndicate.

In subsequent years rivalries between the two groups have intensified to an alarming degree: the events of the six months period coinciding with the researcher's stay in adjacent Llamacachi, illustrate the depth of antagonism aroused. By June 1971, litigation was in process on two counts: syndicate members had brought an action against the cooperative for refusing to allow syndicate families to obtain totora from the lakeside; simultaneously they were petitioning the CNRA to prohibit cooperative members from selling eucalyptus trunks to Mina Matilde (not unnaturally, the syndicate claimed that the said trees were as much their property as that of the cooperative). In the ensuing months, frequent accusations were made by members of both factions concerning the stealing of money, the removal of crops from the ground and the poisoning of animals. Early in August, fighting

broke out after cooperative members reverted to physical force as a means of preventing members of the syndicate from walking across cooperative lands to cut totora for fodder. In mid-August, deliberate planting by syndicate members of broad beans in one of the cooperative's newly-ploughed lakeside fields, precipitated six hours of community warfare: sticks, stones, rocks and guns were brought into action and fighting was only halted after serious bodily harm to 15 community members. Although police officials from Achacachi and Huatajata subsequently visited the community, disarmed the peasantry and ordered them not to engage in further affrays on pain of $ b. 2000.00 fine (£73) or imprisonment, violence did erupt on several other occasions before the researcher's departure. Whilst fiestas and inter-community football matches have afforded temporary respite, community discord persists to the extent of campesinos accusing their neighbours of enlisting the aid of brujos (magicians) to make 'death spells' (according to the translator's communication of July, 1972, 4 cooperative members had died unnaturally within a short period of time and a number of ex-colonos considered the above to be the most likely cause).

It is against this depressing, turbulent background that social and economic change in Chua Visalaya must be viewed. Perhaps one hopeful sign lies in the fact that most ex-colonos, whilst considering themselves inextricably entangled in the land struggle, realise the gravity of the general situation and deplore it. The remarks of a syndicate elder addressed to a community meeting in August, 1971, are typical: "Members of the cooperative, allow me to say that I am your brother because I grew up with you all ... our fathers almost died working for the hacienda, receiving the lashes of the mayordomo's whip. Why must we fight now? We belong to one estancia, we were born on the same land. Fighting could have serious consequences and there is every reason for our fellow-campesinos in other communities to criticise us ... I only call for unity".

Access to land

For reasons already outlined, well-intentioned SNRA surveyors found it virtually impossible to establish undisputed ownership of the majority of sayaña plots: currently prevailing sentiment within the community renders the task no less insuperable and equally hazardous.

A few less-suspicious individuals readily divulged the size and location of parcels in their possession; others specified the total number of plots but were reticent about identifying them on the ground; some stated that the lands immediately surrounding their adobe dwellings and outhouses represented their entire holdings (in such cases estimation of size was facilitated); many flatly denied ownership of certain plots or said they held "parcelas en el cerro" (plots on the hillside) but refused to impart more information for fear of neighbours robbing their crops. One may hazard a guess at the ratio of man to land but, as has been demonstrated, total extent of holding is a meaningless concept; many of the hillside terraces in the possession of ex-colonos lie beyond the limits of cultivation and are almost worthless for grazing purposes. The issue is complicated further by the fact that several Visalayan girls married to Llamacacheños retain access to certain plots of land in the ex-hacienda; likewise, some migrants to La Paz have inherited parental plots (or several furrows in each of a number of fields) and either work them personally or visit the community of their birth at harvest time to collect the produce due to them (in lieu of making payments for field work, they provide free lodging in the city or bring gifts of sugar, rice, etc.).

All ex-colonos, regardless of whether they belong to sindicato or cooperativa, were of the opinion that their forbears had enjoyed usufruct rights to larger tracts of land than they themselves presently own: bearing in mind the customary subdivision of holdings, this is hardly surprising. For example, one campesino remarked: "I have less land than my father ... perhaps half a hectare in all ... because I had six brothers and we all had an equal share when he died". No less significant have been post-revolutionary trends in house building: whereas in former times adobes were restricted to rugged, infertile hillsides, in the last two decades by far the majority of Visalayans have abandoned such unfavourable sites and constructed larger dwellings on valley-side sayañas. By so doing they have drastically reduced the amount of land available for cultivation; removal of earth (for adobe bricks) from adjacent patches of land has frustrated an already critical situation.

As in the past, the principal means of acquiring access to land are through inheritance and marriage. On marriage a son may be granted usufruct

rights to a number of furrows in each of his father's fields or will agree to enter into a share-cropping arrangement with his father and brothers; normally on the father's death land is split amongst the surviving children (sometimes female heirs are assigned equal shares but often they are discriminated against). Inheritance patterns are frequently disrupted by second marriages e.g., "I would like to join the cooperative for the sake of the sons of my first marriage ... their step-father took their father's land and won't work with them ... they'll be left landless". Several Visalayans have gained access to small plots of land in adjacent communities as a result of inter-community marriage contracts: "The three sons of my former marriage have inherited land from their mother ... she was a Llamacacheña. On my death, my land - less than half a hectare - will have to be divided amongst the six children of my second marriage". Land prospects, as appears to have been the case from time immemorial, exercise an important bearing on marriage arrangements. In Chua Visalaya, a man of 22 admitted that he had married a 40 years-old widow with three children primarily because she had "muchas parcelas", (many plots of land) whilst a girl of 18 spoke thus of her 64 years-old husband: "My mother forced me to marry him because he is an old man with lots of land [4 hectares?] ... I never even liked him and now I hate him and want to go and live in La Paz".

Very few examples of land renting (i.e., by Visalayans) were encountered on the ex-hacienda; in two instances narrow hillside terraces were being rented on an annual basis for a sum not exceeding £2. Apart from marriage and inheritance, the only other widespread method of gaining control of land is that of usurpation. A number of Visalayans were convinced that large families provide the sole effective safeguard against the actions of unscrupulous neighbours. Expropriation always appears to have been an accepted feature of Visalayan life: as one young man explained, "We still have some parcels of land in Cayacota ... our grandparents hadn't much land in Visalaya so they seized some in Cayacota. They were intelligent and knew how to look after their sons' needs". In the days following the declaration of land reform, considerable friction was aroused in Compi by the return of migrants claiming ownership rights to lands they had once cultivated; since migration had not been a well established feature of Chua Visalaya's pre-revolutionary life, such

confusions were less marked but by no means absent. An old Visalayan commented: "My family farmed this land in hacienda times ... afterwards a man came from Compi ... he had lived higher up the hillside with his grandfather. He claimed that the land belonged to him ... I was too old to make much trouble, so we split the land. God will see that he is punished in the end". A desperate shortage of land has provoked seemingly inhuman deeds: a number of old couples and widows bemoaned the fact that neighbours - sometimes even their own children - had 'stolen' their lands and crops because they were too weak to prevent them from doing so.

Clearly, traditional inheritance patterns in Chua Visalaya have undergone little change in the post-revolutionary period. Certainly land reform has not consolidated peasant holdings; on the contrary, fragmentation of land has proceeded unchecked. Consequently, many of today's parcelas measure only a few square metres and disputes over field boundaries have multiplied accordingly.

Cooperative farming

It has been intimated that in the field of agricultural progress, Llamacachi far outstrips its neighbour Chua Visalaya: to the casual visitor the contrast seems almost incredible. Whereas in post-revolutionary Llamacachi, a highly specialised and lucrative cash economy has evolved, the majority of ex-colonos in Chua Visalaya continue to farm on a precarious basis. The reasons for Visalaya's failure to become integrated into the monetary economy are multifarious but, in the writer's opinion, deeply rooted in the past. It should not be forgotten that the debt of $ b. 500,000.000 to the Banco Agrícola has imposed considerable strains on the community's cooperative. In view of Visalaya's present unrest and total lack of cohesion, it is probable that the economic gap between the two communities will widen in future years.

As Chapter IV has shown, the 'dual economy' that had characterised Hacienda Chua continued to operate until the late 1950s, when two significant events occurred. The fact that the estate was officially proclaimed an empresa agrícola did not imply a sudden break with the past - wage labour had been introduced six years previously and none of the lands formerly cultivated by the hacienda passed into the hands of ex-colonos. The death of the Chuan patrón (whether or not he died

naturally or was killed either by a member of his staff or a group of ex-colonos is questionable) was more decisive. The estate was subsequently mortgaged to the Agricultural Bank, which eventually assumed complete control in 1964. It would appear that between 1959 and 1964 crop production declined (see Chapter IV): simultaneously there was a marked reduction in the number of livestock on the property. Whereas, according to the expediente the estate had owned 2276 sheep and 71 cattle in 1954, the comparable figures for 1964 (contained in the Banco Agrícola's inventory) were 399 and 10; the section of Chua Visalaya numbered a mere 144 sheep, 5 cows and 11 pigs.

Various agricultural economists have suggested that the reallocation of land in accordance with the Articles of the Decreto Ley de la Reforma Agraria led to a pronounced decline in production. Others would argue that there is no official evidence to substantiate such a hypothesis: 'The 'apparent' decline in agricultural production after 1952, while true in part, is better explained by marketing adjustments and transportation scarcity, and weather phenomena [several prolonged droughts in the mid-1950s], with the former by far the more important bottleneck to be overcome during that period' (Clark, 1970, page 61).[8] This being so, Chua Visalaya must indeed be anomalous - according to Dr. Paz Estenssoro, "an isolated case" - for although the cooperative is unwilling to disclose detailed crop production figures, there is no doubt whatsoever in the author's mind that yields from ex-hacienda lands are considerably lower than those of the 1950s (an opinion repeatedly expressed by unbiassed Llamacacheños); it will be seen that in terms of livestock farming, contrasts are even more striking. Perhaps it is unjust to compare the activities of Hacienda Chua's last patrón (a man of considerable wealth) with those of a newly-created peasant cooperative, starting life heavily in debt: unquestionably, comparisons would have been more favourable from the ex-colonos' angle had the hacienda been run along typically inefficient lines.

The extensive tract of productive ex-hacienda land between Lake Titicaca and the main road has been preserved by the cooperative/Bank in its traditional form i.e., as two large fields. On these, the customary four years rotation course - potatoes, oca, broad beans, barley/oats - is still practised. In the early days of the cooperative's existence, the Banco Agrícola supplied members with bags of Sani Imilla

potatoes (this improved variety had in fact been introduced on the estate by the last patrón). It would appear that of recent years no new seeds or tubers have been planted in cooperative fields: as elsewhere in Chua Visalaya, old seeds are sown regardless of whether or not they are already infected. The traditional crop rotation system is also observed on certain favourable patches of valley land, but followed by a two or three years fallow period; whilst lying dormant such terrain is devoted to unrestricted grazing by the cooperative's 120 sheep.

Whereas in the 1950s the landlord of Hacienda Chua had conducted crop experiments and applied various artificial fertilisers, insecticides and pesticides (on the recommendations of the Belén agricultural station) to all crops, today the cooperative only applies artificial fertilisers prior to planting potatoes. For this purpose, abono químico 12.39 and aldrina (an insecticide), both costing $ b. 3.00 per kilogram, are purchased from the NCDP's stores in Huatajata or Jank'o Amaya. As previously noted, the post of camana de productos (guardian of field produce) has been perpetuated by the group: during the months of crop maturation and harvesting, two cooperative families take their turns at living in one-roomed adobes at the edge of the lakeside fields. During their period of temporary residence the camanas are expected to supervise the preparation of chuño and tunta, the winnowing of broad beans and the drying of bean sticks; their additional duties are to prevent intruders from stealing produce and straying animals from damaging crops. In 1971 the entire cooperative body (the 108 members from Cocani in conjunction with the 32 Visalayans) was required to contribute $ b. 70,000.000 (£2,500) plus 12 per cent interest towards repaying the debt to the Bank. Although Visalayan members were unwilling to specify the amount earned from crop sales (some genuinely had no idea), they agreed that it had always been difficult, especially in years of flooding, inadequate rainfall or crop diseases, to meet the fixed sum from animal and crop sales. Hence they had been obliged to negotiate with the Mina Matilde to sell eucalyptus timber from the hacienda plantation and even from the Avenida de los Indios (from the avenue of trees lining the dirt track from the road to the head of the Chua Visalayan valley).

Although the Bank's agreement had formally transferred all estate machinery to the cooperative, the author found no evidence of any piece

Reckless felling of eucalyptus trees by cooperativístas for sale as pit props to Mina Matilde: the truck is the property of the zinc mine.

Chua Visalayan women chatting and spinning whilst their menfolk attend a community meeting at the school.

of equipment (with the exception of saws) being used in 1971: much valuable equipment had been allowed to rot (see photograph page 97a) and various components had been stolen (one imagines for sale in La Paz). The International McCormick tractor had fallen into a state of disrepair and cooperative members had long since reverted to traditional methods of ploughing; on one occasion the researcher observed 15 teams of oxen ploughing a patch of land not exceeding one acre (photograph page 128a). This is understandable in view of fuel and maintenance costs and the abundance of free labour. On the other hand, such animals impose a burden on the community i.e., they consume valuable fodder and frequently escape, causing serious bodily injury and crop destruction.

Work within the cooperative normally proceeds on a collective basis, all members participating simultaneously. In the above example, those unable to supply oxen for ploughing, were obliged to work - as were their wives - with digging sticks or clod breakers. Seeds are sown broadcast and all harvesting done by hand. This pattern of work does in fact represent an extension of traditional ayni practices - 'an exchange of labor for any and all sorts of tasks, most often for planting and harvest ... carried out almost exclusively with a man's bilateral kin' (Carter, 1964, page 49). According to several members, cooperative tasks (prescribed by the president and his three fellow-officers), together with an ever-increasing number of reunions, seriously interfered with their families' farming programmes - almost as much as had those of the hacienda: some cooperativístas bitterly complained that field operations precluded temporary employment in La Paz.

Syndicate members maintain that, on concluding their negotiations with the Bank, cooperative members had squandered money (obtained from the sale of crops and machinery) on lavish fiestas and drinking bouts, and had slaughtered many of the estate's pedigree animals for their own consumption or sale in Paceño markets. Whether or not there is an element of truth in such allegations is open to speculation, but certainly there has been a marked deterioration in both the quality and quantity of stock. Whereas in the 1940s and 1950s Chua's cattle and sheep had won national prizes, today the cooperative boasts only two of the former animals and a flock of 120 inferior sheep, entirely dependent for their sustenance on local grasses. Although animal

medicines are made available by the Bank, and admittedly animal deaths from disease are less numerous than in the syndicate sector, meat and wool are generally of poor quality and the art of manufacturing large 'Argentinian' cheeses (for which the hacienda had been famed) appears to have died with the estate.

The persistence of subsistence agriculture

It is an inescapable truism that even though twenty years have now elapsed since the declaration of agrarian reform, peasant cultivation in Chua Visalaya remains at bare subsistence level. Minor adjustments there have been but unquestionably lack of change in agricultural practices has been the dominant theme of the post-revolutionary period to date. As ex-colonos, Visalayans theoretically assumed the status of owner-operators, no longer forced to live under constant threat of land deprivation; but there is ample evidence above to show that fears of usurpation and disputes over land ownership have by no means been eliminated by the process of 'land reform'. The cessation of obligations towards the hacendado meant that for the first time in their lives ex-colonos were free to expend their work time and energy on sayaña tasks: in the absence of viable units of cultivable land, the acquisition of unlimited time served to emphasise the problems of overpopulation and underemployment. Furthermore, whereas in hacienda days peasants had been required to adhere to a strict crop rotation system on their aynoka plots, under the new arrangement they were at liberty to exercise their own discretion. In view of the size of landholdings and ever increasing fragmentation, campesinos have been compelled to grow what they have regarded as most essential to family needs: scarcity of land has prohibited experimentation, even where it has been deemed desirable.

The potato still occupies prime place in the Visalayan economy but few individuals grow Sani Imilla or other improved varieties. Native potatoes, such as sakapamya and waca laryara (low yielding, small and susceptible to several types of blight) are harvested after Easter and then converted into chuño and tunta during June (usually the coldest month), before being stored in clamps at the centre of the family compounds. Whilst traditional crops e.g., oca, papalisa, quinua and barley, continue to be raised, there has been a slight shift in crop emphasis. Broad beans, sown in September and harvested

in June, are grown more widely than in hacienda times and over the last few years the better endowed families have begun to produce onions (albeit on a small scale) in imitation of their neighbours. Apart from onions, modest amounts of potatoes and oca and their derivatives (bartered for household items or wool at local markets and regional fairs), all production is for home consumption. It is difficult to estimate with any accuracy the proportion of ex-colonos producing small surpluses for sale; not unnaturally, many say that this is entirely dependent on the year i.e., on rainfall, the occurrence of hailstorms and of crop disorders. As in Llamacachi, a magician is nominated by the community to 'watch over' crops, to petition for rain and to placate the spirit world thereby reducing the risk of calamitous hailstorms.

One of the most obvious adjustments in post-revolutionary farming has been an intensification in land usage, reflected in the gradual disappearance of the traditional period en descanso (fallow). This has been made necessary by an unprecedented phase of landholding subdivision and a correspondingly slow rate of increase in migration; the veritable boom in housebuilding has aggravated the situation by reducing the overall area of agricultural land. On many sayaña plots cultivation is nowadays continuous; if land is left fallow for several months it is unrestrainedly grazed by livestock. Not surprisingly a number of campesinos bemoan the fact that some of their fields are now virtually sterile and yields are declining year by year. Very few ex-colonos apply any type of artificial fertiliser and animal excrement is still valued primarily as a fuel for cooking: taquia (of llamas and sheep), collected in the pampas by poverty-stricken members of the community and sold at $ b. 1.50 per bag, is quite often the only fertiliser used. The stubble of broad beans and quinua is occasionally burnt to supply a fertilising ash, but overgrazing of valley lands and hillsides, inducing a deterioration in the quality of grass, dictates that any available stubble should be used mainly as animal fodder; unlike the cooperative members of the community and the majority of Llamacachenos, syndicate members are even denied access to totora from the lakeside. Regardless of the consequences, infected seeds and tubers are planted, or healthy seeds are sown in contaminated soils; hence crop diseases are rife; by

Harvest time in Chua Visalaya. Each year two members of the cooperative volunteer to live with their families in old adobes adjacent to the lakeside fields in order to supervise the harvest. The duties of camana include prevention of robbery, protection of crops from marauding animals and the preparation of chuño, tunta and claya. Quinua and broad beans are winnowed in the yards beside the huts.

Totora from the lakeside is consumed by animals, used for thatching, making balsas etc. In times of acute food shortage the pith is chewed to supplement the campesino's staple diet.

the inhabitants they are accepted as the unavoidable sequence of events. In 1971 barley smut (which according to Belén experts could have been counteracted by the application of a mercury preparation) rendered most of the crop useless even for animal consumption, whilst different types of grubs destroyed large quantities of potatoes and oca, on which Visalayans are so dependent for sustenance. Carter's findings (1964) in Irpa Chico indicate that 'on average, 68 per cent of food weight consumption is potatoes in some form or other'(p. 95).

Whilst the majority of ex-colonos assert that, except for llamas, they own more animals at present than they did in hacienda times, livestock averages per family are very low (see table page 127). Reducing all grazing livestock to the common denominator of a sheep (the sheep equivalent is termed UAO = unidad animal ovino), Burke computed that Bolivian campesinos in 11 ex-haciendas of Cantón Viacha (south west of La Paz) owned on average 66.2 UAOs per family (the corresponding figures for Peruvian haciendas in the environs of Puno was between 125 and 220). Chua Visalaya's figure of 32.4 UAOs (including animals belonging to the cooperative) falls far short: as the table indicates, the ex-hacienda's stock is of very poor quality and animal losses from unnatural causes extremely high. Lack of fencing to check the spread of contagious diseases, infected soils, underfeeding (confirmed by the visit of the UN veterinary surgeons - see page 46) and poor husbandry e.g., the tying of sheep's hind legs to curb straying eventually lames many animals - all contribute towards the present depressing state of livestock farming. Certainly there has been little, if any, improvement in the post-reform period; indeed some degree of degeneration is more than conceivable. Whereas in hacienda times it had been in the patrón's interest to distribute anti-swine fever doses and pig cholera vaccines, etc., for his tenants' animals, though these can be obtained from the TDC (community development worker) and other medicines purchased from stores in Huatajata and Jank'o Amaya, very few campesinos take any preventative or curative measures (apart from enlisting the help of the local brujos), since they expect animal losses to occur and accept them as inevitable. Several people (members of the Santidad Amigos, a Protestant sect) obstinately affirm that "God will not let anything happen to our animals". In 1970 alone, one family lost 7 pigs, several

Animal Statistics for 1971

Animals	Totals		Average per household		Pure bred		Losses 1970-1	
	Visalaya	Llamacachi	Visalaya	Llamacachi	Visalaya	Llamacachi	Visalaya	Llamacachi
Cattle	105	140	1.5	2.2	2	3	3	-
Sheep	1073 (incl. 120 coop. sheep)	1109	14.9	17.6	-	31	174	72
Pigs	126	153	1.8	2.4	6	12	14	8
Llamas	78	-	1.1	-	-	-	2	-
Burros	16	39	0.2	0.6	-	-	-	-
Poultry	34 (incl. 3 ducks)	117	0.4	1.9	5	17	70?	?

sheep, 3 cows and a llama but sought no expert advice. Such advice is at hand but not accepted when offered because medicines cost money and campesinos are either unable or unwilling to incur the expense. Common disorders in sheep are muyu-muyo (transmitted by dogs), huicho or 'la diarrea' (caused by various intestinal parasites) and in addition many sheep suffer tick infestations; fiebre aftosa (foot and mouth disease) recurs from time to time amongst lakeside cattle, whilst swine fever and triquinosis are responsible for fatalities in the pig population. Deaths from respiratory difficulties are widespread and further losses are brought about by the traditional killing of twin lambs, and by attacks on lambs and other small animals by mountain foxes and wild cats (referred to locally as titís, literally small monkeys).

From the statistics in the table it is clear that the main emphasis in livestock farming is on sheep breeding: sheep are highly valued and presented as dowries. A buena mujer i.e., a good woman, is one investing money obtained from market transactions on purchasing sheep. A family flock may be jointly owned: thus in E.G's household (1971), 10 sheep belonged to the father, 5 to the eldest son, 5 to the second son (both working with their father), 5 to each of two daughters married in Huatajata, and 5 to the youngest son then at the Tiquina Naval School. Whilst old sheep are sold to Visalaya's butcher or Huatajata's dealers, and sometimes a campesino will sell several animals prior to financing a household or community fiesta, sheep are kept primarily for their wool. This is of inferior quality; sheep are usually sheared once every two years with the aid of a piece of broken glass or tin. Llamas are kept on a temporary basis and graze freely on the pampas when not required for transporting produce. Whereas a number of ex-colonos claimed to have possessed more than ten animals in days gone by, few at present own more than one or two: these they purchase from Chileans or Peruvians in the Fiesta de Ramos (Palm Sunday festival) at Rio Seco i.e., the custom post outside La Paz, on the road to Huarina. The llamas are conveyed to the community by truck and after being employed as beasts of burden during the harvest season, are sold (each for a sum of between $ b. 200.00 and 220.00 - £7 and £8) to Huatajatans or to the Visalayan butcher, who dries the meat for sale as chalona in Yungeño markets.

Members of the Chuan cooperative ploughing a field in the valley. On this particular occasion 15 bullock teams had been assembled: the simple wooden ploughs are fashioned out of eucalyptus trunks. Womenfolk are trampling the ground in order to break the larger clods of earth prior to planting potatoes.

Visit of United Nations' veterinary surgeons to Chua Visalaya in September 1971. Samples are being taken from sheep believed to be suffering from liver fluke.

Hens were introduced in the 1960s as part of the Peace Corps' regional programme, but their numbers have declined; according to ex-colonos this is due to difficulties in rearing chickens. One alleged that he had lost 70 hens in 1970; this he attributed to "the climate" but, again, undernourishment could have been the key factor. There is no evidence of any animal being fed on concentrated foodstuffs. Although livestock figures may compare unfavourably with those from other communities, unrestricted grazing of fallow lands has undoubtedly encouraged soil degeneration by loosening the particles and exposing surface soils to erosion by strong winds and occasional storms.

Such is the general state of agriculture in Chua Visalaya. This is not to deny the existence of certain individuals, especially amongst the ranks of the better educated young campesinos, who deprecate the situation and are anxious to improve standards in the community as a whole. One progressive ex-colono had planted about an acre of land (near a spring at the head of the valley) with alfalfa, having purchased the seeds from La Paz. A younger man was genuinely eager to embark on the Belén course in practical farming, but was prevented from doing so by lack of money. Not surprisingly, some of the more 'go-ahead' young people are frustrated by the slow rate of progress: "no deseo ser hombre del campo" (I don't want to be a farm worker) was a remark heard on more than one occasion.

Non-agricultural activities in Chua Visalaya

Sad to relate, lack of change and innovation have been equally characteristic of the non-agricultural sector of economic life in post-revolutionary Chua Visalaya. Whereas a number of Llamacacheños are currently engaged in full-time extra-farming pursuits, to all Visalayans except for a teacher, two wool dyers and a butcher, agriculture continues to be of primary importance. (In 1971, the said teacher was in fact the only resident ex-colono in receipt of a regular salary for work in Chua Visalaya; he was being paid some $ b. 300.00 (approximately £11) per month by the Baptist Mission). With the death of the North American patrón, all boatbuilding activities ceased and have never been resumed; similarly, it has been seen that butter and cheese making were discontinued. As in hacienda times, individuals

find it possible to supplement their incomes in a modest way by performing services for fellow-Visalayans, only nowadays remuneration is usually in the form of cash rather than viveres (provisions). Thus magicians are presented with gifts of coca but expect a financial contribution in addition, the amount depending on the gravity of the task to be undertaken; likewise, men offering themselves for minka (a pattern of cooperative work originating in Incan times), receive between $ b. 10.00 and 15.00 per day on adobe construction work, and less for field work (one boy was weeding a neighbour's fields for a daily rate of $ b. 4.00). At the time of this researcher's stay in Llamacachi, timber cutting for pit props engaged much of the work time of cooperative members: such reckless felling of valuable eucalyptus trees, whilst signifying temporary financial gain to some, is by no means indicative of progress and strongly to be deprecated. In addition a number of ex-colonos still spend endless hours on official syndicate or cooperative business i.e., visiting members, arranging meetings, settling disputes, etc., but although a few consider it an honour to be elected for community service, the majority are not anxious (some even refuse) to accept office, since all such work is of a purely voluntary nature.

A non-agricultural activity deserving special mention is that of band playing; unlike Llamacachi, Chua Visalaya has of recent years boasted a community band which appears to be held in high repute throughout the neighbourhood. Although certain Aymara fiesta dances require 24, 16 or 8 instrumentalists, most occasions call for a 12-man wind/brass band. Drums, cymbals, cornets, pipes, etc., can be purchased cheaply in La Paz or at regional fairs. Members of Visalaya's band (mostly boys and young men) practise regularly and are hired within the local area for special functions e.g., weddings (wedding ceremonies habitually proceed for three days) and fiestas. The rate of pay varies but certainly band playing is a more lucrative part-time enterprise than field or construction work. For example, prior to the researcher's visit, her translator's mother had engaged the 12 bandsmen to play for the three days Fiesta de San Pedro; she had furnished them liberally with food and drink and paid them $ b. 600.00 (£21) in toto i.e., a daily rate per player of $ b. 17.00 (60p).

But by far the most important secondary occupation - the one offering

savings accruing from purchases of Chilean and Peruvian wools. For example, one Llamacacheña returned from the week's market with 4 llama skins, 10 sheep skins and 20 lbs. of alpaca wool, and claimed to have paid about $ b. 180.00 (over £6) less than she would have done in Paceño markets.

Comparable wool prices, 1971

	Nazacara fair	La Paz
Alpaca		
Black - per lb.	$ b. 5.00	$ b. 8.00
Coffee " "	6.00	10.00
Medium coffee per lb.	8.00	12.00
White " " "	10.00	15.00
Grey " " "	14.00	17.00
Vicuña colour	16.00	18.00-20.00
Sheep		
Per lb.	2.50	5.00
Per skin	25.00	30.00
Llama		
Ordinary sized skin	15.00	20.00-25.00
Large skin	40.00	60.00

At the time of the author's investigations, four ex-colonos were functioning as weavers as and when field tasks permitted: whereas in Llamacachi, fabric produced by the community's two weavers is sold in bulk to two tailors for the manufacture of overcoats and even suits, in Chua Visalaya the woven material is sold to ex-colonos in metre lengths - usually at $ b. 4.00 or 5.00 per metre. The womenfolk of Visalaya weave a variety of articles, such as listas (colourful bands worn by men at fiestas), camas (rugs), costales (sacks) mantas (shawls/rugs) and mantillas (head covers): these may be sold at local fairs but are manufactured mainly for family usage. Most impressive beyond any doubt are the brilliantly-coloured aguayos (see photograph page 142a). It is difficult to establish precisely how many Visalayans are engaged in weaving aguayos; several campesinas suggested that up to 20 women possessed the necessary skills, but some lacked sufficient time, and others wove only a few each year. The wife of the secretary general of the syndicate claimed to be able to complete one aguayo in two or three weeks, but added that her aunt would sometimes weave two

within one week at slack periods in the farming year. The finished products realise between $ b. 200.00 and 250.00 (about £7 and £9) in Paceño markets; it is likely that with organised selling, profits could be considerably higher.

Economic change in LLAMACACHI

Changes in land tenure

As a comunidad originaria, Llamacachi was not directly affected by the process of agrarian reform. The Decreto Ley de la Reforma Agraria did in fact contain provisions for the restitution of alienated property to such communities; its second objective was 'to restore to the indigenous communities the lands which were usurped from them, and to cooperate in the modernisation of their agriculture, respecting and making use of their collective traditions insofar as possible'. But whilst small communities, such as Pacharía, brought successful actions against Hacienda Chua, Llamacachi was not justified in making any such claim and continued to enjoy free access to grazing lands in Compi. Whereas in 1952 the five estancias of Compi formed a joint syndicate (this was to split as a result of inter-sectional rivalries even before the finalising of Compi's supreme resolution in 1957), there was obviously not the same need for Llamacacheños to create a peasant union for the express purpose of petitioning for land redistribution, hence no such syndicate has ever existed within the community. In the mid 1960s, eight comunarios organised a loose-knit cooperative, but this quickly disintegrated once its aims - the purchase of pedigree sheep and Sani Imilla potatoes from the Belén agricultural station - had been realised. As a result of the National Revolution, relatively little change occurred in Llamacachi's political hierarchy; the only addition was a presidente de la junta vecinal (as president of the neighbourhood, his authority supersedes that of the jilakata). Simultaneously, all obligations to the county seat were swept away.

Although, unlike Chua Visalaya, Llamacachi has not been plagued by a multiplicity of conflicts emanating from land reform implementation, reallocation of land in adjacent Compi did indirectly precipitate bitter discord between Llamacacheño comunarios and Compeño ex-colonos. Whilst in 1957 Hacienda Compi's land at distance from the lakeside was categorised as latifundia and granted accordingly to the ex-colonos, the

best tract of land between the lake and the road was declared a medium property and thus not subject to expropriation. Because the heirs of the last patrón subsequently found it increasingly difficult to pay the statutory wages, they decided to form a cooperative with a group of ex-colonos: concluding that this arrangement was equally unsatisfactory, and failing to interest ex-colonos in the purchase of land parcels in 1961, the owners sold the remaining lands to eagerly-waiting Llamacacheño comunarios; a number of Llamacacheños stated that they had bought land for as much as $ b. 2000.00 (approximately £73) per hectare. Inter-community hostilities erupted suddenly in 1965, when Llamacacheños planted crops on old animal tracks thereby impeding free passage to the lake: recriminations were of a violent nature and Llamacachi was eventually obliged to enlist official aid from Achacachi (on one occasion 10 or 12 soldiers temporarily detained all Compeño family heads). The question was taken up in La Paz by the Prefecture, the Ministry of Peasant Affairs and the CNRA. Finally, finding the cost of litigation increasingly burdensome and desirous of restoring peace (many comunarios were related to Compeño ex-colonos through marriage), Llamacacheños agreed to sell back the land. Nowadays parcels of ex-hacienda land are rented to comunarios for sums of $ b. 200.00 to 300.00 (£7 to £11) per annum. According to the corregidor of Cantón Chua (as presidente de la junta vecinal at the time of the dispute he had played a leading role), minifundismo constitutes no less a problem in the community than it does in neighbouring Chua Visalaya. Land disputes (especially over property damage, removal of boundary markers, rival claims to fields and claims to property by illegitimate children) occupy more time at community meetings than any other aspect of community life, with the possible exception of education. Some legal battles over ownership continue ad infinitum: for example, the translator's mother had been involved in a case (concerning rival claims to land) for 39 years and no solution was in sight.

As has been mentioned, no Llamacacheño can recall an age when the community's land was redistributed on an annual or otherwise regular basis. Whilst it has been seen that inheritance patterns had in pre-revolutionary days approximated closely to those of Chua Visalaya,

they have been somewhat modified during the last two decades. The migration of young men from the community has seriously disrupted the status quo: "Nowadays the Nabo family [originarios and always regarded as one of the wealthiest families] is no longer rich because Nabo's daughter married men from Compi and Huatajata... so their surnames will multiply in the community and the lands of Nabo will cease to exist because his sons have gone to work in La Paz". Today there is a marked tendency towards transferring property rights prior to the decease of the father; such an adjustment is intimately related to the increased rate of migration from the community. A number of elderly comunarios, fearing that their children will settle permanently in the city leaving nobody to help on the family holding, are more than willing to subdivide their properties prematurely in an effort to forestall migration; as a 60 years-old Llamacacheño remarked, "I did have four hectares but I gave the three boys a hectare each... they're good lads and help me cultivate my plots". By tradition sons inherit more land than their sisters; often girls are granted no more than a few furrows. If there is only one son, land may be distributed amongst cousins: "I have only half a hectare in three parcels... although I'm the only son, this is less than my father farmed because when he died some of the land went to my cousins". Sometimes children inherit several parcels in their entirety; in other instances, especially where soils are of variable quality, each child is assigned a few furrows in a number of plots. Unless they have inherited land on their own account, widows are customarily dependent on the whims of their sons; thus one widow stated "I have only two small parcels - in all, less than half a hectare. My husband's land was split amongst the four children... that left me with just seven surcos", whilst a young man remarked "I cultivate all my father's lands. I give to my mother and sister the produce from 20 furrows of land... we work together". Often it happens that the child with most offspring inherits the larger share of land: in one family, the third son, father of eight, had received the parental homestead and twice as much terrain as his two brothers with only three children between them. Unless land is transferred outright, a partir (sharecropping) arrangements are usually brought into operation on the marriage of sons or when children are deemed to have reached adulthood; for example, "I have three boys and one girl... we plant the fields together and they all take crops from eight furrows", or "We only own one sayaña... my father had very little

Llamacacheña removing tunta (white chuño) from the river. 'Raw potatoes, usually "bitter", are left to freeze for two or three successive nights, but they are picked up and stored each morning so as not to thaw. When well frozen, they are submerged for from four to five weeks under water. Removal occurs in the evening, and the next day they are placed in the sun to thaw, then peeled with the feet, great care being taken not to crush them' (Carter, 1964 p.23).

Visalayan family compound. The piles of oca (on left) and chuño drying in the farmyard will later be clamped, the straw for this purpose being gathered on the hillsides. The iron-bladed hoe is used for digging roots such as potatoes, oca and isañu: the sacks, woven by the daughter of the household, are used for carrying produce to market, storing seeds/roots and for collecting taquia.

land and it had to be split amongst five boys and three girls. My uncle allows me to take the produce from a few furrows, if I help him in his fields".

Through marriage several Llamacacheños have acquired access to land - in some cases, even to houses - in Compi, Tauca, Visalaya and Huatajata. Conversely, a few outsiders have married Llamacacheñas and settled permanently in the community, thereby gaining access to their wives' plots of cultivable land whilst at the same time retaining parcels in the communities of their birth. Thus, "I have half a hectare here which belonged to my mother, and about the same amount of land from my father, a Compeño. I was able to buy about three hectares from Compi hacienda because I had worked for the patrón in the olden days"; similarly, "We have nine parcels of land... I should say about three hectares altogether - less than my father because his land was divided between me and my brother. My father came from Visalaya, so most of the parcels are there and I am a member of the cooperative"; finally, "I farm two small parcels - they're about 30 metres long. My father-in-law gave me them because I agreed to work with him. I don't have my own land because I came from Rio Abajo [near La Paz] so I've rented two parcels in Compi". It should not be forgotten that a number of migrants to La Paz carefully cherish their rights to fields in the community e.g., the corregidor's daughter had been given a field as dowry and visits Llamacachi from time to time to supervise the growth of onions on her land.

Apart from inheritance and marriage, the most important way of acquiring usufruct rights to cultivable land is by renting or anticrético. Because of the comparative economic wealth of the community, renting assumes far greater significance than in Chua Visalaya. At least 10 households rent plots in Compi and several have access by the same means to parcels in other sections of Compi and to hillside terraces in Chua Visalaya. One individual stated that he rented land in seven places, though he did not specify where; another remarked "I have rights to about half a hectare in the pampas and six parcels in the hillsides. They are all rented... I pay $ b. 100.00 (£3.50) every three years for each one". As recorded on page 41 the translator's family, otherwise landless ("My mother was originally from here but her relatives stole her land whilst she was living in La Paz") enjoys access

to seven parcels of land in four communities, as a result of anticrético agreements.

It would be indefensible to argue that Llamacachi does not suffer from an acute shortage of land; a few families remain exceedingly poor and virtually landless. On the other hand, the community has from time immemorial been at liberty to make adjustments, and the problem of overpopulation has been mitigated in a variety of ways. Undeniably migration to the city has alleviated pressure on land; the financial resources of the community make renting land in neighbouring communities a feasible proposition; most of Llamacachi's lakeside lands are highly productive and the fact that, with few exceptions, all comunarios apply artificial fertilisers, renders land much less susceptible to soil degeneration than is the case in Chua Visalaya; moreover, Llamacacheños have found it preferable to specialise in the production of onions - a crop requiring large inputs of labour but less growing space than some traditional crops - from which they derive sufficient profit to be able to purchase staple products if necessary; in conclusion, although nearly all Llamacacheños have built new houses in the last twenty years, the settlement pattern has hardly been altered and very little agricultural land has been absorbed in the process.

The emergence of a cash economy

Whilst agriculture in the ex-hacienda continues along traditional lines, farming practices in Llamacachi have changed almost beyond recognition. Vestiges of the past however are not difficult to find; for example, traditional crops such as isañu and quinua are still grown on sayaña plots; farming tasks are still performed on the specific dates prescribed; some Llamacacheños still approach animal losses with a traditonal fatalism - "the sheep always die in February" - and great faith is still placed in the brujo's rain-creating and hail-preventing abilities. But for a growing number of comunarios, agriculture no longer merely represents a tedious but necessary way of life; it has taken on the aspect of a business enterprise.

One of the outstanding modifications has been the replacement of potatoes by onions as the principal crop; as one comunario aptly observed, "Before, all was potatoes, oca and barley... now it's all onions, onions, onions". Customary rotation systems have altered

accordingly: whilst no Llamacacheño can remember a time when lakeside fields were left fallow for an entire year, land is certainly used more intensively at present. Onions can be planted during any month of the year, hence it is not necessary to leave the soil bare even for short periods. Although Llamacacheños are adamant that onions are only grown twice in the course of six years on any one patch of land, one is inclined to believe that they are produced more frequently; indeed, according to the translator, some people have found it within the bounds of possibility to raise two onion crops in one year i.e., by planting in January/February and harvesting in June, then planting again and removing the crop in November/December. Normally seeds are planted in a nursery bed, transplanted after three months and lifted four months later. With the application of selected artificial fertilisers, careful tending at all stages of growth, and periodic irrigation (by means of buckets and cans of water from irrigation ditches or the lake), high yields can be obtained from lakeside fields. G.L. estimated that in "a good year" he can earn up to $ b. 5000.00 (£180) from the sale of onions from two of his largest fields. In 1971 the corregidor's daughter planted ¼lb. seeds in a nursery bed, about 1 x 10 metres; three months later she transplanted the young onions in a plot of land measuring about 50 x 35 metres. For her efforts she hoped to obtain four or five chipas (each chipa =3000 onions); because she had timed operations so that the crop would reach maturity when onions were in short supply, she expected to be paid from $ b. 250.00 to 300.00 (£9 to £11) for each chipa i.e., from ¼lb. seeds costing only $ b. 6.00 (22p) she calculated on making a profit of £50. The marketing of onions dominates the contemporary scene: apart from transporting and selling crops produced by their own families, many young Llamacacheñas have of recent years become highly skilled businesswomen, involved in purchasing neighbours' onions (either by field or chipa) and negotiating sales with onion producers in other lakeside communities. These transactions will be considered in the next chapter.

Despite the emphasis laid on onion production, the potato still occupies an important position in the Llamacacheño economy. It may be grown with less frequency and occupy less space but according to comunarios total yields far surpass those of pre-revolutionary days. Two innovations are responsible for this: the application of artificial fertilisers and insecticides, and the reliance on improved varieties.

Translator's family planting potatoes in a rented lakeside field. The father is ploughing with a pair of bullocks borrowed for the day from a fellow-comunario: Sofía is mixing fertilisers to be applied to the soil after her mother has finished planting the potatoes.

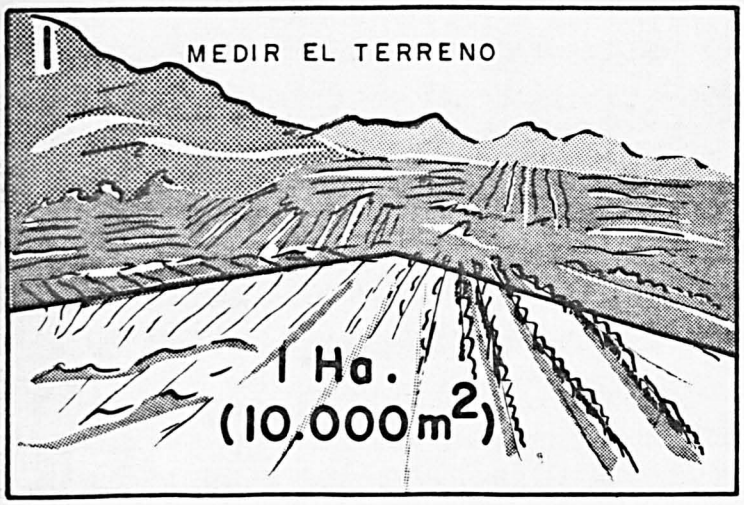
Llamacacheño comunario and son transplanting onions from a nursery bed. In the background the settlement of Llamacachi nestles at the foot of Cerro Picasa. Many householders have planted eucalyptus trees around their corrals (partly to act as wind breaks but mainly for their timber value) thereby giving the community a well-wooded appearance.

With the exception of a few elderly couples and widows, all Llamacacheños apply artificial fertilisers to both onion and potato crops. For example, on a field measuring about 200 x 20 metres, the translator's father was accustomed to using 1 arroba ($12\frac{1}{2}$ kgms.) of abono quimico 12.39, 3 kgms. of urea, 1kgm. of aldrina (insecticide) and several bags of animal manure, purchased from Visalayan ex-colonos. A number of comunarios continue to burn piles of barley stubble, dried grass totora stalks and manure, prior to planting potatoes in mid-September. As has been said, eight families originally procured Sani Imilla potatoes from Belén; subsequently they sold potatoes to fellow-comunarios. More recently, Papa Blanca has been introduced from Peru (according to local opinion, this variety produces up to 60 potatoes per plant); some comunarios are now growing Isla Imilla which they consider yields better than Sani Imilla. Very few comunarios persist in growing native strains. Several claimed that in "a good year" they could produce 12 costales (sacks) per bag of potatoes planted; in a year of low rainfall or crop disease the quantity is halved. Similarly, some comunarios said that by planting "good oca" they could obtain 70 tubers per plant: certain families prepare claya from oca for the main purpose of selling it to Peruvians or exchanging it for llama or sheep wool at the Casani fair in September. At the NCDP stores in Huatajata and Jank'o Amaya, books in Spanish (prepared by the NCDP in conjunction with Peace Corps experts) on farming subjects such as problems in rearing poultry and sheep, and the growing of potatoes, are available for purchase at minimal cost; it is significant that a number of Llamacacheños have reaily bought copies. Various progressive comunarios have experimented with crops not normally included in rotation schemes; one or two have grown alfalfa for fodder, whilst the corregidor has cultivated carrots and radishes. The roots were small and unable to compete in Paceño markets with those from the Cochabamba area but the fact that they were actually produced in the first place is indicative of the new attitude towards farming.

Whilst animal losses, especially amongst sheep (see table page 127), are still high in Llamacachi and comunarios in 1971 owned on average only 40.4 UAOs per family (compared with 32.4 UAOs in the ex-hacienda),

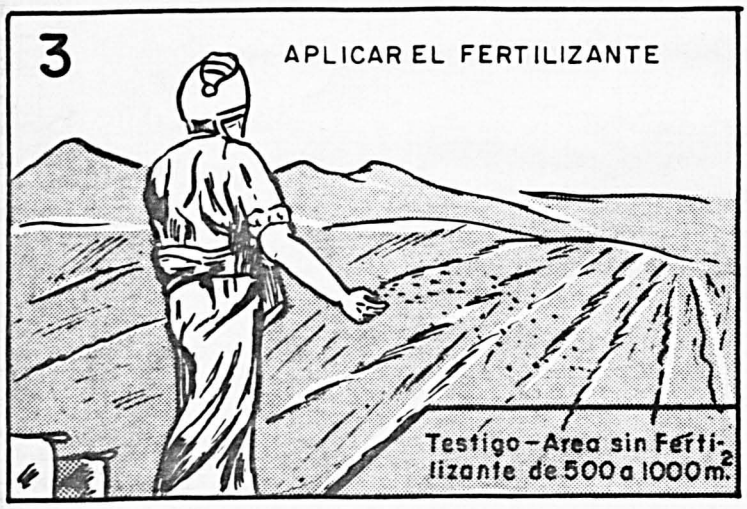
Information sheet on the application of artificial fertilisers issued to Altiplano farmers by the National Community Development Programme.

APLICACION E INCORPORACION DE FERTILIZANTES



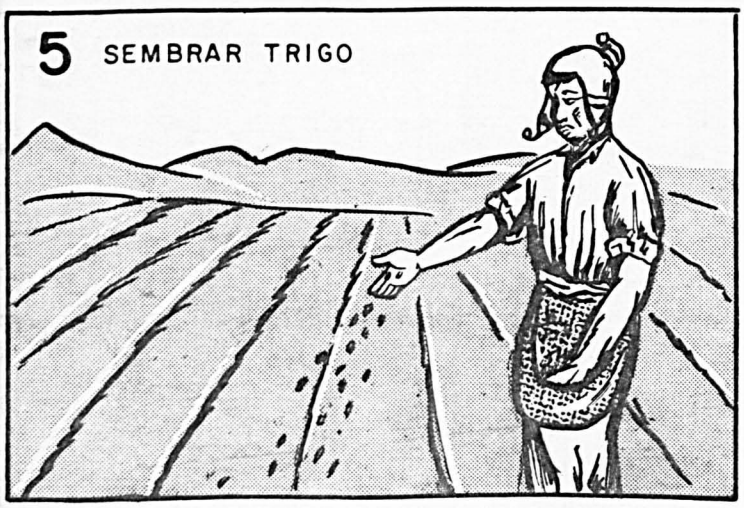
1.- Medir aproximadamente la superficie de la parcela que fue muestreada para su análisis de suelo, de acuerdo al tamaño que se indica en las hojas de "Recomendación".

2.- Vaciar al suelo (lugar seco y limpio) o en una lona los fertilizantes de las bolsas y mezclarlos con pala, lo mejor que se pueda.

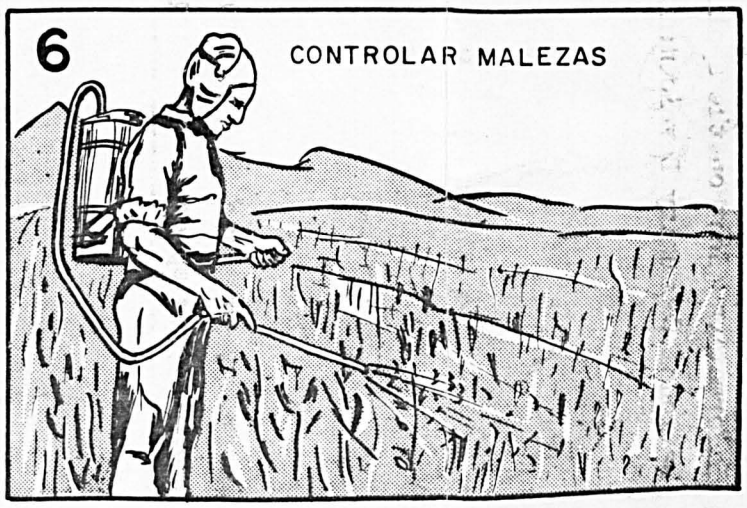


3.- Aplicar el fertilizante al voleo lo más uniformemente en el terreno un día antes de la siembra, y para apreciar los rendimientos es conveniente dejar unos 500-1,000 m2. sin fertilizante, este será el "testigo".

4.- Entierre el abono con una rastra hasta la profundidad de arado, con la finalidad de que el P (fósforo) y K (potasio) estén localizados al alcance de las raices.



5.- Una vez aplicado el fertilizante, el agricultor debe sembrar como es su costumbre. La densidad de siembra para casos de fertilización es de 2 quintales por hectárea de semilla mejorada.



6.- Durante el crecimiento de sus plantas, debe controlar las malezas con herbicidas, porque las malezas aprovechan más el abono que sus mismas cosechas.

there have been certain appreciable advances in the livestock sector. The general consensus of opinion is that stock numbers have increased considerably in the post-revolutionary period and that quality even of creole stock has greatly improved. A number of families have purchased Corriedale sheep from Belén; sheep are sold at the age of 12 months - rams for $ b. 350.00, (£12.50) ewes for $ b. 300.00 (£11). In 1971, several of the more progressive comunarios were intent on installing a sheep dip for community usage, but their efforts were being frustrated by a general unwillingness to make financial contributions. Of recent years farmers have also bought pedigree pigs from Huatajatan dealers, most of the pigs originating from the Cochabamba area: pigs are highly prized in the community and when fully grown can be sold for between $ b. 400.00 and 500.00 (£14 and £18). Unlike Visalayans, an increasing number of Llamacacheños are feeding their stock on supplementary rations e.g., some buy harina de trigo (wheat flour) at $ b. 13 per sack. Many comunarios take advantage of the availability of vaccines; cattle can be vaccinated by the TDC at a cost of 30 centavos per head. As in Visalaya the stress is laid on rearing bullocks for field work; whereas a full-grown bull can be sold for as much as $ b. 2000.00 (£73), the equivalent price for a cow is merely $ b. 500.00. Although burros are highly esteemed as beasts of burden no family has more than two and not every household can afford even one. Some comunarios have tried to breed hens but with little success because of low hatching percentages and respiratory problems; by 1971 many families had given up the attempt and no household was in possession of more than eight birds.

There is still a long way to go and the dangers of concentrating to such an extent on onion production are self-evident. But it must be acknowledged that Llamacachi has proved itself capable of adapting to new situations and has displayed considerable initiative in the post-revolutionary period.

Non-agricultural occupations in Llamacachi

As might be expected from what has already been written, Llamacachi's supporting economy is more diversified and has achieved a better sense of balance than that of the ex-hacienda. Whilst a number of secondary occupations e.g., that of brujo (Llamacachi had four practising magicians

in 1971) are traditional, new functions have emerged in recent years. Several comunarios, such as the notary and inspector of roads, are paid from outside sources; two resident members of the community teach at the primary schools in Compi and Chua Visalaya, whilst another Llamacacheño (on the recommendation of former Peace Corps workers) is employed by the NCDP as the TDC with special responsibilities for Huatajata, Chua, Llamacachi and Compi. As community development worker, he receives a monthly salary of $ b. 270.00 (£9.50) for four days work per week. As in Chua Visalaya, a few landless or virtually destitute individuals work in the fields, especially weeding, or herd animals on a temporary or part-time basis. Some elderly widows assist more prosperous Llamacacheñas with cooking and household chores, in return for several pesos per day and free meals. Likewise, with the boom in housebuilding, young men of little means find it relatively easy to obtain construction work for short terms.

Unlike Visalayans, Llamacacheños engage in both fishing and lakeside shooting, albeit on a modest scale by comparison with the lake activities of Huatajatans. From time to time, fishermen from Huatajata or other fishing communities visit the Llamacacheño shoreline to exchange catches for farm produce e.g., 2 lbs. of broad beans for 15 or 16 small fish. Whilst no Llamacacheño depended exclusively on fishing for his livelihood, (many stressed that in view of the present shortage of trout-salmon, fishing could no longer be considered a profitable enterprise), several fished two or three times in the course of a week for karachi and other varieties of small edible fish: for this purpose they used blue nylon nets and floats from Peru. Two onion vendors stated that they occasionally took small quantities of fish caught by their fathers for sale in La Paz, but for the most part fish were consumed locally, adding valuable protein to an otherwise monotonous, ill-balanced diet. Two comunarios admitted to shooting wild ducks out of bare necessity; neither had access to more than half a hectare of cultivable land. One said that he spent several hours most Wednesdays and Thursdays shooting birds from a balsa boat; from the sale of 50 or 60 ducks in La Paz or Batallas, he could expect a profit in the order of $ b. 240.00 (approximately £8.50). At the same time two other comunarios were making fairly regular visits to the Batallas market for the purpose of selling small bundles of eucalyptus sticks. In 1971 two Llamacacheños were operating as animal dealers; like their counterpart in the

ex-hacienda, they bought local stock and made weekly trips to sell dried meat (chalona) in Yungeño markets.

By 1971, three general stores were functioning in Llamacachi: all occupied roadside rooms in adobe houses and appeared to have started life within the previous decade. Whilst no shopkeeper was willing, if indeed able, to divulge his annual takings, all three stores were obviously thriving and providing work for several members of each family. In all instances, a wide range of commodities - many totally alien to the pre-1952 lakeside scene - were for sale. Items in greatest demand were: bread, sugar, sweets, noodles, rice, tins of sardines, lemonade, beer, candles, matches, kerosene (sold at $ b. 0.50 per bottle) and rough soap; one of the shops even sold small quantities of gasoline. The same families and a few others have of recent years supplemented their incomes at festival times (particularly during Holy Week, at All Saints and in the Christmas season) by providing lodgings at $ b. 2.00 or 3.00 per night and cooking meals for pilgrims passing through the community on their long trek from La Paz to the shrine of the Virgin of the Lake at Copacabana.

As mentioned above, at the time of this researcher's visit, two weavers, each aiming to produce about six metres of fabric every two or three days, were supplying the community's two tailors with material for manufacturing rough suits, overcoats and school uniforms. One of the tailors had bought a sewing-machine for $ b. 500.00 (£18) in about 1957 and had since then acquired an iron, which he heated with a primus stove; the same man claimed to have started work as a tailor in the early 1950s after being left landless. Both tailors made frequent purchases of material from local weavers, but said that for high quality clothes and fiesta apparel they were becoming increasingly reliant on cloth from La Paz. An overcoat usually took about two days to complete and would be sold for approximately $ b. 200.00 (£7). Whilst several women were observed weaving aguayos and sundry clothing, there was much less emphasis on this type of activity than in Chua Visalaya, mainly because most women are fully occupied cultivating their onion crops or actually selling onions in the city. The most interesting innovation in Llamacachi's textile industry is attributable to the Canadian Baptist Mission: a few years prior to the author's stay in Llamacachi, a Huatajatan pastor had conceived what

Visalayan girl weaving brilliantly-coloured aguayo.

Llamacacheño weaver operating traditional foot loom. Lengths of woven material are bought by local tailors for the manufacture of suits and overcoats. In some cases individual comunarios bring dyed wool (sheep, llama or alpaca) to the weaver and select their own colour schemes. The two sons are making cushion covers (p.143) for sale in La Paz.

was to prove a highly successful scheme for providing work and augmenting the income of young Baptists living in the environs of the lakeside. Originally the pastor had bought lengths of plain woollen material in La Paz, arranged for them to be dyed bright colours by a Baptist in the vicinity and then distributed pieces to young men eager to participate in the manufacture of covers, tapestries, etc. Once the prescribed Incaic motifs had been stitched by sewing-machine to the background material, the finished products were returned to the pastor, who paid the boys for their work and sold the articles to certain tourist shops in La Paz. By 1971, 10 or 12 Llamacacheños were involved in this form of appliqué work, most of them at that time buying their own materials in La Paz and dealing directly with Paceño market stallholders. One Llamacacheño still attending school in Compi said that although he could only complete two covers most evenings, his sewing certainly helped towards paying for his education. Another, working on a full-time basis, asserted that he could make up to 24 covers per week and earn between $ b. 170.00 and 195.00 (£6 and £7) for his efforts.

Social change in Chua Visalaya and Llamacachi

Improvements in housing

No feature of the Chuan/Llamacacheño landscape indicates recent socio-economic change more dramatically than does adobe housing: improvements in terms of the size of dwellings and building styles are striking. As noted on page 118, an inevitable response to the removal of building restrictions (as a result of the disintegration of Hacienda Chua) was a radical modification in the actual settlement pattern of Chua Visalaya. Some of the ancient one-roomed adobes sited on the rocky hillsides are retained by the present generation for usage as sheep shelters or granaries but the majority have been totally abandoned and replaced by much larger modern constructions in valley locations. A post-reform spate in building is clearly attributable to a plentiful supply of labour, much of it

gratis in accordance with ayni tradition, to the ready availability of cheap building materials (adobe bricks are manufactured from local earth, small stones, water and the straw of paja waylla) and to the fact that nowadays young couples are anxious to assert their independence by establishing their own homes at a much earlier date than was customary in hacienda times - indeed colonato obligations had made this impracticable. Thus, inside the space of two weeks in August 1971 one young Visalayan constructed a two-storeyed, four-roomed abode, complete with tin roof, windows and solid wooden door (such a door can be bought for $ b. 150.00 i.e., about £5.36 in La Paz) at a total approximate cost of $ b. 4500.00 (£161); in this case, the aid of some 30 friends and relatives was enlisted and four local masons were employed at a daily rate of $ b. 15.00 (53p) each. The principal tool used in construction work - rarely in field tasks - was the spade, obtainable for a price of $ b. 50.00 or 60.00 (£1.77 or £2.14) in Paceño street markets or hardware shops; by 1971 most Visalayan campesinos owned at least one spade. The present researcher observed 36 calaminas (tin roofs) in all, numerous houses with windows (or spaces awaiting the fitting of panes, 9 two-storeyed buildings and 6 with painted exteriors. Such innovations are by no means exceptional in the lakeside region of Bolivia: according to Burke (1970) 'nearly 60 per cent of the Bolivian campesinos (in his area of study) had constructed new homes since 1953 while the Peruvians had built no new ones'.[10]

In Llamacachi the siting of homesteads (see page 98) has changed but little during the last twenty years: building space has always been severely limited. Comunarios had been obliged to erect their adobes adjacent to the through-road in order to avoid the steep hill slope and lands susceptible to lacustrine inundation; of recent years, with the rapid evolution of a cash economy dependent on the transference of onions to Paceño markets, the advantages of living beside a busy thoroughfare have been fully appreciated. Whilst the original configuration of Llamacachi has thus been preserved, the comunidad's post-1952 building record is unquestionably far more impressive than that of its neighbour; the total number of adobe structures may conceivably have trebled or quadrupled. With the exception of several elderly couples and widows, all householders have built new dwellings in the post-revolutionary period; between

January and September 1971, 9 new houses were completed and in the latter month 10 were in the process of being built. In the community the author counted 85 calaminas (some households had three tin roofs), 20 two-storeyed buildings (one such building had as many as 17 windows), 21 gaily-painted houses, 7 chimneys, 13 adobes with outside spouting, 4 with concrete steps onto the roadside and several with curtains and wooden gates. As mentioned on page 61, a large number of comunarios have planted shrubs and flowers; at least a fifth of the family compounds contained what could be categorised as small garden plots, some even with garden seats. Gone are the days when all household activities were confined to one small adobe building; in present-day Llamacachi most families have access, apart from the old thatched adobe, to two or three purpose-built outhouses i.e., for cooking, storage of produce and implements, animals or sewing. The photograph on page 97a of a single homestead clearly illustrates some of the substantial advances in housing over the last two decades. Nor is this the whole story. Preston (1972)[11] emphasises the 'prestige' associated with having a town house: 'many peasants, both young and old, saw the new town as a symbol of a future, more civilised life'. Hence, in a bid to acquire the status of cantonal capital, the community of Jank'o Amaya in 1955 established a nucleated settlement around a central plaza and made concerted efforts to expand the traditional Thursday market: by contrast, Llamacachi has 'bypassed' Preston's new township phase of development, concentrating instead on forging ever stronger links with the primate city. In view of the comunidad's small size (Jank'o Amaya, according to Buechler (1972), contained a population of 1050 and 300 households cf. Llamacachi's 1971 totals of 278 and 63) and the emergence of Llamacacheño producer-middlemen intent on maximising profits by selling onions directly in Paceño markets, such an adaptation is by no means surprising. As many as 10 comunarios reported that they owned or rented second family houses in La Paz or El Alto:[12] in 1971 most of these city houses were permanently occupied by Llamacacheño migrants working or being educated in La Paz (20 boys and 4 girls were at the time receiving full-time education in city institutions) and in addition provided accommodation from Fridays to Mondays for female onion vendors from the lakeside community. Urban life will be further considered in the next chapter.

Distribution of consumer goods

Clark (1970, p.71) maintains that 'In terms of material comforts the northern highland peasant is much better off than previously'; his study of 51 ex-haciendas on the northern Altiplano revealed that 'the total value of goods purchased for consumption on a regular basis in markets for a family of five is $ US 100.95 (about £42), or three times more than the pre-1952 value..... while the regular participation of peasants now in a money economy is over four times what it was before 1952' (p.67). Chua Visalaya's consumption pattern was found to be largely in accordance with Clark's findings: Llamacachi, on the other hand, has made far greater strides in this direction. Indeed, almost as spectacular as Llamacachi's recent boom in housebuilding has been the rapid increase both in the volume and variety of durable goods entering the community.

Whilst a few Visalayan dwellings, notably those belonging to the poorest members of the community, were found to be almost entirely devoid of furnishings and household utensils, save the traditional earthenware bowls - the only apparent post-reform improvements being an enlargement of floor space - a number of adobes contained several wooden chairs (these were sometimes produced at interviews), crude tables, cups, plates, knives, forks, spoons, plastic and tin buckets and bowls, rough soap and candles. Several families were the proud owners of small kerosene lamps and/or stoves; both items can be bought very cheaply in the Paceño black market, and the fuel can be obtained at a cost of $ b. 0.50 (less than 2p) per bottle from one of Llamacachi's stores. A few Visalayans had in the late 1960s procured wooden bedsteads either from La Paz, at prices ranging from $ b. 160.00 to 250.00 (£5.75 to £9.00), or for considerably less at the annual Casani fair. In Llamacachi household interiors were on the whole much less austere than in the ex-hacienda: the whitewashing of cemented walls and the installation of wooden floor boards had become accepted practices amongst the richer element of the population. Although womenfolk still cooked on primitive adobe stoves, many comunarias also owned primus or kerosene ones e.g., the translator's family was using two primus stoves in addition to an outdoor adobe

one. Few families relied solely on candles for lighting; even fewer habitually slept on animal skins on the floor (see page 96); those without wooden or iron beds used thick palliasses.

Whilst the SNRA considers the three major status symbols in rural communities to be the transistor, bicycle and kerosene lamp (page 106), the sewing-machine is indisputably an equally revered article of domestic equipment in the lakeside zone; one Visalayan ex-colono claimed that he lived at subsistence level and could only afford to make infrequent purchases of bread and sugar yet was in possession of a rarely-used sewing-machine for which he had paid more than $ b. 600.00 (£21). Sewing-machines, of predominantly Japanese and British makes, are usually bought on the black market or at the Casani fair. Whilst about a quarter of Visalayan households contained a hand sewing-machine, almost all families in Llamacachi owned at least one serviceable hand or treadle machine. Sewing-machines remain the prerogative of the menfolk, the reason advanced being that women are too clumsy to be entrusted with delicate machinery! In both comunidad and ex-hacienda, boys are taught by their fathers to sew school uniforms, trousers, skirts, etc., from lengths of material purchased in La Paz or at local markets; in Llamacachi young men use machines in the manufacture of cushion covers, tapestries etc. (page 143).

According to Belén's records of the 1965 community surveys conducted by the Peace Corps in conjunction with the NCDP, transistors were at that time totally alien to Chua Visalaya whereas 60 per cent of Llamacachi's households possessed one. Six years later all Llamacacheños and an appreciable number of young Visalayans (for the most part boys who had returned from short work-periods in the city) had access to a transistor; these were mainly cheap Japanese sets and likewise obtainable in La Paz or at Casani. Significantly, four young Llamacacheños are currently employed as Aymara announcers in Paceño radio stations: two by Radio Nacional de Aymara and the others by Radio Mendez. A growing proportion of lakeside campesinos are avid listeners, regardless of whether or not they understand the Spanish programmes. The radio provides a novel, immediate and vital link with the city and central government e.g., in August 1971 campesinos travelled to La Paz in order to participate in a pre-revolution manifestación (public demonstration) as a direct result of receiving official instructions over the air, and through the same medium local teachers were made aware of the compulsory suspension of classes.

It is interesting to note that since the present researcher's return from Bolivia one extremely successful Llamacacheño migrant has even installed a television in his family's city dwelling.

By 1971 a small number of Visalayan youths proudly owned bicycles; simultaneously, most households in Llamacachi possessed at least one machine. A Llamacacheño tailor claimed that he had been one of the first comunarios to purchase a bicycle; this he had done in the late 1950s. Until recently only the male section of the populace enjoyed the privilege of riding bicycles - the bike was highly prized and used for short journeys to school, local markets and fiestas - but in 1966, at an international folk-lore festival held in Compi, girls from Llamacachi and Compi were for the first time invited to compete in a cycle race (the author witnessed another such event at Compi's 1971 festival). Although it is still a rarity to see girls riding bicycles (one 13 years-old Llamacacheña had in 1971 to walk several miles to the Huatajatan school whilst her brother travelled by bike), it is likely that this will become an accepted feature of community life since young Llamacacheñas now find such purchases within their private means as a result of lucrative onion vending.

Reliable comunarios stated that the Copacabana-Huarina road bisecting the two lakeside communities had been improved in the late 1940s; they maintained that at that time only three lorries had made daily journeys between La Paz and Copacabana. In 1963 the road was further widened and the more formidable pot-holes removed in preparation for a national car rally. Over the last decade the volume of lakeside traffic appears to have increased at an unprecedented rate; by 1971 the communities were regularly served by several Bolivian and Peruvian 'bus companies (fares between La Paz and the communities were negotiable, ranging between $ b. 5.00 and 12.00 i.e., 18p and 43p), although few campesinos were in the habit of using this mode of transport, partly because Paceño 'bus drivers were, not unnaturally, averse to carrying heavily-laden passengers short distances, and vehicles from Copacabana were generally full to capacity by the time they reached Llamacachi. The number of lorries passing through Llamacachi and Visalaya was seen to vary considerably; as many as 40 or 50 were counted on days when the local markets of

Jank'o Amaya and Huatajata were functioning or religious festivals being held in Copacabana. Undoubtedly, the loftiest aim of any campesino within the lakeside region today is to own and drive a lorry: in Llamacachi two families have achieved this ambition. In the late 1960s one enterprising young Baptist acquired a G.M.C. truck at a cost of $ b. 45,000.00 (approximately £1607) and another comunario a Toyota vehicle for $ b. 60,000.00 (£2143); both of these were obtained as a result of negotiating hire purchase agreements in La Paz. One suspects that Buechler's findings (1972) could be applied justifiably in both cases: 'By far the most profitable means to acquire both the capital and the connections to buy and operate a truck is by marketing contraband goods'. Llamacachi's two trucks were in 1971 making the return trip to La Paz on at least three days per week (passengers being charged between $ b. 3.00 and 5.00 the equivalent of 11p and 18p); at certain peak periods, as for example when full-grown onions were in plentiful supply, additional visits would be made to La Paz. The owner of the G.M.C. lorry calculated on earning a profit of about $ b. 180.00 (£6.50) on the outward journey and in the region of $ b. 120.00 (£4.25) on the return route.

Adoption of western-style clothing

Substantial changes in the apparel of lakeside campesinos clearly reflect their greatly increased mobility and participation in the monetary economy during the last two decades. It would be misleading to imply that all Visalayans and Llamacacheños have of recent years adopted western-style, factory-made clothing: as the photograph on page 150a illustrates, some of the elderly, poverty-stricken members of the ex-hacienda have benefited but little from the sudden availability of cheap ready-made clothing. On the other hand, with the introduction of the sewing-machine the majority of poorer Visalayans, whilst unable to purchase finished articles of clothing, have ceased to be entirely dependent on home-spun materials. The accompanying picture of a group of Llamacacheño school children demonstrates the most striking modification in female clothing styles, viz., the wearing of brightly-coloured cardigans and jumpers made from wool or synthetic fibres. According to the translator, six small Llamacacheñas had in the late 1960s begun to wear western-type skirts;

she anticipated that within five years all girls of school age would be thus attired as a result of purchases made in local ferias and La Paz by their onion-selling elder sisters. One young Llamacacheña even boasted a large plastic doll dressed elaborately in western clothes. Much of the factory-made clothing worn in both communities is undoubtedly contraband in origin; for example, a jumper priced at $ b. 60.00 (£2.14) in La Paz can be bought for two-thirds the sum at the Peruvian frontier. On more than one occasion the author was implored to don several such articles before arrival at the customs post above La Paz; the said jumpers, etc., are subsequently replaced in their polythene bags for sale in Paceño markets. Over the last twenty years there has also been a dramatic rise in the number of factory-made bowler hats sold in La Paz and at local fairs: the Huatajatan weekly market regularly has one large 'stall' selling nothing but bowlers. Some Llamacacheñas have acquired as many as eight such hats, reserving the newer ones for festive events. In 1952 the wearing of trousers by womenfolk would have been inconceivable; it is still derided by many lakeside dwellers, yet during the temporary closure of city schools in September 1971 girls visiting their grandparents were frequently to be seen dressed in trousers - perhaps another sign of the changing status of campesinas. Buechler (1972) shows how market-women in La Paz have become accustomed to ranking their fellow-vendors 'according to fine distinctions revealed in clothes and language': thus a lakeside campesina may embark on her marketing career as a warmi (a derogatory term referring to a campesina wearing home-spun wool clothing and speaking Aymara) and eventually aspire - as have a few Llamacacheñas - to the rank of chola decente, i.e., a Paceña 'who is expensively clothed in several layers of silk skirts, a blouse, a silk-fringed shawl and felt bowler hat, decked in fine jewels, who speaks, reads and writes in Spanish'.[13] Certainly one of the chief ambitions of most teenage girls in Llamacachi is to be richly dressed - to be 'de vestido': in 1971 several admitted to spending more than a third of their earnings on clothes.

Male attire has also been subject to modification; admittedly, many Visalayans and elderly Llamacacheños persist in wearing drab, old patched trousers, rough shirts and ponchos but an increasing number of campesinos buy pullovers, cheap overalls and jackets.

Llamacacheño school children. Ready-made clothes are procured from regional fairs, at local markets or on the Paceño black market. The girl in the pink cardigan is one of a few now wearing western-style skirts rather than the traditional polleras.

Aged Visalayan couple. A number of elderly couples and widows continue to live in abject poverty: in this instance both man and wife appeared to be suffering from TB (p.96) and had been deprived of land and provisions by unscrupulous neighbours.

The fact that by 1971 Llamacachi's two tailors were regularly making overcoats and suits to order has previously been noted. Numerous young Llamacacheños and several Visalayans stated that they had purchased western clothes whilst working on a temporary basis in La Paz, whilst a number proudly wore green parkas, pullovers, etc., retained from their period of national military service. Rubber sandals (mostly manufactured in Huarina and Achacachi from 'blown-out' tyres) and plastic shoes had become generally accepted by 1971: few members of either community would have contemplated visiting La Paz bare-footed.

Dietary changes

As recorded on page 95, ex-colonos and comunarios alike affirm that their present diet is both larger and considerably more varied than was the case in pre-revolutionary days. Whilst it would be unreasonable to challenge the validity of the first claim, it is impossible to determine the actual amount of increase in food consumption since 1952; on the other hand, it is clearly apparent that many of the foodstuffs currently on display in local fairs and at Llamacacheño stores were entirely unknown to the lakeside region in the 1940s. Unquestionably, there has been a rapid growth in the consumption of sugar and rice (in which commodities Bolivia is now self-sufficient), noodles and coffee (from the Yungas). Yungeño fruit, especially oranges and bananas, are available in season at the weekly markets of Huatajata and Jank'o Amaya; not infrequently baskets of bananas are bought at local ferias or in La Paz for retail sale in Llamacachi. By 1971 heavy bundles of fresh bread were being delivered twice weekly by lorry drivers to Llamacacheño shopkeepers: stores normally opened at daybreak and for several hours there would be a steady trade in bread (each loaf being sold for $ b. 0.50 i.e., less than 2p), flour, rice, noodles, sweets, papaya (soft drinks), beer (at $ b. 2.00 or 7p per bottle), etc. In addition, many Llamacacheñas and some Visalayans nowadays have access to an ever-widening range of fresh fruits and vegetables (mainly from the Cochabamba area) on sale in Paceño streets or inside enclosed markets.

Despite the ready availability of such commodities, diets in both Llamacachi and Visalaya remain on the whole very badly balanced;

many families in the ex-hacienda continue to suffer from severe malnutrition during 'la miseria' and regard food shortage as the greatest problem of domestic life. Peace Corps/RISM and SNRA investigations led to the conclusion that the diets of campesinos within this part of Bolivia are notably deficient in animal proteins, riboflavin, thiamin and calcium. The SNRA (1970), classifying provinces in four groups (high, acceptable, low and deficient) according to the level of nutrition, placed Omasuyos in the third category.

In the mid 1960s Caritas (a Roman Catholic charitable organisation) began distributing powdered milk to lakeside schools; in Chua Visalaya the gruel prepared by the school alcalde (official) prior to the commencement of morning classes still provides the mainstay of many children's diets. Apart from this, milk is rarely consumed. What few eggs are produced on small-holdings are usually taken to local markets and sold to comerciantes (see page 171a). Fish is still considered a delicacy by most campesinos; some families make infrequent purchases of small quantities of lake fish at one of the weekly markets (pejerrey fish from Lake Poopo are also sold at Huatajata) or barter with fishermen at the lakeside (page 141), but the majority seldom consume fish. Few families eat meat more than once per week; some campesinos only eat mutton or pork at fiestas or on special family occasions. Guinea pigs are the traditional fare at birthday celebrations. This accords with Carter's findings (1964, p.24) that meats comprised but 4 per cent of the total food weight consumption in his area of study. However, it must be added that certain more fortunate Llamacacheño families were by 1971 existing on a much better-balanced diet. For example, members of the translator's and corregidor's households fully appreciated the nutritional value of eggs, green vegetables and fruit and were eating fish or meat at least once, sometimes twice, daily.

Sanitation and health

'Compi's water supply is derived from wells and streams in the surrounding terrain since the lake water is brackish and contaminated by livestock. An inspection of local wells and streams revealed obvious human sources of contamination. Sewage disposal is non-existent...

adobe huts are usually infested by rats, hamsters, fleas and lice ... poor sanitation, when combined with unsanitary food practices, creates conditions highly favourable for transmission of water and flood-borne diseases, contact diseases and insect-borne diseases'. The Peace/RISM Corps team's forthright comments (1967)[14] apply equally to present-day Llamacachi and Chua Visalaya. Whilst there has been a steady increase in the volume and variety of consumer goods entering the communities, neither comunidad nor ex-hacienda has taken any positive steps to improve its abysmal standards of sanitation nor is there any general recognition of the need to do so. Whilst bodies, hair and clothes are, except at the end of the dry season, washed in the small stream passing through Visalaya, water for most other domestic purposes is still obtained from an inadequate number of open earthen wells. Although polluted by sheep and cattle, such water is rarely boiled; this is undoubtedly the root cause of frequent recurrences of dysentery and diarrhoea and, in the opinion of the Huatajatan nurse, contributes directly to the high rate of infant mortality. The Buechlers (1971, pp.57-8) record a Llamacacheño meeting of 1965 at which Peace Corps/Baptist mission proposals for erecting a water pump and for constructing latrines adjacent to the Visalayan school were openly debated; no decision was ever reached with respect to the pump and though the latrines were built, they were rarely used, being considered by the residents to be totally unnecessary. In 1971 the TDC, acting on the instructions of the NCDP, attempted once more to arouse enthusiasm for the construction of simple lavatories but met with little success; most campesinos reasoned that human excrement was "good for the fields". Few households are without at least one guard dog; most of these animals are under-fed, flea-ridden and savage. According to a veterinary surgeon working with the British Agricultural Mission (and consulted after the present researcher had received several bites from a Visalayan dog), Paceño vets are accustomed to dealing with several rabid dogs in the course of a week. In the lakeside communities there is as yet no awareness of the health hazards associated with keeping unhealthy animals, whether dogs, sheep or guinea pigs: moreover, most campesinos are not averse to consuming the meat of animals dying from unknown causes.

The Final Epidemiological Report of the Peace Corps/RISM Bolivian Project (1967) declared that campesinos 'are essentially pragmatic and will readily accept solutions that work, whether they derive from penicillin or Pachamama' (Mother Earth). This may be true in situations where no payment is incurred for medical treatment, but the fact that many lakeside campesinos are willing to buy costly attires for fiestas and expend large sums on festal drinking whilst they are not prepared to pay for even the cheapest of medicines is indicative of the low value placed on health. When asked to stipulate the basic needs within their community, 35 Llamacacheños and 30 Visalayans specified a doctor whilst a further 17 and 14 (respectively) considered the installation of a health centre to be of prime importance. Yet it was discovered subsequently that in the mid-1960s two charitable organisations offering to provide a clinic for Chua had ultimately been obliged to withdraw support because the residents had refused to participate in the necessary building programme. Similarly, whilst the Methodist doctor serving the lakeside from Huarina to Tiquina holds a bi-weekly surgery in Huatajata and medical aid is always available at minimal cost from the Bapitst mission, as indeed it has been since the 1920s (each consultation with the doctor costs $ b. 10.00 i.e., 36p whereas the mission gives free consultations), the majority of Visalayans and Llamacacheños continue to rely almost exclusively on the brujos' incantations and herbal potions concocted by local curanderos. The Huatajatan nurse stressed that deeply-engrained superstition constituted an almost insuperable impediment to her work. Most campesinos persist in their belief - a belief which 'stems from a syncretism of folk and religious elements of medieval Spanish, Catholic and Inca origin' (Peace Corps/RISM) - that all illnesses have a supernatural origin, hence they necessitate supernatural cures. The Buechlers (1971, page 103) describe how 'mallk'u or scarlet fever is treated supernaturally by going to a hill near Huarina. There one grinds the stone of the hill and puts it on the skin of the child; for the face of the hill is similar to the skin of the child with scarlet fever'. The traditional fatalistic attitude of the campesino population continues to act as a veritable stumbling block to health care programmes: on numerous occasions the relatives of infirm people insisted that it was pointless to secure medical aid because death had been destined or "Dios sabe todo" (implying that what had happened was in accordance with the will of God).

Some cases, for example one involving a six years-old girl suffering from trachoma, were exceedingly distressing.

On the other hand, a growing number of young, better-educated Llamacacheños and a few Visalayans were by 1971 beginning to approach the activities of brujos and curanderos with a pronounced degree of scepticism, preferring to avail themselves of medical cures; this they are able to do at little extra expense since the nurse arranges to be in Huatajata and Jank'o Amaya on market days. Likewise, although no Visalayan ex-colono was himself prepared to go and obtain medicaments from Huatajata after the day of heavy fighting, all the badly-injured members of the community were more than willing to accept medical aid when it arrived.

Tuberculosis remains the most serious health problem in the lakeside communities; in 1971 several elderly Visalayans were suffering from advanced TB whilst four children within one family alone had died from the disease. Many old campesinos are also afflicted by arthritis and rheumatism mainly as a result of inadequate protection against the cold, bad teeth, etc. (few appreciate the close relationship between bad teeth and various ailments, although one young Llamacacheña boasted a set of false teeth which she claimed to have purchased in La Paz for a sum of $ b. 1200.00 or £45). Whooping cough, scarlet fever, measles, intestinal worms and dysentery also occur on a wide scale. Two families in Visalaya had each lost three children in a measles epidemic preceding the present researcher's visit; in these particular instances parents had made no attempt to procure medical advice until it was already too late and subsequently accused the Baptist nurse of "killing" their children by injection. Prolonged illnesses, sometimes death, result from a wide range of careless human actions; the overturning of over-laden lorries (one middle-aged campesino maintained that he had been injured in five such accidents), stove explosions, mis-handling of dynamite (used in lieu of fireworks) at fiestas, weddings, etc., and goring by bulls (open wounds encouraging gangrene). Drunken brawls after festive events frequently lead to stone throwing and serious physical injury; according to an assistant nurse, at least four Visalayans would have died had they not received immediate medical attention

after the community fight in August 1971 - one elderly campesina had three stones embedded in her head.

In the year prior to this researcher's stay in Llamacachi at least 14 children had been born in the ex-hacienda and 6 in the comunidad; during the same period 16 or more deaths had occurred in the former and 6 in the latter. It is probable that more than 4 Visalayan babies had died but for some reason campesinos were reticent about divulging such information. Thus Llamacachi's population had remained static whereas Visalaya's might actually have declined. Certainly there has been no dramatic increase in population over the last few years; although family planning has recently been incorporated in the work of the Huatajatan clinic (see page 164), the doctor and nurse were in agreement that the present high rate of infant mortality acts as a natural curb on population growth. The Huatajatan nurse stated that despite some reduction in the incidence of infant mortality, she still expected more than 100 deaths per annum within the area covered by the mission, viz., a triangle based on Tiquina, Huarina and Achacachi.

If community development implies 'the development of the fullest potential of the human community',[15] an improvement in the physical well-being of the campesino population is of paramount importance. Balanced diets, improved sanitation, better health care of the young and more responsible attitudes towards the aged and infirm are all facets of the same problem and equally significant.

Progress in rural education

SNRA research workers evaluating (1970) the social and cultural effects of agrarian reform concluded that since 1953 the two main aspirations of the campesino population had been 'el derecho de propriedad sobre la tierra y la facilidad de aceso a la educación' (the right of land ownership and ease of access to education). Writing in a similar vein, Heath (1966)[16] asserted that 'the self conscious concern with education is deep and pervasive in contemporary peasant life'. Whilst the majority of Llamacacheños and a significant number of Visalayans respect education as a catalyst of social and economic

mobility - a means whereby their children can escape the hard toils of the countryside - it would be misleading to imply that all members of both communities regard education with such esteem; as one Llamacacheña commented in 1971, "I live ill with my husband... we quarrel all the time because he wants them to be educated... it's a waste of time and very expensive... they just go off afterwards and give nothing back to their parents".

Educational facilities in the lakeside region have greatly improved in the post-revolutionary period. Ten years ago a primary school contributed by the Alliance for Progress as 'un esfuerzo común entre Bolivia y los EEUU' (the inscription on the building) replaced the original (1942) Baptist school in Chua Visalaya; in 1970, with financial assistance from several sources, the Baptist mission supervised the construction by Peace Corps members and ex-colonos of the more spacious and attractive premises illustrated in several photographs. (In the event, due to a lack of cooperation within the community, aid had to be sought from the Tiquina Naval school). In 1971, 120 children from Chua Visalaya, Chua Cayacota and Llamacachi were enrolled in the school; at that date the mission was considering the possibility of relinquishing direct control in view of increasing maintenance costs. Llamacacheños had in 1958 helped under duress to build a Roman Catholic school in adjacent Compi; when more recently comunarios, complaining that Llamacachi needed its own school, refused to participate in a scheme to erect teachers' quarters in Compi, they were officially threatened with spells of enforced labour at Tiquina. At the age of 13 or 14, on completion of their primary school education, pupils from Llamacachi and Visalaya have the option of transferring to a colegio secundario in either Compi or Huatajata; boys from Llamacachi generally attend the former whereas a few Visalayans, in company with several Llamacacheños of Baptist parentage, make the tedious daily return journey to Huatajata. Clearly, in this section of the lakeside region elementary education no longer remains merely an 'aspiration'.

Additionally, it has been shown that an ever-increasing number of Llamacacheños are benefitting from full-time education in Paceño schools. According to reliable informants this dramatic change has occurred during the last ten years; in the early 1960s a few children

went to live with relatives in La Paz for purely economic reasons, i.e., to relieve pressure in the home community, but with the realisation that standards of education are substantially higher in the city the trend has become more pronounced. A large proportion of the comunidad's 20 boys and 4 girls currently receiving education in La Paz reside with their brothers or godparents; it is the ambition of many Llamacacheños, especially those whose elder brothers have obtained lucrative employment in the city as a result of their city education, to attend school in La Paz. Although only 7 Visalayans were enrolled in Paceño institutions in 1971, it is likely that the number will grow as permanent migration from the community assumes greater significance. Furthermore teaching, formerly regarded as a mestizo occupation, now lies within the scope of lakeside children; a number of parents when interviewed expressed a wish that their sons might eventually become teachers. Boys who have completed the sixth grade of the secondary course and passed their final examinations (also prerequisites for entry to University and the police force) are qualified to embark on a teacher training course. In 1971 two Llamacacheños were studying at the Achacachi college, one was supply-teaching in Visalaya, one was teaching in Compi, one in Huatajata, another in Jank'o Amaya, four in Sorata and one elderly comunario had been seconded for further training to the Warizata college (during which time he was receiving half his regular teaching salary).

Unquestionably, remarkable advances have been made in the sphere of rural education. On the other hand, shortcomings in the present system are easily detected: absenteeism, the low value placed on the education of girls, large classes, poor standards of teaching and lack of equipment. More than 20 Visalayan children of school age were habitually absent from the class room in 1971; indeed few attended with any regularity. Most ex-colonos attributed this to the high cost of education - "no hay plata" (there's no money). Each pupil is expected to furnish his own books, uniform and contribute towards the teachers' salaries. Although the cost of primary education is not excessive and it was usually discovered that children, especially girls, had been kept at home primarily to help with herding or in the home, the costs of secondary education impose a strain on the poorer families of both communities:

teaching and inadequate financial resources have so far precluded such boys from enrolling at La Paz's Universidad Mayor de San Andrés (UMSA), it is to be hoped that in the near future some of the lakeside children receiving full-time instruction in the city will be able to take advantage of such facilities.

Linguistic changes

One important and inevitable consequence of the extension of educational facilities and increased contacts with the outside world (through city marketing, migration, military service, political propaganda, the transistor, etc.) has been a pronounced growth in the speaking of Spanish throughout the lakeside region. In the 1950s a knowledge of spoken and written Spanish unquestionably facilitated upward mobility; for example, Compeños elected returned migrants as syndicate officials primarily because they were best able to communicate with central government representatives. A lack of such migrants and of bilingual ex-colonos in Chua Visalaya may have been largely responsible for delays in land reform proceedings. In the comunidad, the lead was taken by several Spanish-speaking migrants, by one articulate comunario in particular: he had 'received eighth grade education in La Paz.... His experience and his knowledge of politics contributed to his election as intendente of Jank'o Amaya for 1964. Then when Chua created its own county in December 1966, he became its first corregidor' (Buechlers, 1971, page 61). At the present time only a handful of elderly Visalayans and Llamacacheños find it possible to converse in Spanish, and notice of community reunions, etc., has to be given orally in Aymara; with the exception of the corregidor's wife, no middle-aged nor old campesina is bilingual. On the other hand, whereas the Aymara spoken in the lakeside region prior to the National Revolution was pure, over the last two decades there has been much adulteration; many Spanish words, such as mamá, papá, tío, plata, pan, cerveza, agua, cama, tienda, feria, escuela, chacra, parcela, buenos días, have been assimilated in the vernacular and are today in common usage. Of recent years, the Baptist Church has translated the New Testament into Aymara and begun to hold services at which both languages are used.

It is difficult to establish with any precision the total number of Spanish speakers in either community;[18] for instance some campesinos claiming to be bilingual were in fact able to speak but few words in Spanish, whilst others insisting on answering questions in Aymara obviously understood conversations between the present researcher and her assistant. Beyond all doubt fewer Visalayans are bilingual than Llamacacheños; indeed a number of the former who had received several years of formal education had lost the ability to communicate in Spanish because they had very limited contacts with the world outside. The quality of Spanish teaching at the Visalayan school was understandably poor; although legally all instruction in rural schools is given in the official language of the country (i.e., explanations in Aymara being added only when essential), this was certainly not the normal practice in Visalaya - and one questions whether it is even desirable in the first years of school life. Probably more Spanish is learnt outside than inside the class room: in Llamacachi the best Spanish was spoken by children being educated in La Paz, by some onion vendors and by boys who had returned to the community after working temporarily in the city or completing their military service.

Changing patterns of social life

In pre-revolutionary days, when leisure time was in short supply, the fiesta provided the only respite from an otherwise monotonous life of drudgery; today the situation is very different. Many Llamacacheñas are accustomed to spending several days of the week in La Paz, where western forms of entertainment are open to them; not unnaturally this sometimes provokes friction between them and young, home-based Llamacacheños. As previously mentioned, much time in the ex-hacienda is devoted to cooperative or syndicate business. Likewise the stores in Llamacachi have become well-established meeting places for drinking lemonade or beer and gossiping about local affairs. Another innovation is the football match; today Visalaya proudly boasts its own team, 'The Strongest' (in imitation of a Paceño club), which in Holy Week, 1972, challenged several other teams from La Paz including one organised by migrants from the locality. Already a large proportion of young folk spurn the chewing

of coca and regard the traditional fiesta with disrespect; one Llamacacheño referred to the institution as "feo" (ugly) and said he believed that military service provided better proof of a man's devotion to duty and community than fiesta sponsorship. Many young Baptists had ceased attending such gatherings; others admitted to going for the express purpose of meeting girls from neighbouring communities or imbibing heavily. In December 1972 a few public-spirited Llamacacheñas even found it impossible to arouse sufficient enthusiasm for the customary Christmas-time celebrations; most young people preferred to spend the festive season with relatives in La Paz.

Amongst other sections of both communities, i.e., except for the Baptist contingent, the fiesta continues to find strong support: elders are generally more than willing to act as prestes thereby improving their prestige within the immediate area. Thus the father of the present researcher's translator in June 1971 spent $ b. 3545.00 (approx. £126) on food (five sheep, potatoes, chuño, broad beans, maize, bread), drink (five large crates of beer, tins of alcohol and chicha), a band, invitation cards, vestments for Compi's statue of St. Peter and sticks of dynamite. However, the actual facade of fiestas is constantly changing. Of recent years local migrants have formed their own dance groups in La Paz and return to the larger lakeside fiestas to display their skills - and, one suspects, their brilliant clothes. At the Lakachi (i.e., on Pampa Chua) festivities in September 1971, daily newspapers and city-made salteñas (akin to Cornish pasties) were on sale - both, according to the translator, for the first time. Moreover, although prepared to pay liberal fees, prestes are finding it increasingly difficult to persuade Roman Catholic priests to celebrate masses at the beginning of fiestas; when cold winds blew on all five days of Compi's 1972 Fiesta de San Pedro, campesinos attributed such inclement weather to St. Peter's anger at their failure to perform the rightful ceremony beforehand.

One noteworthy innovation has been that of an annual folklore festival in Compi; celebrated for the first time in June 1965, this (in common with other Bolivian folklore festivals) has its origins in the praiseworthy efforts of the MNR to perpetuate traditional

Fiesta on Pampa Chua (see map p.50a) September 1971.
A traditional Aymara dance is being performed by a group of Chuan migrants. At this particular fiesta national newspapers and salteñas (savoury meat pies - a Paceño speciality) made a first appearance.

Special costumes are worn for most traditional dances. Each family owns at least one such attire; some of the more resplendent costumes are handed down from generation to generation.

Aymara dances and reed music. The Compeño festivals have been organised by the Bolivian Tourist Board with the aid of successful migrants from the community. The 1971 event, held in a large purpose-built stadium, attracted thousands of Paceños, foreign anthropologists and overseas visitors (indeed it would have been the subject of a British TV documentary had not the BBC filming team been involved in a fatal accident at Huatajata). An amazing number of Aymara dancing groups from all parts of the Altiplano participated; an exhibition of new crops and farming techniques was arranged by the NCDP/Belén Experimental Station; a balsa boat race took place on the lake; Llamacacheñas and Compeñas competed in a bicycle race and a local girl was crowned Reina de la Papa (Potato Queen).

The social position of campesinas

The changing status of lakeside women was a subject of considerable interest to the present investigator. Some of the attitudes and opinions held by womenfolk have their place in later chapters; the following remarks are for the most part based on personal observations and on explanations ably provided by the female translator. Evidence has already been produced to suggest a marked inequality of the sexes: for example, the low value placed on the education of girls,[19] beating by husbands, a general reluctance to entrust machinery (sewing-machines and bicycles) to women and the arrangement of marriages with land prospects uppermost in mind. It could be added that campesinas are usually paid half as much as campesinos, i.e., the equivalent of children, for field tasks and that whereas it is regarded as a good sign if a brujo returning from spell-making crosses paths with a man, meeting a woman is an evil omen. Elderly women were frequently seen carrying extremely burdensome loads on their backs whilst their sons or grandchildren accompanied them on bicycles. On one occasion a man was observed kicking his very pregnant wife in the stomach - still a method of abortion. Superficially it appears that female emancipation lies somewhere in the distant future.

Conversely, however, there are many signs that the status of women is rapidly changing. In a community like Llamacachi such an affront

to the status quo is perfectly logical: 'in terms of increased market participation, the peasant women have experienced a greater relative change than the men.... most peasant men have concluded that the woman is better for this kind of activity' (Clark, 1970, p.72). Whether they like it or not, because of the changing pattern of economic life Llamacacheños are finding it expedient to show more respect towards their womenfolk. Several more determined Llamacacheñas had in 1971 flatly refused to consent to their parents' marriage proposals, one even insisting that no man could be considered eligible for marriage before completing his military service;[20] at least 13 Llamacacheñas had married migrants or Paceños as a direct result of onion-vending activities in the city. The present researcher attended a community meeting[21] at which it was falsely alleged that a young comunaria had deserted her family and subsequently committed adultery in La Paz; after much heated debate it was eventually determined to grant her a legal separation on the grounds of cruelty - a situation which would have been unthinkable in pre-revolutionary days. One might also cite a legal case involving the present researcher's translator. On a return journey from La Paz a Copacabanan lorry driver carelessly placed a tin of kerosene on top of a large sack of sugar costing $ b. 94.00 (£3.36); when the driver refused to compensate her for the ruined sugar, the translator brought the matter before a Paceño tribunal and the said driver was imprisoned for two hours until he agreed to reimburse her. Furthermore, no longer are womenfolk necessarily expected to produce large families: some better educated Llamacacheños spoke in terms of two or three children as the ideal family size - a marked departure from the traditional tenets of 'machismo'. For several years the Huatajatan clinic has offered free advice to couples wishing to limit their families; the nurse claimed to have fitted more than 250 intra-uterine devices within the lakeside region (although many women asked for these to be removed after one of their number had died as a result of something totally unrelated).

Most of the above refers exclusively to the comunidad: admittedly the young Llamacacheña is far more liberated than her counterpart in Visalaya. Indeed the social position of women in the ex-hacienda has changed but little during the last two decades. Yet Visalayan campesinas can not fail in the long run to derive some benefit from improvements in the status and living conditions of womenfolk in neighbouring Llamacachi.

Footnotes and References - Chapter V

1. K. Barnes Marschall, Cabildos, corregimientos y sindicatos en Bolivia después de 1952 (SNRA, La Paz, 1970).

2. See General Bibliography.

3. Sección de Investigaciones Sociales, SNRA, Evaluación de la Reforma Agraria: Cap. VII Efectos Sociales y Culturales (La Paz, 1970). Other references are to the same work.

4. G.M. McBride, The Aymara Indian Communities of Highland Bolivia (New York, 1921) p.3.

5. In El sistema de la Tenencia de la Tierra en las Comunidades Originarias de la Provincia Manco Capac, Departamento de La Paz (SNRA, La Paz, 1970), M.F. de Lucca D. describes how mass migrations of Manco Capacans into southern Peru had occurred between 1883 and 1932 as a result of acute population pressure; in 1970 some 169 families in one Manco Capacan comunidad, Lok'a, owned parcels of land in Peru.

6. H.C. and J-M. Buechler, The Bolivian Aymara (New York, 1971) p.2.

7. W.E. Carter, Aymara Communities and the Bolivian Agrarian Reform (Gainesville, 1964) p.12.

8. R.J. Clark, Land Reform in Bolivia (USAID/Bolivia and Wisconsin, 1970).

9. According to the present researcher's translator, windows are highly prized in both communities; in many new houses, spaces for windows are blocked with bricks or straw until the householders can afford to buy the window-panes.

   The following statistics for Provincia Omasuyos, derived from Evaluación de la Reforma Agraria: Cap. VII Efectos Sociales y Culturales de la Reforma Agraria (Sección de Investigaciones Sociales, SNRA, La Paz, 1970) and based on CIDA/Wisconsin Land Tenure Center investigations, clearly indicate some of the substantial changes in dietary patterns and the distribution of consumer goods occurring in the post-reform period. Figures relate to the year 1967; 1952 percentages are added in brackets.

   Percentage of campesino families interviewed in Omasuyos possessing: wood or metal beds, 51.2 (3.2); table and one or two chairs, 45.1 (3.2); calamina roof, 16.0 (-); one or more windows, 54.9 (n.a.); metal or aluminium pans, 31.7 (-); larder, 91.4 (13.1); sewing-machine, 43.9 (16.1); transistor, 39.0 (-); a bicycle, 26.8 (4.8).

   Percentage of campesino families interviewed in Omasuyos eating certain foods four or more times weekly: bread, 28.9 (3.4); meat, 40.3* (20.0); sugar, 74.4 (15.2) and noodles, 40.2 (3.6).

   * a high figure when compared with findings in Chua/Llamacachi.

10. M. Burke, 'Land Reform in the Lake Titicaca Region', a chapter from Beyond the Revolution: Bolivia since 1952 (edited by J.M. Malloy and R.S. Thorn, Pittsburgh, 1971) p.322.

11. D.A. Preston, Rural-urban transformations in Bolivia: new towns in a new system (Working Paper 25, Geography Department, University of Leeds, 1972) p.4.

12. El Alto is the rapidly and haphazardly growing barriada overlooking the city of La Paz and lying in close proximity to El Alto airport, the world's highest commercial airport (4,085m 13,403').

13. J-M. Buechler, Peasant Marketing and Social Revolution in the State of La Paz (McGill University, 1972) p.228. The previous reference is to the same thesis.

14. A. Omran, W.J. McEwen, K. Zaki et al., Epidemiological Studies in Bolivia (Final Report for the Peace Corps/RISM Bolivia Project, 1967).

15. Her Majesty's Stationery Office, Community Development: A Handbook (London, 1963).

16. D.B. Heath, A View from the Grassroots: Peasant Syndicates among the Aymara of the Bolivian Yungas (Paper presented to the Conference on Peasant Movements, Ithaca, New York, 1966).

17. M. Baptista Gumucio, Ministro de Educación, Pido la paz y la palabra (La Paz, 1970) p.46:

'En primer lugar, alfabetizar no es sólo enseñar a leer y escribir: eso no constituye el fin, sino un medio, que ha de ir a su vez complementado, con la adquisición de nociones básicas de:
- Higiene y salud, de rendimiento de capitación laboral, de orientación de la recreación y uso adecuado del tiempo libre.
- De cultura básica popular; de organización comunal de base; de promoción del hogar y la vivienda; de ética y de relaciones humanas y universales'.

18. Peace Corps/RISM investigators in Compi concluded that 85 per cent of the community's population spoke only Aymara i.e., that merely 15 per cent of all Compeños were bilingual.

19. Marked inequalities in the formal education of campesinas are revealed by the following figures (SNRA, 1970) relating specifically to Omasuyos province.

A = Percentage of population over the age of 10 having received one or more years of primary education, 1967.

B = Percentage of population over the age of 10 having received four or more years of formal education, 1967.

C = Percentage of population over the age of 10 able to read and write Spanish, 1967.

	MALES			FEMALES		
Age	40+	30–39	10–29	40+	30–39	10–29
A	25.7	70.0	97.0	1.7	7.0	44.9
B	1.2	14.0	43.8	0.1	-	5.6
C	20.8	62.9	83.4	0.4	5.1	36.2

20. Campesinos attending colegios secundarios are normally required at the age of 18 or 19 to spend three months at a pre-military training centre.

21. This was held, as are most community meetings, in Llamacachi's Baptist church, built in 1966. In 1971 the Baptist Mission maintained 12 churches within the Tiquina/Achacachi/Huarina triangle.

CHAPTER VI MARKETING AND MIGRATION

'The Indians not only love their land; they cling to it generation after generation.... Nothing will induce them to move': thus wrote McBride in 1921.[1] Referring specifically (p.13) to Omasuyos and Muñecas he proceeded: 'these provinces have lain completely out of the current of important events and constitute one of the most secluded sections of the country'. Whilst Wolf's dictum - 'Indian peasants ... are not eager to exchange their community world view, their own prestige system and their separate identity for a place on the lowest rung of the ladder of the national social and economic system'[2] - might have been applicable to much of early twentieth-century rural Bolivia, such generalisations are totally incongruous in contemporary Bolivia. Nowhere is this more apparent than in McBride's 'secluded' Provincia Omasuyos. As Anderson astutely remarked: 'The romanticization of peasant culture is generally more attractive to the intellectual than to the peasant who finds life better in the cities, despite poor housing, lack of relevant skills and uncertain employment'.[3]

It will have been noted that the preceding description of socio-economic change in Llamacachi and Chua Visalaya makes frequent mention of local markets, regional fairs, La Paz and migration. Such insertions are unavoidable in view of the communities' present-day intricate interactions with the outside world. One of the most striking changes in post-revolutionary Bolivia has been the abrupt awakening and rapid emergence of rural communities from centuries of oppression, self-sufficiency and virtual isolation. According to Clark (1970), 'the area in which most significant changes were produced lies within a radius of 4 to 6 travel hours from La Paz': proximity to La Paz - a distance of less than 60 miles - dictated that Chua/Llamacachi should be in the mainstream of developments. The years since 1952 have witnessed not only an unprecedented increase in the mobility of the peasants facilitated by radical improvements in communications (Buechler[4] lays accent on the recent 'phenomenal increase in over-loaded, poorly-maintained motor vehicles' in La Paz Department), but also the integration of the peasantry in the national monetary economy (new wants, purchases and consumption patterns) and the adoption by the younger generation of attitudes and aspirations

town's bridges, pave the central plaza and provide Ancoraimes (adjacent to the mine) with a reliable water supply.

Increased participation in rural markets

Whereas in pre-revolutionary times peasant agriculture had been oriented perforce towards family subsistence and consumption, comunarios and the few more fortunate colonos bartering on but a limited scale at ferias in neighbouring communities and provincial capitals, since 1952 campesinos of the northern Altiplano have 'become accustomed to dealing in larger quantities of produce' and 'in cash on a regular basis' (Clark, 1970, p.59). Clark (1968)[11] estimated that the 1966 total value of goods purchased by the average highland peasant family was in the order of US $ 100.95 (£42), i.e., approximately three times more than the pre-1952 level, whilst the regular participation of campesinos in the cash economy was four times what it had been before the National Revolution. Buechler's analysis, Peasant Marketing and Social Revolution in the State of La Paz, Bolivia (1972), records that in the late 1960s some 65 weekly, 23 annual and several hundred festive fairs were functioning in Departamento La Paz. Apparently none of the annual events and only 11 of the 65 weekly fairs had been inaugurated since agrarian reform: in the section of the lakeside under review the markets of Jank'o Amaya (Thursday), Huarina (Sunday), Achacachi (Sunday) and Batallas (Saturday) had all originated in the pre-reform era. Several, such as one in Soncachi[12] east of Chua, had in fact been established in the 1950s but failing to entice a sufficient number of traders had been abandoned; Huatajata's highly successful Wednesday market is the sole surviving creation of the modern age. This would indicate that the major adjustment to Clark's 'bottleneck' (p.121) in Bolivia's lakeside zone has not been a rapid growth in the actual number of markets but rather an expansion in the size and scope of pre-existing ones.

Although the bulk of Llamacachi's onions and some home-produced foodstuffs are sold directly in Paceño ferias francas (p. 138), most Llamacacheños attend at least one local fair in the course of a week; for many Visalayans the weekly feria still represents the major, if not only, contact with the monetary economy. Whilst

occasionally campesinos may travel to more distant markets on specific commissions, e.g., to Achacachi or Huarina for the purchase of such commodities as earthenware vessels, rubber sandals, etc., and the sale of aguayos, or to Batallas (famed for its great number of cattle dealers) to sell eucalyptus sticks or wild ducks (p.141), it is the markets of Huatajata and Jank'o Amaya that attract regular custom, as might be expected by reason of their accessibility. Both are frequented by an unusually high percentage of rurally-based traders; Buechler, visiting the markets in 1969, calculated the figures to be 89 per cent (of a total 227 vendors) for Huatajata and 76 per cent (of 339 vendors) for Jank'o Amaya. This she attributed partly to 'the general population density and long history of trading' in the lakeside area but equally to the ready availability of valuable altiplano staples (potatoes, chuño, papalisa, oca, barley, quinua, cañahui, dried habas) and contraband from Peru.

Early one Thursday morning in September 1971 - the official opening time is 8 a.m. but trading commences before 6 a.m. - the present researcher counted 15 trucks (the largest number from La Paz) around the Jank'o Amayan plaza; Llamacachi's two vehicles made several journeys to and fro charging a peso (3.6p) for the return trip. A few local campesinas were actively employed cooking meals, i.e., preparing soup, frying fish (trout-salmon and karachi) and stewing mutton. Whilst lakeside products, meat and Peruvian factory-made clothing predominated, substantial quantities of oranges and bananas were being sold by Paceñas, by Jank'o Amayan negociantes (middlemen who had sold or bartered dried meat for fruit in Yungeño markets) and by Yungeñas themselves, setting out from their home towns in the small hours; lakeside campesinas maintained that whereas only 6 bananas could be bought for $ b. 1.00 in Paceño markets, they could obtain 10 for the same price at either Jank'o Amaya or Huatajata. A surprising number (Buechler had earlier estimated 10 per cent of the total) were engaged in the sale of bread, coffee and noodles. Though most transactions involved cash transfers, some Visalayans and Llamacacheños were observed bartering sacks of potatoes, chuño, tunta and oca for coca, articles of clothing, etc. By 1971 the researcher's translator and another skilled entrepreneur from Llamacachi were operating a lucrative business in dairy produce alongside their normal onion-vending activities. Arriving at the feria before 5 a.m.

Market day in Jank'o Amaya: Sofía and niece buying eggs for sale to regular customers in La Paz. The permanent store at the side of the central plaza is one of several vending clothes, dry foods, hardware etc. The bicycles are owned by campesinos from Jank'o Amaya and neighbouring communities.

A section of Huatajata's Wednesday morning feria: campesinas negotiating sales of Peruvian aniline dyes. Nearer the road local products, including lake fish, are being traded. On this occasion lorries had transported comerciantes from as far afield as the Yungas, La Paz and Tiquina. The more prosperous Huatajatans (the majority of them, Baptists) have in recent years built commodious adobes adjacent to the main thoroughfare.

in order to waylay the earliest traders, both comunarias would customarily spend several hectic hours competing with Jank'o Amayan rivals for home-made cheeses and eggs (brought in numbers ranging from 2 to 20) for resale in La Paz. Over a typical weekend Sofía calculated on making a profit exceeding $ b. 100.00 (about £3.50) from sales of cheese and eggs (the 300 or 400 eggs being conveyed to La Paz in large baskets packed with straw) to regular Paceño clients; in the city, small round cheeses could be sold at almost double their original price whilst 100 eggs valued at $ b. 40.00 (£1.43) in the lakeside region were expected to realise $ b. 55.00 or $ b. 60.00 (£1.96 or £2.15). At Jank'o Amaya many campesinos combined marketing with visits to the store manned by representatives of the NCDP; here they could seek advice on farming problems and purchase a wide range of fertilisers/insecticides and low-priced booklets on a variety of agrarian topics. As previously mentioned the Baptist nurse had for some years been arranging her 'surgeries' to coincide with the community's marketing hours.

At the Huatajatan feria, within reasonable walking or biking distance of Chua/Llamacachi, local produce again took precedence. As at Jank'o Amaya an impressive quantity of manufactured goods, especially contraband clothing, tools and trinkets, was on display; one stall was devoted to paperbacks in both Spanish and Aymara, the latter printed by the Baptist Missionary Society. By 1971 the market was widely known for its specialisation in lake fish, including the large, white-fleshed pejerrey (p. 152) bought by Huatajatan middlemen from itinerant Oruran vendors, and in aniline dyes (see photograph p. 171a) smuggled from Peru, often beneath bundles of vegetables and fish.

Certain of the larger annual fiestas taking place in this section of the lakeside attract other specialist traders. For example Compi's festivals of San Pedro and Natividad are normally attended by potters from three communities near Achacachi and by curanderos from farther afield; on such occasions cooking pots and herbal medicines are exchanged for lakeside field produce. Both potters and herbalists specify as their motive for travelling to Compi the community's reputation as a producer of prime quality staples.

Extra-marketing social links with lakeside communities

Inevitably relationships with communities in the surrounding areas have been greatly extended in the post-revolutionary period. Attendance at the secondary schools of Huatajata and Compi, membership of the Baptist sect together with participation in large, Easter-week gatherings,[13] allegiance to national political parties, affiliation to regional syndicates and inter-community football matches have all played their part. Travel by truck, whether to the city or to markets, has also served to enlargen the individual campesino's circle of acquaintances. Whilst the better-educated young campesinos despise certain aspects of the traditional fiesta system, the majority of non-Baptists currently attend at least one function per month, sometimes journeying as far as Tiquina or Huarina in order to do so. The RISM/Peace Corps team commented (1969, p.303) on the fact that 'young Compeños have begun to adopt the urban practice of gathering at a local tienda or cantina to drink.... they also travel frequently to the nearby towns in search of excitement'; this modification in traditional compadrazgo (friendship) relations was clearly apparent in the Compi/Huatajata neighbourhood at the conclusion of the 1971 final examinations, only in this particular instance the students' destination was La Paz rather than the 'nearby towns'.

Strengthened links with local communities are perhaps best reflected in the steadily-rising popularity of inter-community marriage. In 1971, 6 Visalayans were living with partners in nearby communities (3 in Chua Cayacota, 1 in Llamacachi and 2 in Huatajata) and 9 people from the vicinity (1 woman from Chua Cocani, 3 from Llamacachi, 1 from Compi, 2 from Huatajata, 1 man from Chua Cayacota and 1 from Jank'o Amaya) had through marriage become permanent residents of the ex-hacienda. At the same time 8 Llamacacheños had settled locally (1 in Chua Kilani, 2 in Compi, 1 in Jank'o Amaya and 4 in Huatajata; one Llamacacheña had married a Capilayan residing in La Paz, another a Nazacaran, and a third an Oruran); Llamacachi's population included 8 members of other lakeside communities (1 woman from Tauca, 1 from Compi, 1 from Huatajata, 1 man from Compi, 2 from Chua Visalaya and 2 from Huatajata) and one Paceño.

Be this as it may, community pride has certainly not diminished with the passage of time. Llamacacheños retain their traditional feelings of superiority towards Visalayans (p.74) and are anxious to prevent any manifestation of discord that might provide other communities with a welcome excuse for adverse criticism; despite present-day frictions community pride is no less a feature of contemporary Visalaya (p.117). Both comunidad and ex-hacienda jealously guard their autonomy: Llamacacheños were not invited - nor were they willing - to become entangled in Visalaya's feud of August 1971 (not unnaturally they preferred to observe the course of events from a distance). Similarly comunarios had refused to assist with the construction of Compi's school until threatened with enforced labour (p.157). In passing it is interesting to note that whilst inter-community marriage has become more widespread, in Chua Visalaya and Llamacachi at least half the incomers bemoaned the fact that they had not been 'accepted', referred to their new neighbours as "mala gente" (bad people) and intimated a desire to return to the communities of their birth or migrate to La Paz.

Attendance at regional fairs

Although the annual fairs of Nazacara (Provincia Pacajes) and Casani (Manco Kapac) had existed prior to the National Revolution, no Llamacacheño nor Visalayn interviewed appeared to have visited either function in hacienda times: today both are regarded as major social events in the year's calendar. In 1971 most young and middle-aged Llamacacheñas and a few Visalayans went to Casani for one or more days of the week-long fair (sleeping out in the open or in lorries) in order to exchange or sell field produce for factory-made clothing and cheap, but high quality, Peruvian wools. In addition to availing themselves of the rare chance to obtain costly items - bicycles, bedsteads, sewing-machines, etc., - at considerable saving, many Roman Catholics from the Chua/Llamacachi area took further advantage of the occasion by making a pilgrimage to the shrine of the Virgin of the Lake at Copacabana. Though both of Llamacachi's trucks and five others from Jank'o Amaya travelled later in September to the even larger Nazacaran fair, the arduous journey (about 155 miles along

unsurfaced roads) in conjunction with the more expensive fare ($ b. 22.00 as against $ b. 5.00 or 6.00) discouraged a number of Llamacacheños and all but a handful of Visalayans from attending. As already noted on page 128, Visalayans purchase their llamas from another traditional fair, the Fiesta de Ramos, held at Rio Seco (Provincia Murillo) beside the La Paz-Huarina road; some Visalayan weavers mentioned that they normally bought wool and the sticks, pegs, etc., required for their handlooms at the same venue.

Colonization

The last of the six 'fundamental objectives' of the Bolivian land reform programme was 'to promote currents of domestic migration of the rural population, now excessively concentrated in the interandean zone, with the objective of obtaining a rational human distribution, of strengthening national unity, and of integrating the eastern area of the Bolivian territory economically with the western' ('Preamble' to the Decreto Ley de la Reforma Agraria, 1953). Not for the first time in the Republic's history was colonization 'regarded as the panacea for the ills of rural Bolivia' (Clark, 1970 p.37): many politicians, whilst appreciating the urgency of improving communications between the capital and eastern valleys, genuinely believed that the mere existence of virgin terrain awaiting exploitation would be an inducement by itself for land-hungry altiplano campesinos. Optimistically the Government declared its intentions of settling 100,000 peasant families in colonization zones in the Yungas and Oriente during the decade 1962-71; yet 'only an estimated 30,000 families [as of 1970] have actually been settled in these areas, and most are spontaneous settlers' (Clark, p.38). Reasons for the shortcomings and failures of colonization schemes are not hard to detect; some of them were advanced on page 44. Suffice it to say that this intangible promise of land does not appear to have provided the necessary impetus. Certainly the prospect of sizeable landholdings in an alien environment has been incapable of stemming the ever-accelerating drift of young Llamacacheños and Visalayans from the lakeside region to the already overcrowded barriadas of La Paz. Neither is there any reason to suppose that these two communities are 'isolated cases' as was suggested to the present researcher by an eminent politician.

Admittedly some neighbouring communities have been participants in colonization projects: Compi, with her long tradition of migration (p.85), is an obvious example: 'The pressure of the Indian population on the land has been intense, erupting in the considerable emigration that has characterized this community for as long as residents remember' (Peace Corps/RISM, 1969 p.254). It was learnt from reliable sources in Llamacachi that some ten Compeño families had moved to the Yungas in the late 1960s; the same informants alleged that a number of these migrants had succumbed to fatal illnesses, especially "the shivering disease", and others were eager to return to the lakeside or obtain employment in the city. "Many of the families who went from Achacachi have come back... they couldn't get used to the weather and the farming" (this information was not checked). Although one Llamacacheño expressed a vague inclination to settle east of La Paz - "I would like to live near Coroico (the nearest Yungeño township) because life is hard here and the work would be easier there" - seemingly not a single Llamacacheño had taken up a plot of land in the post-revolutionary period. When challenged about the validity of such statements the typical rejoinder was: "Why should we want to go? The old folk don't want to leave Llamacachi and young people today would rather go and work in La Paz". Of recent years two Visalayans had migrated to Yungeño towns: significantly in both instances the motive had been to secure anonymity; one man had deserted his wife and seven children, 're-married' in the city and was understood to be living with his Paceña wife in Chulumani (Sud Yungas); a younger campesino was said to have eloped with a Cayacotan girl and intended to remain in the Yungas until his father's wrath had abated. Apart from the communities' butchers, few Visalayans or Llamacacheñoshad even visited the Yungas; several declared that they feared to do so having heard countless tales of trucks overturning on the hazardous journey from La Paz (the tortuous road, a remarkable feat in itself, descends precipitously from a 15,200' pass north east of the city to 4,000' in the environs of Chulumani, the largest town in the Yungas).

Work commitments outside the communities

Apart from those campesinos who had moved to neighbouring communities as a result of marriage contracts, by far the majority

of Llamacacheños and Visalayans absent from their home communities in 1971 were found to be residing either temporarily or permanently in La Paz; only a very limited number had investigated work opportunities elsewhere. A Visalayan youth had in the late 1960s made the tedious trek to northern Argentina[14] but failing to find suitable full-time employment had returned to La Paz (where he had since been trained as an electrician). A fellow-Visalayan was contemplating joining a Cayacotan friend on an expedition to look for agricultural work over the Peruvian border. Otherwise only one large family (possessing less than half a hectare of land) had demonstrated any initiative along these lines. A son of 16 was a bandsman at Tiquina and a daughter had married a Huatajatan, also working at the Tiquina Naval School; of the other seven children, one son had become a resident of Llamacachi and was acting as notary of Cantón Chua, another was attending a city colegio secundario, the two remaining sons (one married to a Huatajatan) occupied adobes in the family compound, a daughter had married a Huatajatan teacher, another was living elsewhere in Visalaya with her husband's family and the youngest was staying indefinitely with relatives in Llamacachi (the result of a family dispute).

Although an impressive number of young Llamacacheños had by 1971 entered the teaching profession (p. 158), only the four at Soratan schools and those registered as students at the training colleges of Achacachi and Warizata lived away from home during term time. As a rule boys on military service were being posted either in La Paz or to the army establishment at Viacha, 12 miles south west of the city. Three of the corregidor's six children had settled in an Argentine town near the Bolivian border; one daughter had married a Bolivian tailor whose trade had prospered and at a later date two younger sisters had been invited to join her (of the others, the only son worked on his father's holding, the eldest girl had married an Oruran in La Paz and another had migrated to the city with her Llamacacheño husband). With these few exceptions all non-resident Llamacacheños were living in La Paz. The community's two truck drivers and their ayudantes (each lorry carries one or more boys acting as conductors) often lodged with city relatives but regarded Llamacachi as their base.

Daily contacts with La Paz

As was shown in Chapter IV, peasant contacts with the capital had been on an irregular and purely economic basis in pre-revolutionary times; Visalayan colonos had made infrequent visits to La Paz in fulfilment of their obligations as aljiris (p. 88) whilst comunarios from Llamacachi had in years of plentiful production travelled by burro or truck (p. 93) to sell potatoes, chuño, oca, etc., in Paceño markets. Over the last two decades the situation has been almost entirely transformed. Whereas the journey from the lakeside had originally taken two or three days to complete, it is now possible for the campesino to travel at minimal expense and be in La Paz within several hours of leaving his home community. Unquestionably the truck has played a highly significant role in broadening the horizons of lakeside communities; apart from providing a cheap means of transport most trucks function as post vans (carrying messages, letters and parcels from relatives and friends in La Paz) and perform an invaluable service delivering beer and soft drinks (from Paceño bottling factories), bread, sacks of flour, etc., to rural stores.

In addition to a substantial rise in the volume of market traffic, a number of Llamacacheños and Visalayans have of recent years grown accustomed to making regular trips to the city on political business or for social reasons. For example in 1971 daily excursions for the purpose of presenting petitions and counter-accusations before the CNRA Tribunal and Federation of Peasant Affairs claimed much of the work time of Visalayan cooperative and syndicate officials; the general secretary of Sub Central Chua syndicate stated that he was expected to visit La Paz twice weekly to discuss routine matters. From time to time members of political groups and peasant unions are called upon to take part in public demonstrations in the city's central plaza, Plaza Murillo; on such occasions the transistor serves as a vital link with the capital.

By 1971 many young and middle-aged Llamacacheños and some of the Visalayans with city-dwelling relatives were habitually attending family functions, viz., weddings, fiestas and funerals, in La Paz. It was no longer exceptional for young folk to stay with migrant relatives for short periods (i.e., not for the express purpose of

seeking seasonal or permanent employment). The growing preference amongst the younger generation for celebrating Christmas in La Paz and for being there on public holidays such as Independence Day (6th August) has already been intimated. Infrequently an ailing campesino with the necessary financial backing will visit the capital strictly on medical grounds, e.g., at the time of the present researcher's investigations one Visalayan was staying with relatives in La Paz whilst being treated for a chest complaint. In August 1971 it was Visalayan syndicate officials who insisted that six of their badly-injured members should demand medical attention at the Red Cross headquarters and make a statement at the Criminal Investigations Centre (though it is doubtful whether they would have done so had they not understood an 'outsider' to be travelling to La Paz by the same lorry).

Whilst Banco Agrícola advisors, legal representatives of the CNRA and Federation of Peasant Affairs, Ministry of Agriculture veterinary surgeons and others visit the lakeside intermittently, usually only at the request of the communities themselves, the majority of migrants return to their home communities fairly regularly and for a wide variety of reasons. Those retaining rights to a few parcelas or surcos come to supervise the planting of their land; they may provide additional help at peak periods in the farming cycle and collect the produce due to them at harvest time (such produce, if not consumed by their families, is sold in Paceño markets). A number of Llamacacheña migrants, namely those without Llamacachi-based, onion-vending sisters, continue to act as middlemen, negotiating the marketing of their parents' crops and buying merchandise from other comunarios; for these comerciantes close liaison with the home community is obviously essential. The market women are dependent on the ready availability of lakeside products; at the same time 'relatives at home rely on the urban-based kinswomen for a reliable and honest outlet for their produce or goods' (Buechler, 1972 p. 211).

By 1971 perhaps a quarter of Llamacacheño households (some comunarios were reticent about divulging details) were receiving financial aid from salary-earning sons in La Paz: "The two boys are radio announcers... they've done well for themselves and help us out with money. Sometimes they send us food when there's nothing

here". Other Llamacacheño and Visalayan migrants visit their parents periodically bringing loaves of bread, sacks of sugar, flour, rice, noodles, packets of coffee, etc., or ask friends to deliver such goods; often this is in lieu of payment for staple products sent from the lakeside by their families after harvest. It is customary for migrants attending fiestas to make offerings of food in return for hospitality: "We have four children, three of them in domestic service... they all come home for San Pedro and bring us bread and sugar but say they don't want to return to Visalaya permanently".

Fiesta time affords the perfect opportunity not only for renewing ties with one's kin but also for negotiating business deals. Whilst most Paceños are reluctant to sponsor fiestas in the community of origin of their parents (they may attend the major feasts but not unnaturally prefer to invest cash in urban jollities), a large number of first-generation migrant vendors are more than willing to assist financially; this they view logically as an aid to promoting closer economic ties between themselves and food-producing communities. The fact that certain go-ahead migrants have formed their own Aymara dance groups and organised football teams in La Paz, in an endeavour to ensure the success and survival of lakeside festivals, is a clear indication of the high degree of rural-urban interdependence. Undoubtedly the participation of migrants in lakeside festivals encourages further migration; children from the rural communities are visibly impressed by the fine city clothes and deportment of elder kinsfolk, whilst the migrants for their part are not remiss in expounding the attractions and advantages of urban living. At school holiday time it is the ambition of numerous boys and girls from the lake area to go and stay with elder brothers or sisters in La Paz (once, there, they are able to earn their keep by running errands, baby sitting, etc.); conversely some of the school-age children of migrants enjoy the experience of spending several weeks in the country, assisting grandparents with field tasks.

Weddings, funerals and the completion of house-building by young couples are occasions for large family reunions in the communities. Finally, migrants visit the lakeside for personal motives, e.g., to ask parental consent for marriage: "The three girls went to La Paz... first they sold onions but then decided to stay. They all met their

husbands in the city and brought them out here 'pedir la mano' " (the statement of a comunaria). The role of migrants returning to resume life in the lakeside communities will be discussed in the next chapter.

Marketing in La Paz

Since 1952 peasant marketing activities in La Paz have increased at a phenomenal rate. As might be expected, the 11 city markets originating in the years immediately preceding the National Revolution (p. 92) had without exception been located with the Paceño consumer uppermost in mind, i.e., 'in primary, older commercial and residential zones and in older well-established suburbs' (Buechler, 1972); during the post-revolutionary period a similar number of new markets have been inaugurated on adjacent sites whilst most pre-existing ferias have expanded considerably in terms both of size and facilities. One of the most striking modifications in traditional marketing patterns has been the ever-accelerating growth of market operations actually inside areas of migrant settlement, viz., the newly-created barriadas of La Paz and El Alto and the less salubrious quarters of the old city. In the 1950s and early 1960s more than a dozen street markets were established in these migrant zonas: in addition the central government authorised the setting up of some 20 tambos (open markets serving as distribution centres for other city markets) enabling truckers from the countryside to discharge their loads without interference.

Moreover, whereas in the pre-reform era hacendados and mestizo middlemen had virtually monopolised city marketing, not infrequently exploiting rural communities mercilessly, latterly many campesinas have proved their potential as skilled business women intent on maximising their families' incomes by assuming total responsibility for the direct sale of home produce to customers in La Paz, thereby dispensing with the services of numerous city-born middlemen. In consequence the total number of vendors in Paceño markets has multiplied and continues to increase by leaps and bounds; according to Buechler, on most Saturdays in 1969 one could count in excess of 15,000 Bolivians (she does not differentiate between rural and urban vendors) selling their wares inside the city boundaries. An appreciable

number of astute campesina entrepreneurs, amongst them several Llamacacheñas, have within a decade of embarking on their market careers as warmis (p. 150) risen to the ranks of cholas decentes (p. 150) or even personas de tener.[15] Finally, the formation of city market syndicates has enabled vendors to manipulate city officialdom; with the backing of such powerful unions, the individual campesina saleswoman has been emboldened to withstand undue pressures from unscrupulous tax collectors and market police.

While Llamacacheños sell or barter some of their surplus field produce in local ferias (or on the rarer occasion at regional markets), in a 'buen año' substantial quantities of potatoes and their derivatives are trucked to Paceño markets where higher prices are realised. Although several of the more enterprising Visalayans have recently begun to participate, albeit on a modest scale, in the onion trade (two in 1971 were selling onions on a regular basis, 8 others irregularly), few ex-colonos market their own staple products in the city. Those families living above subsistence level still tend to sell or exchange potatoes, chuño, oca, quinua, etc., by sack or arroba (25.35 lbs) in Jank'o Amaya or Huatajata; the frequency with which they are able to do so is obviously determined by family size, hectarage of cultivable land and climatic factors. One notable exception to the general rule was 30 years-old, Spanish-speaking Luisa, herself a native of Jank'o Amaya but recently married to an almost landless Visalayan: a shrewd negociante, she would regularly buy several hundred loaves of bread in La Paz for sale or barter at the Thursday-morning Jank'o Amayan fair (at fiesta times she sometimes purchased upwards of 1000 loaves). Her normal method of operation was to exchange two such loaves, originally procured for $ b. 1.00, for 4 or 5lbs. of potatoes, or smaller amounts of chuño, oca, etc. Since certain of her regular clients in La Paz were prepared to pay 80 centavos for a pound of good potatoes ($ b. 4.00 for 5lbs.) her profits were sometimes considerable. In 1971 crops produced by the cooperativa were for the most part being marketed by non-Visalayan middlemen: "Cholas come by truck to buy our potatoes, oca, beans and barley" (the secretary general). As previously remarked, machine-stitched tapestries and cushion covers are sold exclusively in the city; of recent years most Llamacacheño sewers have negotiated contracts with permanent stall holders in Calle Sagarnaga, a street near the city

centre specialising in curios for the foreign visitor. On the other hand, Visalayan-woven aguayos, lluchus, mantas, etc. - goods not manufactured specifically for tourist consumption - rarely enter city markets. Apart from beer, soft drinks and some bread (delivered direct by Paceño truckers) the bulk of merchandise in Llamacachi's three tiendas - even kerosene - is bought wholesale in La Paz by shopkeepers or members of their families and transported by Llamacacheño lorry. Most Llamacacheña onion vendors expend a sizeable proportion of their earnings on clothes and notions in the black market or city bazaars; whilst costly commodities, such as bicycles, transistor radios, sewing-machines, stoves, lamps, doors, sheets of corrugated metal and tools may be bought at regional fairs, naturally the major source of supply is La Paz.

However all such transactions are overshadowed by the flourishing trade in onions for which Llamacachi and estancias of adjacent Compi have in the past decade earned renown throughout the lakeside region and northern Altiplano. The visitor to Llamacachi cannot fail to be impressed by the magnitude of post-revolutionary agricultural change, by the initiative, risk-taking and expertise which have made the transition possible and by the sophistication of present-day marketing. Most remarkable in the author's opinion is the fact that an agricultural system with pre-Columbian roots could have been radically transformed within so short a period of time and with so little dislocation to community life. To base a cash economy solely on a vegetable crop virtually unknown to the area before the twentieth century might appear hazardous in the extreme; in the event the onion proved an ideal choice. With the careful application of irrigation, onions can be planted in any month of the year on Llamacachi's orillas (i.e., in contrast with climatically less-favoured sections of the Altiplano); hence the shrewd comunario is able to raise two crops per annum and ensure optimum prices for his produce by arranging harvest times to coincide with periods of scarcity in Paceño markets. Furthermore onion production is labour-intensive and admirably suited to prevailing conditions; cultivation provides year-round employment for Llamacacheño families (the larger producers and households whose numbers have been drastically reduced by migration can enlist the aid of impecunious Visalayans as the need arises). Proximity to La Paz, Bolivia's largest consumer market, places Llamacacheña onion

vendors at a clear advantage over Cochabambina rivals, obliged to truck their bulky commodity some 230 miles over mountain roads. Moreover, onion marketing exercises the latent ingenuity and adroitness of comunarias; most young women have readily accepted the role of onion vendor in the belief that a 'dual' existence - four days in the community followed by three in the capital - offers the best of both worlds (to the researcher's knowledge, at least 13 Llamacacheña migrants had first met their husbands whilst in La Paz primarily for the purpose of selling their families' onions). Whilst marketing itself remains a predominantly female occupation its success obviously depends to a considerable extent on the availability of cheap and regular transport, i.e., on the cooperation of the community's truckers.

In the early 1950s, before the onion had superseded the potato, the marketing of Llamacachi's entire crop was capably handled by one enterprising comunario who bought the onions after their transplantation from nursery beds and subsequently supervised their harvesting and transportation to chola middlemen in the Rodriguez market; according to the Peace Corps' socio-economic survey of Llamacachi, even as recently as 1965 no more than four Llamacacheños were actively engaged in the onion trade. Yet by 1971 at least 40 Llamacacheñas (excluding migrant vendors in La Paz) were making weekly or bi-monthly journeys to sell onions; a further 16 stated that they made between five and ten trips annually. In addition to marketing their own produce, some Llamacacheñas were acting as middlemen purchasing (or obtaining on credit) bundles of onions from neighbours or from campesinos in nearby lakeside communities. Others had become expert at transacting business in city tambos, especially Mercado Rodriguez; there they would procure onions for resale from as far afield as Cochabamba or southern Peru (although on only one occasion during the researcher's stay were lorry-loads of Peruvian onions intercepted by Paceño customs officials, it was plain that large quantities were frequently entering the city illegally).

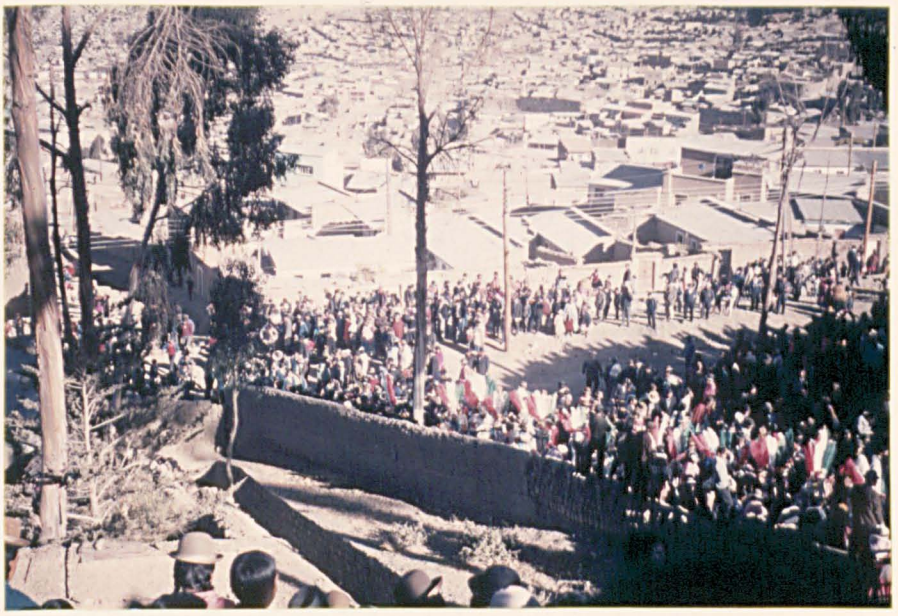
Whilst some migrant vendors have acquired permanent stalls in enclosed markets and a few comunarias sell produce on pavements outside markets such as Camacho, by far the majority congregate

in the almost centrally-located Avenida Montes feria franca, a street market inaugurated shortly after the National Revolution 'to facilitate the already blooming direct commerce between producer peasant vendors and consumers' (Buechler, 1972 p.150). By 1971 Llamacacheña saleswomen were operating according to a set routine: transporting onions to the city in one of the community's two lorries (most of them at reduced rates in return for regular custom) on Friday morning, spending the afternoon visiting relatives or purchasing onions in tambos, selling their onions (sometimes traditional staples would also be offered for sale) in Avenida Montes on Saturday and Sunday, eventually returning to the lakeside community on Monday to resume housework and field tasks. Some of the more competent vendors had managed to curtail their marketing hours by building up a regular clientele, partly through the recommendations of city-based kinsfolk but also by retaining their best produce for certain customers, by giving 'extras' or adding a few sweets to each bundle or sack of onions sold. The Avenida Montes market syndicate established in 1966 had by 1971 become one of the strongest market unions, claiming a membership of 500 female vendors; it boasted its own bilingual radio announcer, broadcasting news of syndicate meetings, fiestas and manifestaciones as well as publicising requests for help on behalf of its members. As a result of the intervention of several forthright Llamacacheñas occupying key posts in the syndicate hierarchy (the researcher's translator had on various occasions acted as chief spokesman), for a daily rent of a mere 20 centavos (less than 1p) the individual vendor was entitled to display her wares in a prominent section of the market strictly reserved for usage by Llamacacheñas and Compeñas. Whilst some lakesiders were satisfied with making a profit of between $ b. 40.00 and $ b. 60.00 (£1.43 and £2.15) on a day's sales, the more ambitious calculated on earnings exceeding $ b. 100.00 (£3.57).

Seasonal migration and temporary residence in La Paz

Whereas the factors stimulating permanent settlement in La Paz are manifold and sometimes inextricable (see next chapter) - not infrequently Llamacacheño and Visalayan migrants themselves being

La Paz with Mt. Illimani (21,325') in the distance. The commercial district lies at the centre of the basin: in the foreground are some of the numerous hillside zonas attracting migrants from the Altiplano and lakeside region.



A 'transplanted' Aymara fiesta being held in a Paceño barrio and attended by Llamacacheño migrants.

unable to specify their principal reason for having taken up permanent residence in the city - seasonal migration is motivated purely and simply by economic 'push factors', the majority of participants being loath to leave the lakeside but compelled to do so by adverse circumstances. A few young Llamacacheños, notably those who lack connections with the textile industry and derive no benefit from the comunidad's thriving onion trade, find it impossible to finance the last years of their secondary school course in addition to providing for the basic needs of their immediate families unless they devote the long school holidays to working in La Paz. Otherwise, seasonal migration appears to be restricted to the ex-hacienda, more specifically to syndicate members or unaffiliated campesinos at liberty to order their own working lives, i.e., not physically tied to the community by extra-family commitments as are cooperativistas. By 1971 it had become customary for poverty-stricken Visalayans to seek employment in the capital for one or several months of 'la miseria' (November to April), the season of rain, plant growth, few field tasks and widespread privation. Whilst the larger, land-hungry families without any form of supplementary income are always under-nourished, the total number - normally between 5 and 20 - of campesinos actually involved in seasonal migration during any particular year is determined by crop yields (this depending in turn on the previous year's weather, the occurrence of crop diseases, whether or not fertilisers have been applied, etc.) and by the labour demands of Llamacacheño onion producers, although, naturally, the younger and more ambitious Visalayans, if assured of cheap lodgings with kinsfolk in La Paz, prefer to investigate work openings there rather than earn a pittance ($ b. 3.00 to $ b. 6.00 per day or small quantities of victuals) for services rendered to comunarios.

In the summer preceding the present researcher's visit, whilst at least 10 Visalayans, including several women, had worked on a regular basis in Llamacacheño onion fields, 13 others stated that they had been temporarily employed in La Paz. Two had worked as hotel porters, two others had been assistants in tailors' shops, three had sold sweets and cigarettes in city streets and markets, two had swept roads and pavements and four had laboured on building sites (one of the four said he had been paid a mere $ b. 8.00 (28p)

daily whereas another claimed to have received a weekly wage of $ b. 120.00, i.e., £4.28). Several other Visalayans finding work hard to come by had been obliged to take a number of jobs on a more casual basis. Most of the 10 Visalayan girls who were in 1971 working as domésticas in Paceño households and pensions had originally left the lakeside community in time of acute food shortage but for various reasons had remained in the city despite improvements in economic conditions at home. As is only to be expected, seasonal migration fosters permanent settlement: "The eldest daughter went to La Paz a few years ago in 'la miseria': she decided to stay on because I only have ¼ hectare of land and there's no future here. The two younger girls followed here - all three are now in domestic service and one of the boys works for the corporation" (a Visalayan father of seven). Another Visalayan intending to return to his holding after a few months had instead remained for four years, working with a construction firm.

Two potent motives for temporary migration to La Paz are military service and education. Military service, whether for two years (the normal length of duty) or for three months (compulsory for secondary school students), has been instrumental in broadening the world-view of young Llamacacheños and Visalayans and has aroused new aspirations. Of recent years the majority of ex-service men have either stayed in the city (most of them resuming civilian life, although all three boys of one Visalayan family had enrolled as regulars in the army) or returned there after fruitless attempts to readjust to their former pattern of existence. The writer has already (p. 157) commented on one of the most spectacular modifications in community life, viz., the large-scale migration of children from Llamacachi and to a lesser extent from Visalaya for educational purposes (in some instances the necessity for relieving pressures at home probably outweighs the desire for higher standards of teaching). It was ascertained that all Llamacacheño and Visalayan children enrolled at city institutions in 1971 were living with relatives (more often than not with elder brothers or sisters) or with padrinos (godparents); more than a third were earning their keep by assisting with household chores or by working in the evenings and at weekends as delivery boys, street hawkers, etc., whilst at least seven older boys were attending evening classes to enable them to work

on a full-time basis during the day.

Permanent migration to the city

There is little doubt as to which two post-reform innovations have most profoundly affected the traditional pattern of Llamacacheño life. The development of a cash economy based on the onion called for radical changes in agriculture; it guaranteed increased mobility and participation in marketing, contributed in large measure to the rising prosperity of Llamacacheño families and fostered rural-urban interdependence. No less dramatic has been the impact of permanent settlement in La Paz.

By September 1971, 92 Llamacacheños (55 males and 37 females) i.e., a quarter of the comunidad's total population of 370, were living outside their place of birth (see age-sex pyramid p.109a). With the exception of the four Llamacacheñas in Argentina and Nazacara, several teachers (p. 177) and eight young comunarias who had moved to their husbands' communities, all absentees were residing in the city. As already noted, 20 boys and 4 girls from the community were being educated in Paceño primary and secondary schools; whilst it might seem misleading to categorise school children as permanent migrants it would be unrealistic not to regard them as such - none of those interviewed on visits to Llamacachi during the enforced closure of schools expressed any desire to resume a rural way of life, several older boys were keen to train as teachers or join the police force and, as remarked above, at least seven were already in full-time employment. Although a few go-ahead Llamacacheños had moved to La Paz in the 1950s, migration did not gather momentum until the 1960s; comunarios' allegations are substantiated by the fact that 47 out of 55 (85 per cent) non-residents in 1971 were less than 30 years of age; only two were over 40 whilst the number of migrants domiciled in the lakeside community after prolonged periods of absence was negligible. The higher proportion of females in the age bracket 30 to 39 - 15 out of 37 as opposed to 6 out of 55 - requires little elaboration; although several of these Llamacacheñas had married into neighbouring communities and three others were for various reasons living in La Paz separated from their Llamacacheño husbands, the majority had originally acquainted themselves with city life as onion

vendors and subsequently married Paceños; according to comunario informants such women had blazed the trail for male migrants. Discrepancies in the age bracket 10 to 19 - 4 out of 37 females compared with 13 of 55 males - are also partly explained by the onion trade. Few Llamacacheños consider formal education for girls beyond the age of 12 to be either necessary or desirable; it is believed that at this juncture they should have acquired the rudimentary knowledge of Spanish and arithmetic essential to successful marketing and hence be content with weekly excursions to the capital. Except for the few girls at school in La Paz, all migrant Llamacacheñas were married; those not fully occupied with housework (migrant households, providing accommodation both for relatives working permanently in the city and girls on weekend onion-vending visits, were as a rule much larger than those in Llamacachi) had either procured fixed stalls in enclosed markets or maintained an active interest in the onion business (see p. 179) and/or the sale of contraband goods. Whilst their husbands were bringing home weekly wages of less than $ b. 200.00, i.e. about £7 (Lloyds Bank gives the average monthly salary of a Paceño labourer in 1969 as merely US $ 37 or £15.40), one or two highly skilled Llamacachena contrabandistas had devised methods of earning up to $ b. 700.00 (£25) per week.

Seven of the 34 Llamacacheño migrants in full-time employment in 1971 (the number includes several boys at night school) were tailors or tailors' assistants, four were radio announcers, five were working as roadmen, on building sites, etc., for city authorities, four drove taxis, one was a Baptist pastor, another a policeman, two were hotel porters, four worked in bakeries, four had manual jobs in factories (two in a shirt factory, one in a biscuit factory and the fourth in a paint factory) and two were labourers with a building firm. Very few Llamacacheños had left the lakeside with the promise of a definite job in La Paz (one notable exception was an intelligent young man who had joined his brother as a radio announcer); in other instances relatives had helped migrants in their search for work or instructed them in their own trades. Some migrants, on the other hand, had preferred to exercise their own initiative and find work for themselves: for example, P.C's four sons had gone to La Paz in the late 1960s "to civilise themselves"; by 1971 one was a taxi driver at the army headquarters, another worked at the biscuit factory, a third was "in public works"

and the youngest was still at school; the only girl lived at home and was responsible for marketing her family's onions.

Despite the fact that economic pressures are more acute in the ex-hacienda, migration has as yet provided a welcome outlet for relatively few Visalayans; in 1971 only 37 members of the community (19 males and 18 females, i.e., 10 per cent of the total population) were residing elsewhere, only 29 in La Paz. Permanent migration to the city is a more recent feature of Visalayan than of Llamacacheño life; in 1971 all but two non-resident males were under 30 years of age. Of the 12 migrants working in La Paz (including two boys attending evening classes) three were employed in bakeries, three were regulars in the army, one was a taxi driver, another a hotel porter, one an electrician, one a tailor, one a secretary at the University, and the twelfth a road worker. The life style of Visalayan girls in La Paz contrasts markedly with that of Llamacacheñas; all 10 young Visalayan women (aged between 13 and 24) living in the city in 1971 were working as domésticas, some of them lodging with relatives. According to their parents none of them aimed to return home permanently (the few who were homesick had resisted the urge to do so knowing there to be no future for them in Visalaya), whilst in the city they had become conversant with higher living standards and the Spanish language. Although they visited the community at fiesta time (some performed in special dance troupes, see p. 162a), it was anticipated that most girls would eventually marry Paceños and establish their own homes in the city.

Footnotes and References - Chapter VI

1. G.M. McBride, The Aymara Indian Communities of Highland Bolivia (New York, 1921) p.3.

2. E.R. Wolf, quoted by C. Wagley in 'The Peasant', a chapter from Continuity and Change in Latin America (edited J.J. Johnson, Stanford, 1964) p.44.

3. C.W. Anderson, 'The Changing International Environment of Development and Latin America in the 1970s', Inter-American Economic Affairs Vol. 24:2 (1970) p.83.

4. In this part of Bolivia distance is not a good indicator of the length of journey; J-M. Buechler, Peasant Marketing and Social Revolution in the State of La Paz, Bolivia (McGill, 1972), has estimated that 'it takes a vendor on average an hour to travel 27 kms' (15 miles).

5. R.W. Patch, 'Bolivia: The Restrained Revolution', The Annual of the American Academy of Political and Social Sciences, 334 (1961), p.131.

6. D.B. Heath, C.J. Erasmus and H.C. Buechler, Land Reform and Social Revolution in Bolivia (New York, 1969).

7. D.B. Heath, 'The Aymara Indians and Bolivia's Revolutions', Inter-American Economic Affairs Vol. 19:4 (1966) p.39. The expressions, 'unos cuantos vivos' and 'with hat-in-hand humility' are used by Heath in the same article.

8. R.J. Clark, Land Reform in Bolivia, (USAID/Bolivia and Land Tenure Center, Wisconsin, 1970) p.76.

9. 'The regimientos campesinos... were initially created as an armed peasant contingent during the same time that the national army was being disbanded. The two centers of the largest of these regiments were Cliza in Cochabamba and Achacachi in La Paz, and in both areas they were commanded by strong peasant leaders loyal to the MNR Party. These regiments constituted a permanent armed force used by Paz Estenssoro as leverage against other sectors (miners and urban centers) and political parties. By adroit usage of this leverage, at time threatening both the cities of Cochabamba and La Paz with armed invasions, and by taking economic and political reprisals against anyone not joining the MNR Party or at least not cutting old political ties, the MNR Government assured its own continuation' (R.J. Clark, Land Reform in Bolivia, 1970) pp. 45-6.

10. D.J. Fox, Unpublished Field Report, 1972: Mina Matilde was re-nationalised in 1971.

11. R.J. Clark, 'Land Reform and Peasant Market Participation in the Northern Highlands of Bolivia', Land Economics, XLIV (May 1968) p.169.

12. Soncachi would appear to have been an ill-chosen site for a feria: the community lacked a central plaza adjacent to the main thoroughfare and is situated less than three miles from Huatajata.

13. 'In order to alleviate the pressures on their congregation (particularly to drink alcohol at fiestas) and give them a sense of group identity the Baptist mission has introduced large gatherings in which Protestants from the entire area participate in prayers, confessions, discussion groups, singing and so on'. H.C. and J-M. Buechler, The Bolivian Aymara, 1971, p.88.

14. According to the CNRA, Evaluación de la Reforma Agraria Cap. VII, Efectos Sociales y Culturales de la Reforma Agraria (La Paz, 1970), 200,000 Bolivians had settled in northern Argentina by 1970; 10,000, probably more than half of them campesinos, were migrating annually to Argentina whilst each May about 40,000 agricultural workers crossed the border in search of temporary employment, returning if successful to their home towns or communities six months later.

15. Buechler (1972) defines personas de tener as 'persons who own land, houses and trucks, enjoy wealth, such as tambo owners'.

CHAPTER VII DETERMINANTS OF CHANGE AND THE LASTING IMPACT OF THE HACIENDA SYSTEM

Rarely does the researcher investigating the dynamics of rural change experience difficulties in identifying the major factors responsible for modifications in the traditional structure of community life; the present case is by no means exceptional. A cursory visit to the Chua Visalaya/Llamacachi region yields abundant evidence of the impact of agrarian reform, pressure of population on limited land resources, rural education, improved communications, returned migrants and organisations for aid - factors associated with rural change throughout the Third World. Paradoxically, attempts to evaluate the contribution to the change process made by each one of these elements may be fraught with problems.

In the first place, seldom is an adjustment or innovation the product of one stimulus acting in isolation: for example, reductions in the size of Llamacacheño households can not be explained adequately in terms of migration alone: the tendency for young couples to assert their independence at an earlier stage in married life, the replacement of subsistence farming by onion cultivation, the extension of rural education facilities and the availability of medical advice on methods of birth control are all vital considerations. Reasons for pursuing a particular course of action may indeed be multifarious and inextricable: unquestionably this is true of migration from the lakeside to La Paz. Matos Mar (1961)[1], examining reasons for rural-urban migration in Lima's barriadas, claimed that 61.05 per cent of them were basically economic, 22.85 per cent, social. Statistical data of this genre is highly suspect. As previously observed, numerous participants are themselves vague about original motives: where, at all events, is a line to be drawn between social and economic impulses? The majority of young Llamacacheñas specified fluency in Spanish and the necessary wherewithal to acquire expensive clothing as their principal objectives: probing revealed that some of the girls in question were impelled by a desire to attain prestige in their community or in their market syndicate, others were eager to attract the attentions of eligible Paceño bachelors because they wanted to settle permanently in the city, whilst the remainder regarded bilingualism and fine garments as aids to successful marketing. Likewise lakeside boys advanced a wide variety of reasons for not wanting to be "hombres del campo" (countrymen or farm labourers): it would be exceedingly

presumptuous to maintain that economic pressure at family level provides the sole impetus for migration.

In the introductory chapter the author stressed the almost insuperable problem of 'bridging the cultural gap' between rural communities and 'outsiders', be they government officials, overseas agencies for development or foreign research workers. All too often, projects - colonization and self-help programmes reliant on the campesino's 'supposed predilection for communal cooperation' (Heath, 1970)[2] immediately spring to mind - are destined to partial or total failure because the instigators expect the intended beneficiaries to conform to stereotyped patterns of behaviour and deem it unnecessary to consult their feelings at the outset. Likewise the researcher may succumb to the temptation of adopting a purely subjective approach to the phenomenon of socio-economic change and proceed to draw hasty conclusions totally at variance with reality: for example, whilst it is reasonable to suppose that the mass of migrants originate from sections of the communities in which economic needs are most pronounced and that those migrants who are most successful in securing suitable, well-paid employment are more likely to remain permanently in La Paz, it is foolhardy and inexcusable not to put such hypotheses to the test.

The issue is further complicated by a lack of uniformity inside individual communities: conflicting values, in some measure attributable to differences in educational attainment, age and religious affiliation, permeate community life in Chua Visalaya and Llamacachi (a theme to be elaborated in subsequent chapters). Divergent outlooks foster discrepancies in the level of acceptance of innovation and change i.e., both between and within families. Simultaneously, the existence of anomalies in human attitudes and responses must be appreciated - actions may defy logic: for no deducible reason one young man may be intent on migration whilst his brother with the same educational experience is determined to remain on the family holding. Finally, it is impossible to account for the wide gap in Chua Visalaya's and Llamacachi's rates of development without recourse to intangible character traits, especially initiative and perseverance.

The impact of the National Revolution on rural Bolivia

'The campesinos of Bolivia are proud beneficiaries of the only social revolution in 20th-century South America' (Heath, 1970, p.3); the role of the National Revolution as a catalyst in the change process can not be overstated. Whilst the unprecedented programme of social and economic reforms instigated by the Movimiento Nacionalista Revolucionario did not guarantee a sudden, immediate response on the part of the Bolivian peasantry (p.9) - 'providing technology will not persuade the farmer to use it' (Wagley, 1964)[3] - indisputably it sparked off a gradual restructuring of rural life and rural-urban relationships. Twenty years after the event 'peasant supporters of the MNR proclaim fervently their support of the party, their devotion to V. Paz (who, they feel gave them the land) and their undying gratitude for the social revolution that gave them the vote, land reform, greater access to education...' (Heath, 1966)[4]; 'now the land belongs to us all and we will always be indebted to Dr. Paz who was President and gave us our freedom... we're no longer treated like burros' (a Visalayan ex-colono's remarks to the present researcher). Certainly, had the National Revolution not occurred, rural change and economic development would have been impossible. Any post-1952 programmes genuinely aimed at improving the lot of the indios would have met with total failure: 'The landholding structure and predominant tenure relations would have precluded anyone receiving benefit ... except the owners of land' (Clark, 1970)[5].

Bolivia's land reform programme is frequently criticised by foreign students for its defects e.g., inadequate provision of credit facilities to campesino smallholders or failure to combat minifundismo: in its defence it must be remembered that Paz Estenssoro himself never intended the Decreto Ley de la Reforma Agraria to furnish the complete answer - he perceived it rather as 'one step in a very dynamic process' (Clark, 1970, p.90). Despite its shortcomings, the agrarian reform law has had far reaching implications, apart from its more obvious and spectacular achievements such as the eradication of the crippling hacienda system and redistribution of land amongst peasant communities. ECLA reported in 1956 that 'In Bolivia other factors will tend to give great dynamism to demand; above all, the profound transformations in the social field, and in the distribution of income, thanks to a considerable degree to the agrarian reform, which in practice is already resulting in a gradual

incorporation of the rural population into the monetary economy and new forms of consumption'[6]. As Burke observed at a later date[7] 'The Bolivian land reform was not merely a redistribution of land, labor and time, or even income; it was simultaneously a redistribution of opportunity, freedom and power'. The Investigations Section of the SNRA (1970), attributing social and cultural change in rural communities almost exclusively to agrarian reform, qualified its claim thus: 'there is ample proof for the conclusion that agrarian reform has benefited most rapidly and profoundly those campesinos who had previously enjoyed a more favourable living standard than was the norm'[8].

However, land reform was but one component of a comprehensive programme of reforms and as such should not be viewed in isolation. Indeed, in Patch's opinion (1961)[9], 'the major accomplishment' of the Revolution has been 'the integration of the majority of the population speaking indigenous languages into the social and political life of the nation'. (Be this as it may it must be noted in passing that some of the pre-existing rigid class divisions have by no means disappeared in the post-reform period; it was distressing to be informed in 1971 by one 'blanco' in a position of authority that "Bolivia will make no economic progress until all the Indians have emigrated"). The replacement of the derogatory term indio by the more acceptable one of campesino, the granting of universal suffrage, the active promotion of sindicalismo and the establishment of a Ministry of Indian and Peasant Affairs to assist with community development schemes and defend the interests of the peasantry have combined to make 'the Indian peasant... the locus of considerable political power' (Wagley, 1964, p.35). As outlined on page 8 and substantiated in Chapter V, the impact of formal education on rural Bolivia has been profound. Additional by-products of the National Revolution were the reintroduction of conscription and improvements in internal communications, facilitating greater mobility and increased market participation.

Beyond all doubt, the prime determinant of change in rural Bolivia has been the National Revolution, 'the most profound movement of social change in America since the beginning of the Mexican Revolution of 1910' (Alexander, 1958, p.271).

Factors stimulating change in the lakeside communities

The National Revolution

Even the most poverty-stricken Visalayan ex-colonos, recalling the rigours of life in hacienda times, refer to their present mode of existence as "la vida linda" (the genteel life). Whilst as a comunidad originaria Llamacachi was not directly affected by the Decreto Ley de la Reforma Agraria, in common with the ex-hacienda it benefited considerably from the sweeping reform programme carried through by the revolutionary government: significantly, a number of comunarios continue to lend ardent support to the MNR; indeed, one lost his life fighting for the party cause in 1964. As related in the last chapter, close ties with recalcitrant Achacachi have been largely responsible for the lakeside's high level of politicization; a further factor has been that of proximity to La Paz, making it feasible for campesinos to take part in city manifestaciones at several hours' notice.

The part played by rural education in promoting social and economic change in the Chua Visalaya/Llamacachi region can not be dismissed lightly: in this connection credit must be apportioned to the Canadian Baptist Mission. Whereas the Education Reform Law of 1955 placed formal education firmly within the grasp of the mass of ex-colono families for the first time (Compeño and Chuan hacendados had actively discouraged the establishment of elementary schools on their premises), as one Llamacacheño remarked: "We owe our schooling to the Señorita of Huatajata.... in the olden days we were like animals". It would be wrong to insinuate that education in the lakeside is 'universal, free and compulsory' (the main objectives of the reform programme); as was shown in Chapter V, truancy, encouraged by the laxity of school alcaldes, poses an insurmountable problem for local teachers, only rivalled by the inadequacy of equipment. Indisputably the standard of instruction in rural schools leaves much to be desired, a fact recognised by numerous comunarios in Llamacachi and by the teachers themselves, who send their own children to city schools. Notwithstanding, formal education has greatly assisted in the acculturation process and radically modified the quality of life in the lakeside region; through taking advantage of its facilities, Llamacacheños have gained access to professions, especially teaching and the police force, formerly the prerogative of mestizos; a basic knowledge of Spanish and arithmetic has enabled Llamacacheñas to develop their latent skills as market vendors;

an increasing number of campesinos are able to digest political propaganda and agricultural advice from NCDP leaflets, and to benefit from radio programmes in Spanish. Furthermore, learning has aroused novel aspirations and accelerated migration to La Paz i.e., few children attending Paceño institutions intend to resume their former way of life on terminating their studies. Writing in 1952 Osborne affirmed that 'the children who have been subjected to education return if possible to the ayllu and forget what they have learnt, immersing themselves in the culture of their fathers'[10]; this is rarely the experience of lakeside communities today.

Likewise, compulsory military service has fostered permanent settlement in the city and given young campesinos a new perspective on life; reliable informants affirm that conscription has also been instrumental in raising the age of marriage. Certainly a number of Llamacacheñas were adamant about remaining single until their suitors had proved themselves to be "real men"; equally, the more responsible young comunarios believed that they had no right to seek a wife before completing their term of duty in the armed forces (significantly, a soldier's return to either community is marked by a fiesta).

Agrarian reform

The land tenure changes which have taken place in Chua Visalaya in accordance with Resolución Suprema No. 84494 were described at length in Chapter V. The broader implications of the agrarian reform programme may be summarised as follows: security of tenure i.e., ownership rights to traditionally-cultivated sayaña plots; freedom from fear of eviction, stimulating a boom in house building - 'Few families wanted to invest much time or money on home construction because they were not sure how long they would remain on that site' (Clark, 1970, p.16); the need for ex-colonos to make their own decisions about crops, fallow periods, livestock, marketing, etc.; the acquisition of time and the liberty to organise work and pleasure activities - to expend energies in any chosen direction; open encouragement from the MNR to belong to an agrarian syndicate and elect its officials; and freedom to leave the community in order to seek employment elsewhere. On the negative side, dotación exacerbated the problems of minifundismo and sowed the seeds of the bitter dissension currently confounding community life and frustrating socio-economic development in Chua Visalaya. Whilst the agrarian reform decree signified no modification in Llamacachi's ancient pattern of land

tenure, the community profited in other ways. A number of comunarios acquired access, through renting, to additional plots of cultivable land in neighbouring Compi; the age-long dread of land expropriation by unscrupulous landlords faded away; instead, the more prosperous Llamacacheños began to employ ex-colonos on a casual basis at peak agricultural periods. By-products of agrarian reform from which ex-colonos and comunarios alike have derived benefit are: the National Community Development Programme and its extension agents (the TDCs), the services of the Belén agricultural station, and above all, the vast expansion of marketing facilities both in the countryside and in La Paz (according to Preston, the most positive influence on new farming in the Batallas area was the local periodic market)[11].

The spatial factor

Turning aside from the impact of the National Revolution, the single factor exerting the strongest influence on the extent and direction of change and development within Chua Visalaya and Llamacachi has been the spatial one. Although there is no cause to question the SNRA's conclusions (1970) that agrarian reform had raised the standard of living in every community investigated, it is clearly apparent that, whether comunidades originarias or ex-haciendas, those communities lying off the beaten track, far distant from urban centres and exposed to the harshness of the climate, have been severely handicapped in their efforts to adjust to the post-revolutionary situation; for many of them migration has offered the only feasible means of advancement. By contrast, Llamacachi (to a much lesser extent, Chua Visalaya) has not been remiss in exploiting its advantageous position with respect to climate and accessibility. Whilst ingenuity and enterprise have contributed towards the success of the onion trade, essential factors have been the practicability of continuous crop growth adjacent to Lake Titicaca and Llamacachi's proximity to La Paz, Bolivia's largest consumer market. Bearing in mind the bulky and perishable nature of the commodity, it is obvious that the development of a cheap and rapid transport system was a vital element in the growth of the onion trade; moreover, it is their increased participation in city marketing that has encouraged the mass of comunarios to build new adobes as close as possible to the main thoroughfare. One could argue that accessibility to La Paz has promoted an amelioration in

community living standards i.e., that without the proceeds of onion sales Llamacacheños would have been precluded from purchasing costly consumer items.

The widening of the Copacabana-Huarina road (a route originally avoided by travellers, merchants, etc., see page 39); the increased volume of traffic in contraband goods from the Peruvian border- there is reason to suppose that Llamacachi's two lorries were bought with earnings from contraband activities (p.149); the growing popularity of Copacabana as a lakeside resort (both for Paceños and foreign visitors) and as a pilgrimage centre (pilgrims supplement Llamacachi's income by using the community as a resting place and patronising its general stores); Compi's annual Folklore festival; Huatajata's thriving Yacht Club and the opening of the Matilde zinc mine - all have helped to place Llamacachi and Chua Visalaya firmly 'on the map'. It is clear without further elaboration that the ever-expanding network of social, political and economic ties between city and lakeside (as described in the previous chapter) bears an intimate relationship to the ease of communication between the two.

Outside agencies for aid

The Canadian Baptist Mission's prominent role in stimulating socio-economic change within the lakeside region under review has already been accorded recognition. Unlike the majority of communities on the Bolivian altiplano those inside the Tiquina/Huarina/Achacachi triangle have lain open to the cogent influence of the Protestant Church for nearly half a century; as noted on page 85, land parcelation in Huatajata anticipated the National Revolution by ten years. Since the 1920s the medical and educational facilities of the Huatajatan mission have been extended to comunidades and haciendas indiscriminately, although some colonos in the latter were discouraged by estate owners from taking advantage of such benefits. As previously observed, many lakesiders are appreciative of the formal education provided by Baptist missionaries at a time when rural schools were few and far between; similarly, despite many setbacks - even in 1971 a Huatajatan couple had killed a girl twin in accordance with traditional beliefs; the older generation of campesinos still place strong faith in the miraculous healing powers of local curanderos and brujos - the Baptist Church has made considerable headway on the

Folklore festival at Compi, June 1971: Mimula, an Aymara dance, accompanied by pan-pipes. Attended by several thousand Paceños, migrants from the lakeside and foreign visitors, this impressive festival (first held in 1965) incorporates a race for balsa boats, the crowning of the Reina de la Papa, a bicycle race for Compeñas and Llamacacheñas, agricultural demonstrations organised by the Belén experimental station in conjunction with the NCDP and an exhibition of lakeside handicrafts.

The annual Casani fair (September 1971). In the foreground lakeside Bolivians are exchanging altiplano staples for high quality Peruvian wool; Peruvian factory-made clothes are arrayed behind.

medical front. Certainly, by 1971 there was no shortage of campesinos seeking medical advice and attention during surgery hours at Huatajata and Jank'o Amaya; in 1942 the timely action of the mission had prevented a typhus epidemic reaching uncontrollable proportions and in 1970 mass injections had thwarted a serious outbreak of measles (p.155). As mentioned on page 164, for several years the Huatajatan-based nurse and a peripatetic Methodist doctor have disseminated advice on birth control amongst the peasant population (as a consequence of which they have been overtly criticised in the national press).

Since in the pre-revolutionary era, with the obvious exception of Huatajata, the activities of the mission had met with fewer obstructions in Llamacachi than in lakeside haciendas, it was here that missionaries achieved their greatest success in spiritual terms; in the mid 1960s more than 30 Llamacacheño elders declared their adherence to the Baptist sect. Undoubtedly the mission has contributed towards the community's economic prosperity; it persuaded members not to spend hard-earned cash on festal drinking bouts but rather to invest it in farming and durable goods, and by promoting rural crafts made it possible for young Llamacacheños to complete their secondary education, thereby enabling them to gain entry to professions such as teaching. In this connection it could be said that the mission has delayed but not stemmed the tide of migration. On the negative side, affiliation to the Baptist sect has tended to foment friction and cleavage within the community: several forthright Baptist elders have ceased to attend community meetings because of overbearing pressures on them to drink alcohol and a number of ex-Baptists stated that they had renounced their beliefs because they could no longer endure the ridicule and malicious actions of fellow-comunarios or resist the temptation to imbibe at fiestas.

Whilst it is logical to assume that the last patrón of Hacienda Chua, by his rare example of intensive, progressive farming, had laid the foundations for radical modifications in peasant cultivation, this does not appear to have been the case: after the dissolution of the estate, pedigree animals were squandered, valuable equipment left to ruin and subsistence farming allowed to proceed along traditional lines. Strangely enough, Llamacachi would seem to have derived the

greater benefit; several comunarios declare that they first started using artificial fertilisers and new seeds because they were deeply impressed by the yields obtained from contiguous hacienda fields, and others allege that they owe their house- and boat-building skills to the training they received as employees of the estate.

It is impossible to evaluate precisely the part played by the agricultural experimental station of Belén in inculcating change within lakeside communities. As has been seen, the Chua patrón had worked in conjunction with the research centre from its inauguration in 1948; throughout the 1950s he had participated in crop and animal husbandry experiments supervised by an international team of advisers. During the past decade, links between lakeside communities and Belén have been strengthened as a result of the inception in 1964 of the National Community Development Programme. The TDC or Village Level Worker (Peace Corps terminology) responsible for the Chua/Llamacachi region (himself a returned Llamacacheño migrant) received his initial training at Belén and remains in constant touch with the NCDP's regional office, sited on the Belén campus. Whilst bemoaning a reluctance on the part of campesinos to donate money for community projects e.g., the purchase of a sheep dip in Llamacachi and the construction of covered wells, he has been responsible for a number of important innovations in Chua Visalaya and Llamacachi viz., the vaccination of creole cattle, the purchase by several Llamacacheños of 30 pedigree sheep and sacks of seed potatoes from Belén, the adoption of certain artificial fertilisers (obtainable from NCDP stores) and the fumigation of stagnant water. When the present researcher left the communities in 1971 the same extension agent was attempting to enlist support for the construction of simple latrines in accordance with a NCDP directive (p.153). Since 1968 Belén has also functioned as one of six Bolivian Escuelas Prácticas de Agricultura (Farm Institutes); in 1971 several young Visalayans expressed a keen interest in enrolling for the four years course but lacked the necessary financial backing. Two or three community leaders, in the belief that such instruction could prove advantageous to Chua Visalaya as a whole, suggested that one intelligent boy be selected for sponsorship by the community - an excellent idea but, according to the TDC, unlikely to meet with general approval (nothing constructive has been done in the interim).

It is too early to judge the success of Belén's 'Project 21', a scheme instigated in 1969 under the direction of Peruvian and Italian agronomists and aimed at raising the incomes of small-holders in Omasuyos and Los Andes provinces by encouraging the sowing of better seeds, the application of artificial fertilisers, the purchase of pedigree stock and extending credit facilities. Likewise Oxfam's Proyecto Extensionistas Cooperativas, introduced in 1971 with the objective of investigating 'the relevance of cooperatives and possibilities they offer for solving some of the socio-economic problems of the rural people' in Departamento La Paz, recently established contact with Cooperativa Chua Limitada but has as yet had insufficient time to make any marked impression. (Before the writer's departure, working on information supplied by field officers to the effect that at least 22 of the cooperativas officially listed had collapsed as a result of misappropriation and general mismanagement of funds, lack of confidence amongst members, lack of financial assistance and unwillingness to plough back early profits for long-term investments, the Oxfam representative in La Paz had arranged several practical sessions on accountancy from which a number of rural communities had derived benefit; however, whilst Chua Visalaya's cooperative has had more than its share of problems, at least its financial affairs have been efficiently handled by the Banco Agrícola).

The United States' Peace Corps, modelled originally on the British Volunteer Programme, operated in Bolivia from 1962 until its eviction in 1971; by 1967 more than 300 members were actively engaged in almost as many community development projects, for the most part in the fields of agriculture, rural education, public works and rural electrification. Although several of their number are remembered with respect - even with affection - in the lakeside district, it is doubtful whether they made any lasting impact on community life; as one forthright Llamacacheño remarked, "They promised us many things but gave us nothing". The writer was left with the impression that well-intentioned Peace Corps members devised worthwhile, elaborate programmes but failed at the outset to establish the necessary rapport with campesinos: 'White (almost all), middle-class American Peace Corps volunteers have a very hard time adjusting to a static (compared to the U.S.), poor, illiterate society in the harsh seemingly barren, windswept Altiplano.... The attrition rate is around 30%; i.e., almost 1/3 of the volunteers don't finish

their two year tour' (Baumann, Peace Corps Director in Bolivia, 1970)[12]. One well-meaning, Compi-based Peace Corps worker, whose husband had introduced commercialised poultry rearing in this part of the lakeside (p.129), had invited campesinas from the surrounding area to her home for instruction on child care, better diets, more efficient cooking methods etc., but had been forced to acknowledge total failure; this the researcher's translator ascribed partly to the fact that campesinas were wary about invading a stranger's territory but would have welcomed visits to their own homes, but also to the women's realisation that the clothes, foodstuffs, utensils, etc., being recommended by the Peace Corps volunteer were beyond their financial means. Scrawlings on Compeño walls, e.g., "El gringo es un moderno", are indicative of public sentiment towards the volunteers in question.

The Peace Corps/RISM research project undertaken in ex-hacienda Compi, whilst affording useful data especially of a medical nature and providing several Llamacacheños with temporary employment as translators, appears to have made no permanent impression on community life (p. 153). Regrettably, this also seems to be true of individuals conducting their private research: as one distraught Llamacacheña remarked, "I don't know what Señora - would say if she could see me now: she told me how to avoid having any more children and I've had five since then"!

The role of migrants in community life

As previously recorded, a number of landless Compeños who had migrated to La Paz in the years preceding the National Revolution returned to the lakeside after 1953 to lay claim to parcelas of land; whilst inevitably creating friction within their own immediate families, by virtue of their ability to speak Spanish and their adroitness in dealing with city authorities, they were welcomed by the community at large and elected as syndicate officials and community spokesmen. Chua Visalaya, lacking a pre-reform history of emigration, derived no such benefits; significantly, the ex-colono who has held the post of secretary-general since the formation of Chua Visalaya's syndicate in 1953 is not bilingual. In 1971 only one man residing in the community had worked for more than two years in La Paz; it is most unlikely that the situation will change.

On the other hand, three Llamacacheño families have returned to the lakeside after protracted periods in the city. As already seen, one

migrant is able to exert a strong influence on community life as an employee of the NCDP. The translator's and corregidor's families (related by marriage) currently run two of Llamacachi's thriving tiendas. In a variety of ways the translator, educated at a Convent in La Paz, has assisted in raising the status of Llamacachi's women folk: she has dispensed medicines and given injections, acted as an intermediary in local disputes, pressed claims against fraudulent traders and lorry drivers, been a spokeswoman for the community's onion vendors in the Avenida Montes market syndicate and negotiated favourable terms for lakeside stall holders.

The impact of the corregidor and his English-speaking, Paceña wife has been even more profound. Unquestionably he is one of the most progressive and efficient farmers in the vicinity; he played a leading role in the rapid development of the onion trade and it was he who experimented with growing horticultural crops such as radishes and carrots. He and his wife, aided by the Baptist Mission, opened the community's first school; they constructed one of the first adobes with a calamina roof and large windows; they even installed a piano. Moreover, though no longer a practising Baptist, the corregidor was Llamacachi's first pastor. As recorded earlier, his eight years of formal education in La Paz, bilingualism and intimate knowledge of judiciary matters enabled him to offer legal advice to Llamacacheños and Visalayans alike and equipped him for political leadership; he was the natural choice for Jank'o Amaya's first intendente and has more recently served as Cantón Chua's first corregidor. In all probability he has been Llamacachi's most potent 'culture broker'.

Factors influencing the individual campesino's level of acceptance of agricultural innovation

'Campesinos are superstitious, are afraid of change, are weary of promises, the material and psychological risks of outstripping a neighbour or an adjoining village - all weigh heavily upon them. The typical jealousies and mutual fears of an inbred peasant society exist abundantly'. Despite an element of truth in Baumann's statement (1970, p.195) based on the experience of Peace Corps members, remarkable changes have indisputably occurred in Bolivia's lakeside region; moreover certain communities, Llamacachi among them, have exhibited no reluctance at 'outstripping' their neighbours but rather made determined efforts to do so. (Frequently communities have attempted, sometimes successfully,

to gain prestige by establishing nuclear schools and petitioning for cantonal capital status). Yet whilst it is abundantly clear that Llamacachi has advanced both socially and economically much more rapidly than adjacent Chua Visalaya, it is obvious to the most casual observer that discrepancies inside both communities are equally significant.

Preston's investigations in Batallas and Pucarani led him to conclude that more than 60 per cent of the information causing peasants to adopt innovations in farming is disseminated by friends and neighbours, i.e., originates internally. Even after close questioning in Chua Visalaya and Llamacachi the present researcher is hesitant about making any such claims; at all events they are surely meaningless since innovations originate per se outside the community, hence contact with the outside world is an all-important factor in their introduction. Lane Vanderslice, in an illuminating lecture entitled, 'How to modernize the campesino'[13] (this he identifies as Bolivia's most acute problem, reasoning that industrial growth can only be sustained by increased agricultural output), enumerated the factors determining the level of acceptance of change amongst Jank'o Amaya's 300 families as follows: education, size of holding, age of head of household, amount of contact with La Paz and the impact of individuals, notably friends, neighbours and leaders of community opinion. In large measure the present writer's findings accord with Vanderslice's.

Clearly, the majority of impecunious Visalayans and some Llamacacheños with little land and large families can not afford to take the risk of experimenting with new seeds, cash crops, artificial fertilisers, etc. As only to be expected, the younger, better-educated campesino - able to assimilate information from NCDP pamphlets and agricultural programmes transmitted in both Aymara and Spanish and to follow experiments conducted by the TDC and instructions on fertiliser bags - is more receptive to change than his father: when asked why they did not accept the advice given by the TDC, the majority of elderly Visalayans replied that new seeds, etc. were too costly or, with a traditional fatalism, that "you cannot alter the course of nature". 'One now finds sharp differences between older peasant families and the new generation.... Younger peasants really do not know what it was like to work under the old system' (Clark, 1969)[14]: indeed, some Llamacacheño boys specified the high cost of education and farming materials (seeds, pedigree stock, fertilisers, tools, etc.) as their reasons for wanting not more than two or three children. On the other hand, whilst formal education facilitates

agricultural change no less does it stimulate migration: through a knowledge of Spanish campesinos 'can move with greater security towards urban centres, to find better employment and to enter into the process of becoming cholos' (Uriarte)[15]. The influence of community leaders, especially Llamacachi's corregidor and the NCDP extension agent, has already been mentioned.

Certain other factors must be considered in the present context, namely religious affiliation in the comunidad and membership of agrarian organisations in the ex-hacienda. As seen earlier, some Llamacacheño Baptists have been able to play a prominent part in the onion trade by virtue of not having to donate valuable animals and produce to fiestas or expend hard-won surplus cash on festal drinking; Cooperativa Chua Limitada's strong links with Banco Agrícola technicians has ensured that improved seeds, tubers, artificial fertilisers, etc., are used in cooperative fields and that livestock receive regular medical attention from Paceño veterinary surgeons.

Finally, numerous campesinos allege that they have adopted new techniques, ceased planting infected seeds or bought pedigree animals on the basis of successful results, i.e., after observing the good crop yields obtained by progressively-minded neighbours or other lakesiders, and noting the high prices paid at rural markets for pedigree as distinct from creole stock. Thus in Llamacachi a large number of comunarios, impressed by the size and quality of potatoes raised by the eight families originally forming a loose-knit cooperative for the express purpose of procuring Corriedale sheep and Sani Imilla potatoes from Belén (p.139), eagerly bought seed potatoes from their neighbours. More recently many Llamacacheños have abandoned this improved variety in favour of Papa Blanca and Isla Imilla, in consequence of one comunario buying tubers from a Peruvian trader and proudly demonstrating that each plant could, with careful tending, yield in excess of 60 sizable potatoes.

The lasting impact of Hacienda Chua

One of the most perplexing problems confronting the present researcher during the preliminary phase of investigations was how to account for such pronounced differences in the rate of socio-economic development between contiguous communities, displaying marked similarities in terms

of population size and area of cultivable land. No amount of questioning provided a satisfactory answer: Llamacacheños would volunteer remarks such as, "Visalayans are incomprensibles" or imply that, as colonos, their neighbours had been forced to work much harder, whilst Visalayans, for their part, would speak derisively of "rich evangelistas". The only rational explanation lay in the communities' strongly contrasted historical backgrounds.

As recorded in Chapter IV, throughout the turbulent nineteenth century Llamacacheños had demonstrated an audacious spirit and immutable determination in thwarting the endeavours of ruthless landowners to alienate community holdings - no other freeholding within the immediate area had remained intact; not unnaturally comunarios are proud of their ancestors and consider themselves superior to neighbouring ex-colonos. Since the National Revolution perseverence, initiative and adaptability - qualities previously essential to the community's very survival - have forcibly expressed themselves in the emergence of a cash economy and the forging of an ever-expanding network of rural-urban relationships. Despite the perpetuation of quarrels over terrain (e.g., stealing parcels of land or removing stone boundary markers) and bitter feuds between the two richest families, no one could deny that Llamacachi as a community has come to terms with the modern world. Certainly the Protestant Mission has contributed towards this transformation; Llamacachi has a lengthier history of formal education than most rural communities and comunarios have been given every encouragement to make worthwhile investments in agriculture.

Conversely, Chua Visalaya has failed miserably to take advantage of fresh opportunities and has seriously lagged behind other lakeside communities: campesinos are generally unwilling - or lack the capacity - to make responsible decisions and take positive action, whilst campesinas exhibit far less skill as entrepreneurs than their Llamacacheña counterparts. Such conditions would appear to be bred of excessive paternalism during the hacienda era: at a time when Llamacacheños had been compelled to fight for survival itself, however unpleasant living conditions had been for Visalayan tenants at least successive hacendados had furnished most of their essential needs and afforded protection from the outside world. To the colonos' detriment they had not been required to exercise any initiative, had been prevented from attending school and had been

forbidden to organise politically or elect their own community spokesmen. It is not surprising that today any outsider visiting Visalaya is regarded as a substitute for the patrón and expected to solve pressing problems and satisfy basic needs: as in many communities the sentiment prevails that 'they' (the central government) should participate to a far greater extent in problem-solving and providing various forms of rural infrastructure. A number of ex-colonos openly admit to spending fewer hours in the fields; this was a natural reaction to the dissolution of the colonato system and, in any case, underemployment was an inevitable consequence of land re-distribution in a densely peopled community. Unfortunately, unlike Llamacacheños, not all Visalayans have accepted this harsh reality and few have sought other outlets.

To reiterate, disputes over land ownership pervade virtually all aspects of community life; much time and energy is expended on brawls and meetings at which the land question is endlessly debated, and all projects dependent for their fruition on corporate involvement have no chance of even a modicum of success until cohesion is restored. Simultaneously, the activities of the more prosperous section of the community, viz., the cooperativa, have been severely impeded by the obligation to pay off a substantial financial debt to the Banco Agrícola. Thus, although the colonato system was irrevocably destroyed by the Decreto Ley de la Reforma Agraria and Chua's resolución suprema dealt a death blow to Hacienda Chua, it is clearly apparent that the hacienda system made a deep, seemingly lasting, impression on community life.

Factors involved in rural-urban migration

Population pressure

'Rapid urban growth is more the result of economic "push" factors from the rural countryside than "pull" factors in the cities. The "pull" from the cities tends to be social rather than economic.... Urbanization has not been a function of industrialization in Latim America' (Hopper, 1964)[16]. There is little doubt that excessive population pressure on limited land resources and the associated lack of work opportunities - what Thiesenhusen (1966) terms 'sheer desperation'[17] - provided the original incentive for migration from Bolivia's lakeside region to the primate city. Hence the Peace Corps/RISM team investigating change in ex-hacienda Compi reported (see p.176) that 'intense' pressure of

population had precipitated 'the considerable emigration that has characterized this community for as long as residents remember'. Writing in a similar vein, de Lucca (1970)[18] alleges that acute shortage of cultivable terrain has been wholly responsible for mass migration from fourteen Copacabanan comunidades originarias to both Lima and La Paz.

Notwithstanding the attraction of so simple and logical an explanation, it would be grossly misleading to imply that early rural-urban migration was the outcome of land pressure alone. Whilst Burke maintains that 'since the Bolivian land reform, the population of the ex-haciendas in the Lake Titicaca region has doubled' (1971, p.315), this has certainly not been the case in Chua Visalaya; neither has the population level risen dramatically in post-revolutionary Llamacachi. In these two lakeside communities - one suspects, in many others also - migration was obviously not sparked off by a sudden, uncontrollable population explosion.

Hopper's intuitive résumé of the Latin American situation supplies the missing link: 'If people are deserting the country for the city, even though they are still needed on the farm [indisputably this is so of a number of Llamacacheño households - p.224] it can be concluded that they migrate because they want to and not because they are forced to.... certainly economic conditions in the countryside have not worsened appreciably since the upsurge of urbanward migration. Rural people could have remained where they were had they been content to do so.... the flow of migration suggests that the motives for movement have to do with the images of a way of life, rather than a panicky desire to escape the grinding poverty of the country' (1964, p.264). Significantly, outward migration from the Copacabana area began and quickly gathered momentum after the Chaco War (1932-38) i.e., it was stimulated by what Patch (1961, p.126) describes as 'the new experience and vision of the Indian veterans and the disillusionment.... which would most profoundly affect Bolivia's future by clearing the way for revolution and by preparing a mass of people who would take advantage of the change when it came'.

In Llamacachi and Chua Visalaya, although overpopulation was a vital factor in the incipient phase of emigration, it was the National

Revolution and all its connotations viz., the increased mobility of the peasantry, extension of rural education facilities, improvements in road communications, spread of mass media and an expansion in marketing opportunities, that unleashed widespread migration and rural-urban interdependence. Thus the Buechlers adopt a cautious approach to the migration phenomenon: 'The combination of increasing population pressure and more possibilities open to the peasant has induced young men and women to leave for La Paz'[19]. Likewise Clark (1970, p.64) attributes both temporary and permanent emigration from the northern highlands to 'population pressure and relative opportunities between the rural sector and city life'.

Migration from Llamacachi to La Paz

The majority of elderly Llamacacheño informants stated unequivocally that land hunger had been the root cause of migration "in the early days" i.e., in the 1950s. Eight of the householders interviewed in 1971 maintained that during recent years members of their families (in two instances as many as four children were involved) had been compelled to leave the community from economic necessity; all comunarios equated land shortage ("falta de terreno") with inadequate financial means ("falta de plata"). The following are typical of the reasons advanced: "We're farmers at heart but there's very little land in our family and not enough work to occupy us all ... so they had to find work away from Llamacachi"; "The two boys went to La Paz because there's nothing for them here .... we only own about half a hectare" and "My four sons went to the city because I only have a few small land parcels... three of the boys married girls in La Paz and the youngest is still at school there. They've settled down there and don't want to come back here to live".

Surprisingly, at the time of the present researcher's visit to the lakeside region, school children formed the largest category of Llamacacheño emigrés (20 boys and 4 girls). Undoubtedly a number of comunarios genuinely attached considerable importance to their sons' formal education. A few more affluent members of the community were adamant that they had sent children to La Paz purely for educational reasons i.e., because they knew the level of instruction in city institutions to surpass that characteristic of rural schools; in

addition at least four boys had gone to La Paz for the express purpose of embarking on teacher training courses (the high esteem in which the teaching profession is held by the campesino populace was stressed in the previous chapter). However, it is patently obvious that a substantial body of Llamacacheño school children have in the last decade taken up residence with kinsfolk in the city primarily from economic motives. As one of three widows with children enrolled in Paceño schools explained: "The two boys went away to study because I can't support them; their uncle is paying for their schooling". According to the general consensus of opinion the trend for Llamacacheño children of school age to enter migrant households in La Paz had rapidly accelerated in the late 1960s as families had become aware of the manifold advantages accruing from such domestic arrangements; whilst attending city schools and thereby equipping themselves for permanent employment in La Paz, migrant children currently perform household chores for their city-based relatives, mind younger children and assist with marketing activities; at the same time their absence from the lakeside community alleviates economic hardship within their immediate families. As already seen, few of the children in question are eager to resume their old way of life once they have grown accustomed to urban living; more than one of those visiting Llamacachi in 1971 scornfully remarked "no hay nada aquí". (As Patch points out (1965)[20], when a young campesino has been successful 'in crossing his caste barrier from indio to become a criollo, or a member of the lower class of Spanish speakers, he usually does not return to his community'). Assured of cheap accommodation and aided by their newly-acquired fluency in Spanish (giving them a clear advantage over freshly-arrived, work-seeking campesinos), the majority of migrant children encounter minimal problems in making the transition from full-time to part-time employment (many of them finance their education by working in the evenings or at weekends as delivery boys or street peddlars).

Onion vending plays an equally significant role in promoting permanent settlement. The second largest group of migrants in 1971 comprised 17 Llamacacheñas, most of them married to Paceños. All of those questioned were content with city life; indeed some admitted unashamedly that they had consented to marry Paceños rather than Llamacacheños because they had become acquainted with the agreeable aspects of urban living during their marketing expeditions. They specified the attractions of their new life as follows: security of their husbands' incomes,

higher living standards (expressed in terms of ready-made clothing, better diets, more material possessions and reliable water supplies), a sound education for their children and the possibility of engaging in lucrative market transactions[21] and participating in a fuller social life. (This accords with Preston's findings (1972)[22]: 'In field work in 1968 the most surprising and impressive common denominator of many interviews was the belief that life in the town was better...'). As illustrated in Chapter VI, through fiesta attendance, exercising rights to land parcels and marketing products for their parents, migrant Llamacacheñas maintain close contacts with the community of their birth. Undoubtedly the tendency for onion vendors to settle permanently in the city will become increasingly marked. As already intimated, the mass of young Llamacacheñas are eager to follow the examples of older sisters or aunts; in consequence young Llamacacheños will be obliged to look farther afield (in neighbouring communities or the city) for suitable wives.

All other reasons stipulated by Llamacacheño comunarios are directly related to one or more of these three major determinants of emigration viz., population pressure, education and changing marketing patterns. For example, two Llamacacheños had in 1970 moved to La Paz after their elder brothers, on completion of their secondary school courses, had taken the initiative in securing well-paid jobs for them: similarly, boys from two Llamacacheño families had readily accepted their uncles' offers of free accommodation in the city. Several married onion vendors had left Llamacachi and taken up residence in migrant households for a variety of domestic reasons: one said she hoped that by so doing she would be able to forget her husband's death, two had allegedly left their Llamacacheño husbands on account of their excessive cruelty and another wished to overcome her grief at losing a child. The importance of kin ties in migration analysis cannot be overstated: J-M. Buechler (1972, p.204) found that 'Kinsmen contributed to the initial desire to migrate in 37 out of 60 cases where such information was recorded. They also provided the migrant vendor with lodging in 47 out of 80 cases. In 22 out of 30 cases they initiated the vendor into selling and taught him the basic skills involved'.

Clearly the Buechlers' remarks about Compeño families (1971, p.104) apply equally to neighbouring Llamacachi: 'While the Compi households

are growing smaller, the ties between close relatives have not disappeared, they have simply been reallocated to fulfill different functions such as providing lodgings and outlets for produce for Compeños on their market trips to La Paz. Thus, while assuming a different geographical dimension, the extended family still retains paramount importance in Compi social structure'.

In view of the adverse man/land ratio in Llamacachi, an amazingly high proportion of householders (32 out of 63), including practically all the comunidad's elders, indicated that they were more than satisfied with their lot and had no intention whatsoever of deserting the lakeside. For the most part the young men still residing in the community said they were not particularly anxious to seek work elsewhere; "Yes, I'd quite like to work in La Paz but I'm happy enough here" was the typical rejoinder. A few less fortunate youths recognised that for them the only future lay in migration e.g., "After I've finished school at Compi I'm going to have three months' rest. I will go to look for a job in La Paz ... not that I really want to leave Llamacachi but there are five of us in the family, we have hardly any land and my father has no money to give me". Others with land expectations but whose brothers had 'made good' in the city were unsettled and vulnerable to the persuasive arguments of city-dwelling kinsfolk, especially at fiesta time. In a number of families the sole remaining son was keen to join his brothers in La Paz but prevented from doing so by domestic circumstances i.e., the obligation to assist aged parents with field tasks, thereby ensuring a continuous supply of onions for the Paceño market. As in Visalaya, one boy had returned to the community to look after his widowed mother and take over his father's lands; however, in two other instances middle-aged widows were contemplating leaving the community to go and live with their children in La Paz and it is more than likely that this will become the accepted procedure. The majority of adolescent Llamacacheñas engaged in onion vending were of the opinion that they enjoyed the best of both worlds - four days in the community followed by three with relatives in the city; generally speaking, the desire to settle permanently in La Paz grew with age and marketing experience. A handful of female immigrants, referring disparagingly to Llamacacheños as "mala gente" (bad people), claimed that they had never been "accepted" by their husbands' families and community, and expressed a strong wish to make a fresh start in the city.

On the whole Llamacacheño migrants have been highly successful in obtaining well-paid regular work and adjusting to city life; whilst few of those interviewed wanted to sever connections with the lakeside, none planned to return indefinitely (the three migrant families mentioned earlier in the chapter had done so largely for health reasons and in order to open tiendas, but had maintained intimate links with the city; two even owned sizable houses in La Paz). Marriage to Paceñas had for 10 Llamacacheños strengthened the pull of the city; one aged comunario acknowledged that he had carried out costly improvements in his lakeside house because he did not want his sons to feel in the least ashamed when they brought their Paceña wives to fiestas and family gatherings.

Migration from Chua Visalaya to La Paz

Taking into account factors of contiguity and similarity of size, the sharp contrast between Llamacachi's and Chua Visalaya's migratory patterns is at first glance astounding. Non-seasonal migration from the ex-hacienda is a relatively recent innovation in community life; in 1971 it involved merely 37 members of the community as against 92 Llamacacheños. Moreover, the routes to permanent settlement in the city are markedly different.

In the writer's estimation the only conceivable reason for such wide discrepancies is once again the hacienda system, more specifically the paternalism of the hacendado. Although an ever-increasing number of Visalayans are coming to realise the hard fact that the only practicable, long-term solution to community strife, minifundismo, overpopulation and abysmal living standards, lies in emigration, a genuine fear and lack of initiative prevents most of them from taking any positive action to remedy the age-long depressing situation. Whereas throughout their community's turbulent history Llamacacheños have been forced to struggle and assert their individuality, with few exceptions Visalayans are clearly reluctant to act independently; many regard membership of the cooperative or syndicate as a welcome substitute for the patrón's protection in hacienda days. Significantly, whilst in 1971 numerous migrant Llamacacheñas were busily occupied with lucrative market transactions calling for considerable expertise and shrewdness, all Visalayan girls residing in La Paz (except for several of school age) were employed in a domestic capacity i.e., in non-constructive, non-thought-provoking work. Likewise, whereas one Llamacacheño had trained

as a police man and others were intent on doing so and no Llamacacheño had opted to serve more than his requisite term in the army, the reverse was true in Chua Visalaya; three men had enlisted as regulars in the armed forces and none had sought entry to the police force, i.e. unlike Llamacacheños, Visalayans were willing to obey orders but not prepared to exercise authority. At the other end of the scale, it was interesting to note that several of the young Visalayans interviewed were over-ambitious and possessed of totally unrealistic aspirations e.g., three boys of mediocre mental ability said they would like to become doctors and would refuse to accept offers of manual labour if they went to La Paz (perhaps this is another legacy of the hacienda, i.e., a reaction against the obligation to perform menial tasks). Others remarked that the high cost of living in the city deterred them from going to look for work; because of the slower rate of migration, fewer Visalayans then Llamacacheños are fortunate in obtaining cheap lodgings with kinsfolk, although four ex-colonos stated in 1971 that their sons had gone to La Paz at the invitation of relatives. Understandably, although financial problems are magnified in the larger families with little or no land, the majority of male migrants were enterprising, single young men drawn from the more prosperous section of the community (most of these were sons of cooperative members). Such families are more likely to have city-dwelling kinsfolk from whom rooms can be rented cheaply or are themselves able to provide the necessary financial assistance; thus, the three Visalayan boys who had remained in the army were living in a house bought for them by their father, one of the biggest landholders in the ex-hacienda.

Only in the last few years have Visalayans left the lakeside community of their own free will; formerly migration, traditionally seasonal in character, had been precipitated by Thiesenhusen's 'sheer desperation' (p. 209). As elaborated in Chapter VI, menfolk from poverty-stricken households had during 'la miseria' been compelled to relieve the chronic economic pressures at home by going to La Paz in quest of short-term casual labour. Similarly, teenage girls - usually against their inclination - had been sent to Paceño hotels and private residences to work as domésticas; the provision of free board and lodging had more than compensated for the minimal wages received. As only to be expected seasonal employment, enforced by food shortage (even threat of starvation in some instance), has of recent years paved the way to permanent

settlement in La Paz; girls in particular, after learning to converse in Spanish, earning sufficient money to procure western-style clothes and living in conditions far removed from those of the home community, are nowadays unlikely to want to return to the lakeside for any lengthy period of time.

Whilst in 1971 seven Visalayans indicated that they wanted to move to La Paz because of family quarrels, "malas personas" (bad people) and the land dispute, two had left the community in order to secure anonymity (p. 176) and four (as mentioned above) had decided to avail themselves of their La Paz-based relatives' hospitality, by far the majority had left the lakeside from purely economic motives without the promise of any definite job in La Paz. As one ex-colono asserted: "My eldest boy went to La Paz because there was nothing for him here... he works in a bakery and would like to come home but what could he do?.. we've only got a quarter of a hectare of land".

Although at the time of the present researcher's visit only 8 Visalayans compared with 24 Llamacacheños were attending schools in La Paz, this obviously represents a significant modification in traditional community life and, as these young Visalayans become established in the city (all were living with relatives in 1971), the trend is likely to continue, albeit at a slower pace than in neighbouring Llamacachi. The following two statements made by Visalayans in their twenties are indicative of the role education is beginning to play in inducing migration from the ex-hacienda: "I don't want to be a farm labourer .... I'm at college in Compi and when I finish the exams I want to go and live with my brother... why should I have to struggle to survive here?" and "I want to go and study to become a lawyer... we're not really happy here because we've got no land worth speaking of. I have to go and work in La Paz in the holidays to support the family... I would like my children to be able to speak Spanish properly and have the chance to get on in life".

Footnotes and References - Chapter VII

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8. The writer's translation of a passage from Evaluación de la Reforma Agraria: Cap. VII Efectos Sociales y Culturales de la Reforma Agraria (Sección de Investigaciones, SNRA, La Paz, 1970).

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11. Paper presented at the Annual Conference of The Institute of British Geographers, Birmingham, January 1973.

12. G.F. Baumann, 'The National Community Development Programme in Bolivia and the Utilization of Peace Corps Volunteers', Community Development Journal 5: 4 (October 1970) p.195.

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14. R.J. Clark, 'Problems and Conflicts over Land Ownership in Bolivia', Reprint from Inter-American Economic Affairs 22: 4 (Spring 1969) p.17.

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16. R. Hopper, 'Research in Sociology', in Social Science Research on Latin America Ed. C. Wagley, (Columbia University Press, 1964) p.264.

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17. W.C. Thiesenhusen, 'Agrarian Reform and Economic Development in Chile: Some Cases of Colonization', Land Economics, 42: 3 (August 1966). 'Rural people who attempt to migrate to the city are probably motivated more by sheer desperation on the farm than by the attraction of higher wages in the town' p.284.

18. M.F. de Lucca, El Sistema de la Tenencia de la Tierra en las Comunidades Originarias de la Provincia Manco Capac, Departamento de La Paz (SNRA, La Paz, 1970).

19. H.C. and J-M. Buechler, The Bolivian Aymara (Syracuse University, 1971) p.44.

20. R.W. Patch, 'A Note on Bolivia and Peru', West Coast South American Series: American Universities Field Staff Reports Service, XII: 2 (June 1965).

21. J-M. Buechler in her doctoral thesis entitled Peasant Marketing and Social Revolution in the State of La Paz, Bolivia (McGill University 1972), quotes the example of a 33 years-old Llamacacheña migrant: whilst at the time of Buechler's investigations Raimonda's husband was earning $ b. 75.00 (£2.70) per week in the police force, and her 16 years-old son, $ b. 37.00 (£1.32) as a trainee radio technician, her own weekly income from sales of clothes on the black market was in the order of $ b. 720.00 (£25.71).

22. D.A. Preston, Rural-urban transformations in Bolivia: new towns in a new system, (Working Paper No.25, Department of Geography, University of Leeds, October 1972) p.4.

CHAPTER VIII CAMPESINO ATTITUDES TOWARDS COMMUNITY CHANGE

'All that is strongest, all that is morally best in Bolivia, is the Indian and we must put an end at once to the Spanish spirit which still dominates our history to extremes' (Tamayo, 1910).[1] Whilst a few enlightened writers and politicians had in the pre-revolutionary era made impassioned pleas on behalf of the rural masses, Squier's disparaging remarks (1877) about the Aymaras encountered on his travels - 'a people notoriously morose, jealous and vindictive'[2] - epitomize traditional Hispanic sentiments towards the subjected Indian populace.

The deep 'racial cleavage running through Bolivian society' (Alexander, 1958)[3] and surviving into the post-reform period is vividly portrayed in Diez de Medina's '<u>Thunupa</u>' (1956; significantly, at the time of writing the author was Minister of Education): 'The Indian is a sphinx. He inhabits a hermetic world, inaccessible to the white and mestizo. We don't understand his forms of life, nor his mental mechanism. The sociologist and the narrator don't succeed in molding the living material... We speak of the Indian as a mass factor in the nation; in truth we are ignorant of his individual psyche and his collective drama. The Indian lives. The Indian acts and produces. The Indian does not allow himself to be understood, he doesn't desire communication. Retiring, silent, immutable, he inhabits a closed world. The Indian is an enigma....'[4]. No less categorically - though less offensively - Osborne maintains: 'The key to the Indian character is his traditionalism, a form of self-preservation which causes him to reject and repudiate everything alien to his traditional way of life. He is not a good subject for education because to him education in schools is an alien influence to be fought as for centuries he has fought all alien and disrupting influences'[5].

While Bergsten's claim (1964)[6] that 'traditional fatalistic precepts have vanished' is exaggerated and Heath's assertion (1970)[7], 'It is difficult for those affected - either as beneficiaries or "victims" - not to overestimate the pervasiveness of change in such a revolutionary setting', should constantly be borne in mind, clearly recent events have invalidated both Diez de Medina's and Osborne's calculated judgments. Rarely had 'the white and mestizo' even <u>tried</u> to 'understand' the Indian

temperament. Taking into account the fact that to the mass of indios life in hacienda days had appeared utterly wretched and hopeless, the researcher is bound to concur with Frank's assessment of the situation: 'Insofar as the corporate Indian community has been isolated at all, this reflects the self-chosen retreat which is the Indians' only available means of protection from the ravages and exploitation of the capitalist system'[8].

Inevitably 'the cultural gap' between indio and blanco has narrowed somewhat since the National Revolution; one campesino has even aspired to the rank of Cabinet Minister. However, racial antagonism dies hard (see p. 196) and a lack of concern for - or inability to interpret the felt needs of - the peasant population is reflected all too obviously in the slow progress of non-spontaneous colonization programmes, the collapse of numerous agrarian cooperatives and the failure of certain community development projects. The vital necessity of looking at rural change from the standpoint of the actual participants was emphasised in the introductory chapter; undoubtedly, until determined efforts are made to consult and analyse the feelings of rural communities, serious attempts are made to dispel pre-existing apathy or active resistance, and the spirit of cooperation is awakened, it is meaningless to embark on costly enterprises in the expectation of successful outcomes.

Hence the present chapter is primarily concerned with the campesinos' self-expressed evaluation of the manifold changes overtaking family and community life in the post-reform period. Basic problems and essential household and community wants, as identified by Llamacacheños and Chua Visalayans themselves, will be reviewed. As is only to be expected, socio-economic changes of the magnitude described in Chapters V and VI have not taken place without considerable disruption to family life; indeed, it will be shown that exposure to unprecedented internal and external impulses has provoked discord and tension inside many nuclear families. Likewise, a total lack of community cohesion and strenth of purpose has acted as a stumbling block to development in the ex-hacienda and impeded progress in the comunidad originaria. Whilst misunderstandings and friction both at family and community level can be traced to numerous causal factors, for the present purposes attention will be focussed on what were discovered to be (apart from the vexed question of land ownership) the three major

determinants of internal conflict viz., education, 'the generation gap' and religious affiliation. Finally the writer will examine some of the misconceptions and resentments stemming from past contacts between lakeside communities and outside agents, i.e., central government representatives, organisations for aid and research workers.

'La vida linda'

"I want only to die.... my husband died last month with a bad cough. I have the same illness and my chest hurts when I cough. There's nothing to eat in the house but I don't want to eat. It's very cold at night but I haven't got the strength to light a fire. My sister's family looks after the donkey but the neighbours have taken all our land because we were too weak to prevent it". To this elderly Visalayan widow, the couple illustrated on page 150a and several other aged, infirm and desperately poor campesinos interviewed in 1971, life was exceedingly burdensome and the concept of change wholly irrelevant; in fact they were of the opinion that in hacienda times persons in like conditions had received kinder treatment both from younger members of their families and fellow-colonos or comunarios.

With these notable exceptions, middle-aged and elderly ex-colonos and comunarios alike i.e., those campesinos who had experienced the rigour of life in pre-revolutionary Bolivia and had witnessed the entire process of change in the lakeside region, were unanimous in their praise of "Taita Paz" (p.195) and insistent that, for them, life in 1971 was far pleasanter than it had been twenty years previously. As one 70 years-old ex-colono reasoned: "We're much happier now... life is not so hard and my grandson helps me in the fields. We suffered a great deal in the past and had to get up at 4 o'clock to go and work for the patrón.... really, the young folk don't know what it was like. The children [seven] didn't go to school.... not like they all do today. There was never enough food to eat at home and there was no time to make proper clothes for the children". Understandably, for many Chua Visalayans the destruction of the hacienda and all its connotations (Ch.IV) represented the greatest single achievement of the post-revolutionary period. As Erasmus (1967) discovered in southeast Bolivia: 'most peasants preferred to emphasize the elimination of labor obligations to their patrón as the major benefit of the reform rather than any change in consumption'[9].

As had been anticipated, informants in both lakeside communities stressed the importance of several or all of the following aspects of change: improved living standards (in terms of food, housing, clothes and material possessions), education for their children and grandchildren, freedom of movement, greater participation in market activities and close contact with La Paz; the rapid growth and prosperity of the onion trade was specified by a number of Llamacacheños as the prime indicator of community advancement. What had been underestimated by the researcher - indeed, it was uppermost in the minds of more than a few forthright comunarios - was 'the enormous psychological impact of the revolution' (Heath, 1970, p.8), i.e., the acquisition of the intangible 'dignidad de la persona' (p.14). Nearly all campesinos, irrespective of whether they had been directly subject to the estate system, were eager to point out that, whereas formerly they had been treated as "burros" or "children" and from lack of education had been reduced to behaving "like sheep", "now we're all on the same level" - "nobody can tell us what to do any longer".

Although the general reaction towards post-revolutionary modifications in traditional life styles was highly favourable, rarely did one encounter an elderly campesino who believed that all change had been for the better; on the contrary, certain aspects of contemporary life were sorely deprecated. Understandably Chua Visalayans, whilst fervently expressing their gratitude to the MNR for liberating them from the shackles of the colonato system, bemoaned the fact that land redistribution had provoked unparalleled bitterness and mistrust within and between ex-colono families, culminating in violent clashes and serious bodily injury. Frequently campesinas complained that their husbands had "grown lazy" and were accustomed to spending far too much of their work time on cooperative or syndicate business or brawling with members of the rival faction. (Yet it could be argued that, in view of the pre-existing acute land shortage and the traditional reluctance to seek employment elsewhere, no form of settlement could have proved entirely satisfactory to all inhabitants, hence some measure of disunity was inevitable; as Patch astutely remarked (1966), 'There are two factions in Pairumani - as there are in nearly all such isolated villages')[10].

In Llamacachi inter-family land disputes symbolized no change in the status quo (see Chapter V). Whilst the majority of comunarios emphasised the obvious advantages of being able to procure better seeds, artificial

fertilisers, insecticides, etc., as a means towards increasing crop yields, mass migration from the community had presented a number of farmers with considerable labour difficulties: 'With the increase in number of migrants, what was previously a problem of underemployment, too few jobs and too many people wanting work, has been replaced by a shortage of labour' (Odell and Preston, 1973)[11]. As one 64 years-old Llamacacheño explained: "My big problem is not that I'm short of land but that there's nobody left to help me in the fields, especially when my daughter's selling onions in La Paz. The three boys have all left the community and don't intend to return.... I have to employ men and women from Visalaya at a rate of $ b. 5.00 per day".

Turning aside from agriculture, the main causes of discontent amongst the older generation of campesinos were beyond all doubt the disintegration of family life and the general lessening of respect for authority. (To reiterate, Heath et al. (p.72) had identified 'endogamous marriages' and 'the political hierarchy linked with a complex system of fiesta sponsorship' as the main integrative factors in pre-revolutionary comunidades). Many campesinos alleged that, whereas life "in olden times" had been hard, at least families had been cohesive units, separations virtually unknown and parental authority seldom challenged. Migration and easy access to La Paz, they maintained, had completely dislocated the traditional pattern of family life whilst the instability of marriage had of recent years become a recognised feature of community life: Visalayan wives, especially those raising large families, no longer felt secure since their husbands could renounce all responsibility for their children by immersing themselves in city life (p.18); simultaneously several young Llamacacheñas (so community elders argued) had abandoned their husbands and children on the slightest pretext in order to take up residence with relatives in the city. Gone were the days when daughters accepted advice and agreed to their parents' marriage proposals without question: some Llamacacheños bemoaned the fact that successful onion vending had given young comunarias "airs and graces.... they no longer think the young men from the community are good enough for them". Young men, on the other hand, overtly ridiculed the time-honoured fiesta system (p.162) or attended community functions for the sole purpose of drinking heavily (in pre-reform times few unmarried sons had enjoyed access to alcohol). A number of campesinos sadly referred to "a lack of culture" e.g., "The community [Visalaya] lacks any concept of culture

today. In olden times people would always greet outsiders and treat them with respect.... nowadays the young folk, especially the girls, are very suspicious and impolite".

Campesino views on domestic and community needs

The tables overleaf are based on the replies of householders or their wives to the open-ended questions: "What does your family need most urgently?" and "What is the community's greatest need at present?" (see p.31). The answers to the former indicate the immediate requirements of lakeside families to be essentially basic and unsophisticated. Whilst Baumann (1970)[12] insists that a rural population accustomed to 'a feudal-barter economy... does not easily throw caution and old habits to the wind, for a quick cash profit', it is abundantly clear that, in Chua Visalaya and Llamacachi at least, the power of "plata" (cash is fully appreciated; on one day alone three campesinos besought the present researcher for financial aid. The value placed on formal education also manifests itself forcibly: 'Education has become a basic aspiration of campesino communities. Most persons hold the aspiration not for themselves but for their children' (Patch, 1961)[13]. (Be this as it may, it was suspected (see p.158) that a number of campesinos alleging that their children were absent from school solely for "falta de plata" had in fact withdrawn them from class for work purposes). In the majority of households where second marriages had occurred in consequence of the premature death of one or other partner (this was the case in 14 per cent of Visalayan households), domestic disagreements between children and step-parents over land and work relationships were rarely far from the surface; sometimes they dominated family life. Whilst generally speaking Llamacacheñas were prepared to reply on behalf of their families, often Visalayan women were more reticent e.g., "My own big problem is looking after the children when I'm working in the fields or cooking. Only my husband could say what we need most at home".

Responses to the second question proved more varied; it was difficult, if not impossible, to reconcile them with campesino reactions towards earlier community development projects deliberately aimed at satisfying such wants. The researcher was surprised that so many householders specified medical care as an urgent need in view of the fact that medical facilities have for many years been available at minimal cost in neighbouring Huatajata but by no means all Chua Visalayans and Llamacacheños

Household and community needs as expressed by residents (1971)

(a) Needs within the household

	Chua Visalaya	Llamacachi
Money for unspecified purposes	43	35
Money for food	7	5
Money for education (i.e. for textbooks and contributions to teachers' salaries	16	9
Money for clothes/furnishings	3	6
Money for livestock	2	5
Money for seeds, tubers	4	2
Money for work materials e.g., cloth	3	1
Money for fertilisers, insecticides, etc.	3	2
Money for coca	2	-
Additional labour (result of migration)	-	5
Solution of domestic quarrels	4	3

(b) Needs of the community

	Chua Visalaya	Llamacachi
Doctor	30	35
Health centre	14	17
Drinking water	8	9
Pump/irrigation	6	9
Electricity/lighting	26	41
Agricultural expert	11	10
Flood control (from lake)	2	-
Sheep bath	-	6
Government aid (unspecified)	9	7
Textile factory	-	2

(Figures represent first and joint priorities of householders interviewed. The first table does not include considerations of land; with the rare exceptions of elderly couples or widows unable to complete field tasks, all families specified additional plots of cultivable land as a prime requisite).

take advantage of them when visiting the markets of Huatajata and Jank'o Amaya (p.154): significantly, two organisations had met with opposition in their attempts to implement schemes for constructing a clinic in the ex-hacienda. Likewise, although technical information is currently disseminated by the extension agent of Desarrollo de la Comunidad, a large number of informants insisted that their community's priority need lay in this direction; when asked why they did not accept the advice given by the NCDP representative, the majority replied that new seeds, artificial fertilisers, etc., were too expensive or, fatalistically, that "you cannot alter the course of nature". Similarly as many as 18 Llamacacheños emphasised the need for a more reliable water supply i.e., either for domestic or irrigation purposes, although comunarios had previously refused to collaborate with Peace Corps volunteers proposing to erect a water pump (p.153); additionally, the NCDP had been more than prepared to meet half the costs towards providing a sheep dip for Llamacachi but initial enthusiasm for the project had waned once the TDC started approaching individuals about making financial contributions or participating in the building programme.

Since 38 per cent of Compeño householders interviewed in connection with the Peace Corps/RISM research project had stipulated electricity as the community's prime requisite[14], the large number of Visalayan and Llamacacheño respondents considering the installation of electricity to be essential was not remarkable. Reasons for wanting electricity in Chua Visalaya and Llamacachi differed e.g., some campesinos stressed the advantage of being able to extend the working day (at present, families without kerosene lamps are obliged to retire in the early evening) whereas others remarked that lighting in the Visalayan school would enable them to attend adult evening classes[15]. One overseas expert on rural affairs suggested that such an innovation - like a secondary school or a successful football team - provides a natural focal point for community pride; this was substantiated by obtrusive remarks such as "We all want electricity in Llamacachi because they haven't got it in Compi or Jank'o Amaya yet" (a community elder).

Conflicting values inside lakeside communities

Whilst differences in age and educational experience are largely responsible for variations in development rates and innovation acceptance (Chapter VII), equally are they major sources of disharmony and antagonism

in lakeside communities. Although education is generally highly esteemed by lakeside dwellers as a means of social and economic advancement, inevitably it causes friction inside certain campesino families: the sentiments of the Llamacacheña quoted on page 157 ("I think.... it's a waste of time and very expensive... they just go off afterwards and give nothing back to their parents") are easily understood. Learning awakens new aspirations sometimes totally opposed to traditional Aymara concepts and, as illustrated on a number of occasions, actively promotes migration; few, if any, of the lakeside children presently being educated in Paceño schools will return for any length of time to the community of their birth. (The outspoken opinions of such children - "there's nothing to do here" and "I don't want to be a farm labourer" - bear a striking resemblance to those still voiced today in the writer's own farming community). Whilst some elderly campesinos have come to terms with the seemingly irreversible process of rural depopulation and are genuinely relieved that their children and grandchildren have been able to escape the toils of the countryside e.g., "My three lads are all going to stay in La Paz... they like their new way of life and it's better for them to stay there" (a 60 years-old comunario), others are clearly torn between wanting their children to make a better life for themselves in the city and needing them to help on the land: "My father wants me to stay in Visalaya and work in the fields but why should I? I'd rather go and live with my brother in La Paz. He's been trained as an electrician and has done very well for himself".

Wagley's generalization (1964)[16], 'A growing number of bilingual Indians... reject what they see and learn away from home and attempt to reintegrate themselves into the local community', appears to have little relevance to the communities under consideration (Chapter VII). Indeed, whilst Llamacacheños and Chua Visalayans alike said they were anxious for their children to become proficient in Spanish as an aid to successful marketing and bargaining with officialdom, at the same time they deplored the fact that legally the Aymara language has no place in the rural education system (a viewpoint supported by at least one eminent politician): one or two even affirmed that their children and grandchildren had learnt to despise Aymara and, as city dwellers, had become so accustomed to conversing in Spanish that on return visits to the lakeside they found it difficult to communicate in the native tongue.

From what has been said above, it is patently obvious that the younger generation's lack of respect for authority and tradition gives rise to considerable stress and strain in family and community life: Barbero (1960)[17] depicts the struggle as 'a fight between men who hold a realistic viewpoint of constructing a new society to replace the ancient one and those who, on the contrary, want to retain their cherished positions'. In communities where 'traditional patterns of prestige, based as they are on community service and fiesta sponsorship, have by no means disappeared' (Carter, 1964)[18], young men, only too eager to leave for the city, refusing to participate in community meetings, openly challenging the miraculous powers of the brujo and pouring scorn on the traditional fiesta system - "It's all a waste of time and money really.... anyway, who's left to stop the sheep ruining the crops?" (the observations of a young Llamacacheño Baptist) - or on the age-old practice of chewing coca, naturally provoke considerable tension and resentment amongst the older generation of campesinos. It would be erroneous to suggest that all young Chua Visalayans and Llamacacheños fall into this category; few express their opinions in public. A number would agree with Nestor (a Llamacacheño who had completed his sixth grade at the Compi secondary school and his compulsory term of military service) that "There's no place like Llamacachi in the whole of Omasuyos... if there was only some work to do, I would like to stay here for ever".

The antagonism between Baptists and non-Baptists has already been demonstrated: refusal to take part in traditional drinking bouts at patronal festivals or to attend community meetings has of recent years produced ugly scenes of physical violence. As the Buechlers remarked (1971): 'Absenteeism from meetings is especially serious in Llamacachi where a high proportion of the population are Baptists. There, a few very able persons fail to make any considerable impact on the community because they do not attend assemblies'[20].

Replies to the question, "What do you think is the ideal size of family? Why?" (see p.30) provided further evidence in dramatic terms of conflicting attitudes towards change: such viewpoints appear wholly irreconcilable. "I would like to have twenty sons because I only have four children at present and the people abuse me... in any case, some

day when I am weak and helpless my children will be able to prevent the neighbours from stealing my land" (a 40 years-old ex-colono without any experience of formal education); likewise, "I want at least four children because if you don't have a large family they say you're not a real man.... you need plenty of sons to bear your name and raise the status of the family" and "Ten... it's a great sin not to have many children" (a Visalayan mother with only one year of schooling); on the other hand, "I hope that we will not have more than two children because it is costly to rear and educate them these days" (a Visalayan in his final year at the Compi colegio), "From two to four children - no more because we couldn't support them properly... I've been reading a book on family planning" (a young, well-educated Llamacacheño Baptist) and "I think a family should have no more than two children because life is dear, especially education" (a Llamacacheña migrant). However, it must be added that the answer given by more than a third of those interviewed, regardless of age, sex, education and religious affiliation, was "Dios, no mas sabe" (Only God knows).

Misunderstandings between lakeside communities and the central government

Despite ardent campesino support for the Movimiento Nacionalista Revolucionario and affection for Dr. Paz, post-revolutionary relationships between national government representatives and the lakeside communities in question have been marred by misunderstandings and acts of violence. As recorded on pages 38 and 113, SNRA surveyors had in the mid-1950s been compelled to suspend operations in Chua Visalaya on account of the belligerent behaviour of ex-colonos; more recently, legal representatives of the CNRA have met with open hostility and been accused (as was the present researcher) of employing devious means to accumulate information for land taxation purposes. Suspicion and mistrust of such outsiders is hardly surprising in view of the lakeside's turbulent history and the traditional liaison between estate owners and the 'Rosca'; hence even in 1971, when the FSB (Falange Party) was returned to power along with the MNR, numerous Visalayan ex-colonos genuinely feared that their lands would be expropriated, although the President of the coalition party had publicly assured the rural population of the irreversibility of the land reform programme. Baumann's critical analysis (1970, p.195) of the problems confronting the National Community Development Programme is surely pertinent: 'Quick bureaucratization and politicalization of

the NCDP have taken their toll in terms of faith and confidence and credibility in the programme by the rural communities' and 'Many technicians in the La Paz central office and the area operational offices are descendants of former landlords who still remember the hacienda days. While they give lip service to the integration and development of their clientele, the campesino, they have a long way to go in accepting the former Indian as an equal'.

As in many countries, whether of the Developed or Third World, the sentiment prevails at community level in rural Bolivia that the central government should participate to a far greater extent in problem-solving and providing various forms of rural infrastructure. A list of urgent problems (in order of priority) compiled by leading comunarios meeting at Playa Verde and Pillapi in 1959, clearly illustrates the point:[21]

(a) Lack of cultivable land.
(b) Conflicts between campesino syndicate leaders and those who want to organise in cooperatives.
(c) Quarrels between comunidades over boundaries.
(d) Need for government aid to build schools.
(e) Need for financial aid to organise cooperatives.
(f) Difficulties in obtaining credit.
(g) Lack of technical assistance for irrigation schemes.
(h) Difficulties in transactions with government offices.

(It is interesting to note a total lack of concern in the sector of health and sanitation). In Llamacachi and Chua Visalaya campesinos frequently suggested that "they" should supply milk for children of school age and for the elderly, and install electricity in the communities. ("The old folk need some help from the government.... they should give us free milk and flour, and money to buy coca"). Certainly, if the original objectives of the agrarian reform bill had been fully realised, especially in terms of the provision of technical assistance and credit facilities, socio-economic conditions could feasibly have improved more rapidly, but it is lamentable that campesinos should have failed to recognise the harsh reality that 'the central government lacks the necessary financial resources and manpower to fulfil all their expectations' (p.11).

Whilst in Bolivia in 1971 the researcher was extremely fortunate to be granted two interviews by Dr. Paz Estenssoro; as President of the Republic during the critical period from 1952-6, again from 1960-4,

and currently leader of the MNR, his opinions on the future of agrarian communities were highly valued. His contention that the solution to many rural problems and possibilities for increased agricultural output lie in the expansion of the cooperative movement and accelerated migration to the Yungas, would seem more than logical but ignores one salient point viz., the feelings of the rural communities themselves.

It has already been seen (p.175) that government propaganda on colonization is in direct conflict with campesino aspirations. The mere existence of land plots awaiting exploitation in the Yungas has certainly not induced lakeside dwellers to migrate eastwards: 'During the past several years, progress in colonization has slowed down to a snail's pace' (Edelmann, 1967)[22].

On the whole the experience of the agrarian cooperative in Bolivia has proved a failure; reasons for this were suggested on page
As Heath observes (1970, p.10): 'One of the most popular and inaccurate myths concerning Indians in highland Latim America is their supposed predilection for communal cooperation. It appears that urban nationals have accepted this as uncritically as have foreigners, and many ambitious development plans have failed because they were based on this unfounded assumption. Contrary to the expectations - and explicit intentions - of those who fostered the syndicates, few became cooperatives in any meaningful way...'. Certainly, as Dr. Paz elaborated, cooperatives embodying communal ownership of land previously under individual control do not provide the ideal answer: few campesinos having gained coveted titled to land parcels as a result of the process of agrarian reform can be persuaded to exchange them for membership of an impersonal landholding group. In Chua Visalaya, even apart from the bitterness engendered within the community by the activities of Cooperativa Chua Limitada, significant problems have reduced its effectiveness: not unnaturally, in the formative years a number of ex-colonos withdrew their allegiance from the group, being loath to pledge land, livestock and buildings as surety. As noted on page 123, members complained in 1971 about cooperative tasks being ordered in such a way that an individual was not at liberty to market his own products at will, nor to undertake work in La Paz on a temporary basis; a few even alleged that they were as much tied to the community as they had been in the days of the hacienda.

Failure of community development projects

"Various gringos have promised us many things such as a pump, a sheep bath and drinking water.... they always say they'll provide half the money if we give the rest.... well, the community has collected the cash but nothing's happened so I, for one, have lost all patience with gringos" (the forthright remarks of a disillusioned young Llamacacheño).

Several well-educated young men from both communities expressed their strong resentment at the fact that government officials, Peace Corps volunteers, research workers, etc., derive valuable benefit for their own purposes from community surveys without contributing anything useful in return; in fact, they claimed that such outsiders had been instrumental in spreading dissatisfaction inside Chua Visalaya and Llamacachi (p.21) by raising campesinos' hopes and later "breaking faith" with the communities. The first allegation is unfortunately irrefutable and greatly to be regretted. However, accusations of "broken faith" e.g., that two organisations had promised to donate a health centre and subsequently withdrawn support, appeared to be unfounded; as already recorded, the organisations concerned insisted that they had lost interest in the schemes solely because campesinos had flatly refused to participate in the necessary building programmes.

Undoubtedly certain Peace Corps projects had been doomed to miserable failure at the outset e.g., campesinas gave sound reasons (p 204) for their reluctance to cooperate with the well-intentioned (but ill-informed) volunteer who had endeavoured in vain to introduce balanced diets, 'better' methods of child care, etc. Similarly, the programme for building latrines (p.153) had aroused no enthusiasm because campesinos had deemed them wholly unnecessary in the first place: "When an assembly was called to discuss the epidemiological survey, nobody came, and when el Señor Wayne [the Peace Corps volunteer who had planned to erect the water pump and latrines] tried to gather the people, he too found it impossible" (a statement made by the corregidor at a community meeting in Llamacachi in 1965, quoted by the Beuchlers, 1971, p.58). As a result of this initial failure to awaken the interest of campesinos and establish an all-essential mutual trust, misunderstandings and antagonism are unavoidable: in 1971 some campesinos genuinely believed (either because they had never understood the motives behind taking

blood samples or because they had been easily persuaded by 'unos cuantos vivos') that the present researcher had "come to sell Indian blood".

It was more difficult to reach a logical conclusion as to why community development projects specifically designed to satisfy the 'felt needs' of Llamacacheños and Chua Visalayans (viz., a clinic, a sheep bath and a water pump) should have encountered local opposition or, at best, apathy. When asked why they had refused to collaborate, few campesinos gave convincing answers. Some, however, declared that manual work was "degrading" and wanted to know why they should be expected to do it without payment. Others said they were too busy or they were not prepared to work alongside members of rival factions or people who had stolen their land or crops. Clearly, community disharmony is partially responsible for the lack of cooperation on the part of the inhabitants themselves. (In Chua Visalaya the researcher was given further evidence of the deep-seated mistrust and suspicion confounding community life when several ex-colonos insisted that an official document be drawn up stating that the kerosene lamps (p 237) were for the sole use of the school and for community meetings and could under no circumstances be removed by individuals for their own private usage).

However, one questions whether agencies for aid would have been able to achieve more had both communities been cohesive units. In the writer's opinion, Baumann (1970, p.195) again points to the core of the problem: 'The Programme [the NCDP/Peace Corps Bolivia programme] , predicated upon the concept of self-help, encounters a great deal of resistance and apathy. Self-help and local initiative are in direct conflict with the traditional Spanish-imposed paternalistic approach that has been prevalent in Bolivia for a long time. There is, of course, a harking back to the ayni and minga, the communal labour system (at times, forced labour) of the Inca empire. Whatever of these systems has prevailed is dormant, and constant prodding is needed to get village tasks done'.

The 'cultural gap' between rural communities and research workers

One of the most difficult problems confronting the researcher carrying out investigations in rural Bolivia (as in any other country of the Third World) is that of gaining the confidence of the local inhabitants; without the cooperation of informants, such research work is meaningless and intrusions into community life may indeed prove hazardous.

Certain of the pitfalls are ubiquitous and there is no excuse for failing to recognise them; others are learnt through bitter experience. In the lakeside communities under consideration, in view of the region's tempestuous past, traditional mistrust of strangers and total lack of choesion, a sensitive and tactful approach was the prime requisite. Failure to establish immediate contact with community leaders in order to explain the motives involved; the employment of a translator from outside the area or one identified with the cause of a particular group inside either community; open demonstration of sympathy towards any such faction; refusal to comply with reasonable requests e.g., the provision of lamps for the school and of English lessons; reluctance to attend patronal festivals and partake of local food; ridicule of Aymara customs and beliefs; unwillingness to accept adverse criticism or to laugh at oneself - these and many other factors could seriously have jeopardized relations between campesinos and research worker.

Yet however 'integrated' into community life the researcher may believe he has become, clearly the 'cultural gap' remains and nothing will remove it; it is impossible for the outsider who has never had to struggle for very survival - never experienced the pangs of hunger and abject poverty - fully to appreciate the deep-rooted fears, suspicions and hopes of peasant peoples. On the other hand, the 'gap' sometimes appears wider than it is in reality; elderly members of countless rural communities in Britain would express little surprise at some of the herbal remedies concocted by Aymara curanderos - although many visitors to the lakeside find them a subject for derision.

From what has been written, especially in Chapter VII (pp.152-6), it is abundantly clear that campesino attitudes towards health and sanitation are totally at variance with those of outsiders, be they Peace Corps volunteers or foreign research workers. It would be feasible to compare attitudes towards different aspects of contemporary community life ad infinitum but for the present purposes it is necessary to be more selective; in the writer's opinion, attitudes towards animal husbandry and the conservation of natural resources admirably illustrate conflicting and seemingly incompatible values.

It was seen in Chapter V that livestock in the lakeside communities are on the whole of inferior quality and mortality rates exceedingly high; overgrazing by sheep emphasises an already-severe problem of soil erosion whilst uncontrolled pasturing encourages the spread of contagious diseases.

Many families currently keep two oxen solely for ploughing; such animals consume valuable fodder, frequently escape and cause damage to crops or serious injury - even loss of life - to human beings. As noted on page 123, fifteen teams of oxen were on one occasion in 1971 observed ploughing a cooperativa field less than an acre in extent; despite the fact that two Chua Visalayans had received specific training as tractor drivers, a tractor formerly belonging to the patrón had been allowed to fall into a state of disrepair - because "oxen plough deeper". Yet in a situation where herds are traditionally esteemed for their size rather than their quality, in which a bride's father is expected under normal circumstances to offer a few sheep as a dowry, and a "buena mujer" (good woman) is held to be 'one investing money obtained from market transactions on purchasing sheep' (p.128), more responsible attitudes towards animal husbandry are unlikely to evolve in the near future. Significantly, the UN veterinary surgeons' conclusions (p.46), that animal deaths in the ex-hacienda were largely attributable to under-nourishment rather than disease, occasioned no relief; on the contrary, several stock owners remarked that such allegations were slanderous. Whilst they were more than prepared to accept undue animal losses as the natural and irreversible state of affairs - "the sheep always die in February" (p.137) - or to acknowledge that a misdemeanour of some campesino or family had evoked a curse on the community's livestock, they were indignant that outsiders should accuse them of mismanagement.

Writing as early as 1950, Dion identified soil conservation on the Bolivian Altiplano as 'a crucial problem'[23]; notwithstanding the fifth major objective of the agrarian reform decree - 'To conserve the natural resources of the nation, adopting technical and scientific means which are indispensable' (Carter, 1964, p.10) - conditions have worsened appreciably in the intervening years. 'Depletion of natural resources .... was seen to be like a late frost or a rainless year - a natural hazard that was unfortunate but wholly inevitable' (Preston, 1969)[24]. Certainly, in Chua Visalaya and Llamacachi intensification of land usage and unrestricted grazing of fallow lands and hillsides have proceeded unchecked; amongst by far the majority of elderly campesinos there is no thought whatsoever of the future and of the need to conserve natural resources. The campesino's concern is only with the present and with immediate results. Such an attitude is surely to be expected in a region where for centuries peasant folk have lived from day to day, at bare subsistence level.

Thus during the researcher's stay, being informed of the financial worth of eucalyptus timber, the Visalayan cooperative began reckless felling of valuable trees for sale as pit props to Mina Matilde; little consideration was given to the trees' value as wind breaks, even less to their aesthetic appeal in an otherwise (i.e., apart from the lake) somewhat drab landscape. Likewise Llamacacheño farmers, concentrating almost exclusively on the production of onions for the Paceño market, were at the time of the writer's visit obtaining lucrative returns, but when it was suggested that monoculture could prove ruinous to the soil in the long term or that the market might conceivably be 'flooded' as other communities followed the successful example of Llamacachi and some of her neighbours, they responded dogmatically that such a thing could never be - "God would never let that happen to us".

An attempt has been made to describe the attitudes of campesinos towards post-revolutionary change in the lakeside region. It would be wrong to imply that all such opinions are in direct conflict with those held by outside observers and agencies concerned with aid programmes. For example, the serious suggestion of two young Llamacacheñas - "They should build a small textile factory here and give the girls something to do... the men have their sewing and weaving but what is there for us to do apart from working in the fields and selling onions?" - coincided precisely with the present researcher's viewpoint. Likewise the city-oriented aspirations of the younger generation of campesinos, those who never experienced the harshness of life in pre-reform days, are easily understood. The two communities selected for study, whilst atypical in certain respects, are by no means exceptional in exhibiting a lack of harmony and a general disinclination to cooperate either financially or manually in projects aimed at ameliorating their own living conditions. At the same time there has obviously been a failure on the part of outsiders, both nationals and foreigners, to 'bridge the cultural gap' and appreciate the true sentiments of the very people they have sought to assist.

Footnotes and References - Chapter VIII

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2. E.G. Squier, Peru: Incidents of Travel and Exploration in the Land of the Incas (London, 1877).

3. R.J. Alexander, The Bolivian National Revolution (New Jersey: Rutgers University Press, 1958) p.

4. F. Diez de Medina, Thunupa (La Paz, 1956), p.253.

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6. C.F. Bergsten, 'Social Mobility and Economic Development: The Vital Parameters of the Bolivian Revolution', Journal of Inter-American Studies and World Affairs, VI (1964), p.370.

7. D.B. Heath, 'Hacendados with Bad Table Manners: Campesino Syndicates as Surrogate Landlords in Bolivia', Inter-American Economic Affairs, 24: 1 (1970), p.4.

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9. C.J. Erasmus, 'Upper Limits of Peasantry and Agrarian Reform: Bolivia, Venezuela and Mexico Compared', Ethnology, 6 (1967), p.357.

10. R.W. Patch, 'Change on the Altiplano: A Success Story of Land Reform and Technological Innovation in a Bolivian Village', West Coast South American Series, XIII: 1 (1966), p.3.

11. P.R. Odell and D.A. Preston, Economies and Societies in Latin America: A Geographical Interpretation, (Budapest, 1973), p.111.

12. G.F. Baumann, 'The National Community Development Programme in Bolivia and The Utilization of Peace Corps Volunteers', Community Development Journal, 5: 4 (October 1970), p.194.

13. R.W. Patch, 'Bolivia: The Restrained Revolution', The Annual of the American Academy of Political and Social Sciences, 334 (1961), p.130.

14. W.J. McEwen (Ed.) Changing Rural Bolivia (Final Anthropological Report for Peace Corps/RISM Bolivia Project, 1969). 'In all communities there is a focus of concern on a small range of problems' (p.307). In Compi 'concern' focussed on electricity (38 per cent), water (20 per cent), agriculture (17 per cent), education (11 per cent) and health (7 per cent).

15. Three large kerosene lamps were subsequently bought with money donated by Oxfam and a Stafford Youth Club.

Footnotes and References - Chapter VIII continued

16. C. Wagley, 'The Peasant' in Continuity and Change in Latin America (Ed. J.J. Johnson, Stanford, 1964), p.46.

17. Translated from G. Barbero, Realizaciones y problemas de la reforma agraria en Bolivia (La Paz, 1960).

18. W.E. Carter, Aymara Communities and the Bolivian Agrarian Reform (Gainesville: University of Florida Press, 1964), p.58.

19. See C.J. Erasmus, 'Upper Limits of Peasantry and Agrarian Reform: Bolivia, Venezuela and Mexico Compared', Ethnology, VI: 4 (October 1967), p.362. 'Throughout most of the area [south eastern Bolivia] there is a belief in supernatural sanction, divine punishment for people who refuse to sponsor fiestas, but at La Cienaga the syndicate leader laughed scornfully when I mentioned this. "Hemos hecho la prueba ya y no cayó nada" (we have tested [the belief] and nothing [bad has] happened). This was the only syndicate leader I encountered who had undertaken to oppose the age-old fiesta system'.

20. H.C. and J-M. Buechler, The Bolivian Aymara (Syracuse University, 1971), p.56.

21. Pillapi, an expropriated hacienda (11,200 hectares) near the south eastern shore of Lake Titicaca, and Playa Verde, close to the mining camp of Huanuni, were at the time under the administration of the UN Mision Andina: 'The job of the Mision Andina at Pillapi was to encourage the peasants to use new techniques and get more production from their holdings. This called for considerable diplomacy. The Indians at first refused the offers of the United Nations people of better seeds and fertilizer, saying that they had always used their own methods and achieved good output and they saw no reason to change. So the head of Pillapi asked the Indians to let him plant with his methods land which they considered too poor to use. They agreed to this. When the output on the "waste" land turned out to be much better than their own production, the peasants were convinced and became eager to get the new seed and to use fertilizer'. R.J. Alexander, The Bolivian National Revolution (1958), pp.249-50.

22. A.T. Edelmann, 'Colonization in Bolivia: progress and prospects', Inter-American Economic Affairs, 20: 4 (1967), p.52.

23. H.C. Dion, Agriculture in the Altiplano of Bolivia (Washington FAO: Paper No.4, 1950), p.

24. D.A. Preston, 'The Revolutionary Landscape of Highland Bolivia', Geographical Journal, 135 (March 1969), p.13.

CHAPTER IX WHAT FUTURE FOR THE LAKESIDE COMMUNITIES?

Notwithstanding the magnitude of post-revolutionary change in Bolivia's lakeside region, inhabitants of comunidades originarias and ex-haciendas alike are the first to acknowledge that their total 'integration... into the social and political life of the nation' (Patch, 1961)[1] is, as yet, by no means a fait accompli. Though nobody could deny that as a community Llamacachi has emerged from its former partly self-imposed isolationism and already made its mark on the outside world, a number of comunarios continue to live at bare subsistence level. Even twenty years after the promulgation of the Decreto Ley de la Reforma Agraria the majority of campesino families in neighbouring Chua Visalaya still exist marginally; for them the failure of a single harvest spells untold hardship, if not complete disaster. As demonstrated in Chapter V, acute shortage of land in the comunidad is no less a bone of contention in the 1970s than it was in pre-reform times, whilst in the ex-hacienda antagonism and bitterness, precipitated by wrangles over lakeside fields and sayaña plots, currently pervade most aspects of family and community life. At the same time, crop diseases and the high incidence of unnatural deaths amongst livestock are cause for considerable anxiety to both comunario and ex-colono. In Chua Visalaya and no less in Llamacachi diets are on the whole ill-balanced and inadequate; standards of sanitation are everywhere abysmal, and, despite the valiant efforts of the Protestant Mission, human life remains a cheap commodity. Superstition, fear and mistrust are rampant and outbursts of physical violence unfortunately commonplace.

Clearly, the socio-economic changes which have been described in detail in the preceding chapters relate to rural communities passing through a difficult transitional phase of readjustment and development; indeed, it would be unreasonable to suppose that the traditions of centuries could be swept away in so short a period of time - the wretchedness of life in hacienda times is too firmly impressed on the minds of the older generation of campesinos. National decrees may be drafted and proclaimed within a matter of weeks, even days, but seldom are patterns of rural life transformed abruptly overnight. In the Lake Titicaca region of Bolivia a gradual restructuring of family and community life is still in progress; new life styles are still evolving.

Whereas future trends e.g., an acceleration in the rate of outward migration, are in large measure predictable, circumstances unforeseen by the resident population - the 'flooding' of the onion market or the construction of a small textile factory adjacent to the lake are cases in point - could have profound repercussions on contemporary community life.

'In less developed countries.... the role of the researcher... often includes not only data gathering and analysis, but also problem identification and concrete suggestions of methods for solving the problem, i.e., constructing a complete strategy of change' (Adams and Havens, 1966)[2]. Had the present writer been conducting research in the environs of Lake Titicaca in 1961 rather than ten years later, the task of 'constructing a complete strategy of change' would undoubtedly have appeared simple and straightforward by comparison. In a country whose 'development relies heavily upon loans made by the United States Agency for International Development and the Inter-American Development Bank' (British Board of Trade, 1970)[3] and in which the Central 'Government has not been able to meet even the minimal service needs of the rural sector since the land reform and the Revolution of 1952... due largely to lack of resources' (Clark, 1970)[4], few outside observers would disagree that the only logical and practicable solution to the superabundance of rural problems <u>must</u> lie in the promotion of community development programmes founded on the principle of self-help i.e., in encouraging the individual community 'to set about solving local problems using its own resources and local organisation' (H.M.S.O., 1963)[5].

However, the task confronting researchers - be they geographers, agronomists, economists, anthropologists or sociologists - investigating aspects of change and development in rural Bolivia at this precise moment in time differs markedly from the one outlined above; in the writer's opinion, it is more taxing, perhaps impossible. The reason why this should be so is that the very sort of comprehensive, cleverly-contrived programme of community development which might conceivably have been advocated by perceptive researchers in the early 1960s (and indeed <u>was</u> by some) has now <u>been</u> operating throughout the length and breadth of the Republic for seven years - yet <u>still</u> the problems

of rural communities remain unresolved. The National Community Development Programme, devised by Bolivians and Peace Corps staff members, was specifically aimed at catering for 'the felt needs' of campesinos i.e., its professed target was 'to develop strong, self-reliant rural communities capable of identifying and solving their problems through the promotion of local community organizations and the establishment of an institutional structure which will enable the campesino masses to communicate their needs to the government and, in turn, permit the government to respond to those needs in a more effective and adequate manner. This should eventually lead to what could be called a "brown power consciousness" ' (Baumann, 1970)[6]. Efficiently organised at national, provincial and local levels, in receipt of financial and technical assistance from a variety of sources (the Bolivian Government, the United Nations, the Inter-American Development Bank, the United States Agency for International Development, the United States Peace Corps and the German Volunteer Service), the NCDP wisely incorporated the training of local campesinos as Village Level Workers, each vested with the responsibility 'to stimulate the villagers to become aware of their problems, express the needs they feel, teach them the practical material that he has been taught, and help them to make effective use of the existing technical services at their disposal through specialists who are assigned to work at the provincial level in the area operational offices' (Baumann, 1970, p.193). Admittedly the NCDP, acting in conjunction with the Peace Corps Bolivia Project, has achieved noteworthy successes (by 1970 more than 3,500 projects had been completed in the fields of agriculture, health, rural education and electrification); furthermore, many of its pressing problems have been of a purely political nature, hence beyond the control of the programme organisers (in addition to those already mentioned, Baumann (p.195) emphasises the adverse effects of 'national political instability.... Since 1964, eleven different Ministers of Agriculture have tried to put their philosophical, political, cultural, and geographic imprint on the programme'). Yet it is abundantly clear from the 'non-events' recorded in the previous chapters that the programme's impact on community life in both Chua Visalaya and Llamacachi - one suspects in countless other communities too - has been minimal. If by community development we mean 'a movement designed to promote better living for the whole community with the active participation and, if possible, on the initiative of the community, but if this initiative

is not forthcoming spontaneously, by the use of techniques for arousing and stimulating it in order to secure the active and enthusiastic response to the movement' (Ashbridge Conference on Social Development, 1954)[7] - then, beyond all doubt, the NCDP has met with almost total failure as far as the two lakeside communities under consideration are concerned.

Thus, for any well-meaning outsider to make hasty suggestions e.g., that a water pump be erected in Llamacachi, is valueless - such suggestions have been made on numerous occasions, often by Llamacacheños themselves. Likewise to recommend that either community provide a 50 per cent contribution in the form of labour, land or building materials (as required for all NCDP undertakings) towards any project designed to fulfil a self-expressed want, is equally pointless - the contribution probably could be made but it is most unlikely that it would be made without some form of coercion (see p.157). Obviously, before recommending any positive course of action it is essential to analyse the reasons responsible for past failures i.e., to identify those obstacles which have frustrated community development during the last decade and to reach some realistic conclusion as to whether or not such impediments could be removed and, if so, how. Simultaneously, it is vital for the investigator to 'search for elements in the Indian past... that are not only worth preserving but that can be used in building a better social and political order' (Hirschman, 1961)[8].

To reiterate, whatever 'strategies of change' are proposed ultimately, assuredly unless community cohesion is restored beforehand, a spirit of cooperation and dedication engendered, and a workable relationship established between 'recipient' and agency for aid, there can be little prospect of fruition. Although the individual research worker studying the complexities of change in the Bolivian countryside initially approaches the subject from his own specialist angle, the more intimately he becomes involved with life at 'grass roots' level, the firmer his conviction inevitably grows that the crucial problem to be tackled by any researcher or planner is one of human relationships viz., how to reconcile seemingly uncompromising attitudes and ensure unity and strength of purpose.

Major obstacles to development in Chua Visalaya and Llamacachi

The land question

'Agriculture [in Bolivia] has made notable advances in solving the problems connected with latifundismo; but a minifundio structure, equally undesirable and harmful, has spread' (Ferragut, 1963)[9]: 'Where peasants suffer from the extreme parcelization of land or from lack of land... land provides the basis for tension and even violence' (Wagley, 1964)[10].

In both Chua Visalaya and Llamacachi 'the land question' poses an almost insuperable obstacle to progress in any direction. Whereas the agrarian reform decree optimistically stipulated 10 hectares as the maximum size for 'a small property' in the lakeside region, few campesinos in either community presently enjoy access to even a single hectare of cultivable land. Whilst the planting of prime quality seeds, lavish application of carefully selected artificial fertilisers, insecticides, pesticides, etc., the fencing of fields against marauding animals and improved irrigation facilities could doubtless be instrumental in augmenting crop yields, thereby alleviating the distress of Visalayan ex-colonos and some of the less-fortunate families in the adjacent comunidad, certainly by far the majority of landholdings are by now so minute or fragmented that they could never become viable economic units. On the other hand, as Baumann shrewdly observed (1970, p.192), whilst 'From an agricultural economist's point of view, these economic units [he refers specifically to 'the traditional Aymara-Quechua-Indian areas of the Altiplano and the valleys'] are too small to justify their existence... from the campesino-Indian's point of view, they are what he has wanted all his life'.

The implications of this acute shortage of land in lakeside communities are both multifarious and disastrous. Understandably, virtually-landless farmers are exceedingly wary of taking risks e.g., by experimenting with new crops or artificial fertilisers; their prime, if not sole, concern is with the raising of traditional root and cereal crops for immediate domestic consumption. Neither, even if they deem it expedient, can such peasants afford the luxury of leaving land en descanso for more than a few months: the typical

lakesider is convinced that he has no alternative but to overcrop and overgraze his cherished parcelas. Whilst Preston (1969)[11] alleges that 'nowhere has the social and political enfranchisement of the rural labour population [in Highland Bolivia] brought a realization of the responsibilities involved with ownership', one could argue that in the lakeside region at least, the mass of elderly, land-hungry, impecunious campesinos, determined not to desert the community of their birth, have never had any real opportunity to exercise such 'responsibilities'. Similarly, although a tractor could be used effectively in the orilla fields presently cultivated by Cooperativa Chua Limitada, such an innovation would be wholly inappropriate elsewhere in the ex-hacienda or in Llamacachi: 'To change field size or shape to accommodate modern machinery would be a formidable task. Regardless of farm size, field size practically dictates the use of hand labor or animal-drawn equipment' (the calculated judgment of Tennessee Valley Authority experts, 1970)[12]. Bearing in mind the already-serious problem of underemployment in Chua Visalaya, it is questionable at all events whether the introduction of 'modern machinery' is even desirable.

More than any other single factor, the excessive pressure of population on severely limited land resources has been responsible for the disharmony and tension regrettably characteristic of both Chua Visalaya and Llamacachi today. In the latter community, 'the land question' has from time immemorial been the root cause of rivalry and hatred between the two wealthiest originario families; as seen in previous chapters, disputes over ill-defined field boundaries and multiple claims to land plots continue to dominate business at community meetings, whilst work time is frequently expended to no avail on fights between different factions. The frustrations, deep-seated suspicion and violence emanating from the implementation of 'land reform' in the ex-hacienda have already received due consideration. Suffice it to say at this juncture that community development has no chance of success so long as 'men go in fear and trembling of their lives'. Not until non-agricultural outlets for labour are made available locally, or more campesinos admit defeat and withdraw from the fruitless struggle for land by migrating to La Paz or elsewhere, can today's depressing situation in Chua Visalaya be redressed. García, in an excellent article entitled 'Agrarian Reform and Social Development in Bolivia' (1970)[13], reasons that: 'The

minifundio, as it now stands, has no way out except for structural remodeling. And this cannot come about through spontaneous readjustment, but must be the result of a state policy and of agrarian planning. Only by applying agrarian reform in these minifundio areas can a structural change take place which would open the door to real development of the rural communities'.

The shortcomings of agrarian reform

The writer has not the least intention of critically examining all major aspects of Bolivia's agrarian reform programme: its successes and failures have of recent years merited the attention of a number of eminent economists and agricultural scientists far better equipped for so formidable a task. Since consideration has already been given to the national government's policies on colonization and to the inadequate provision of rural infrastructure in non-spontaneous settlement zones (it was shown that some of the greatest obstacles to colonization are psychological rather than economic viz., the campesino's strong emotional attachment to his homeland and the necessity of coming to terms with a new environment and a totally alien range of crops), emphasis will instead be placed on the fourth objective of the Decreto Ley de la Reforma Agraria: 'to stimulate the increased productivity and commercialization of agricultural goods, encouraging the investment of new capital, respecting small- and medium-sized landholdings, encouraging agrarian cooperativism, giving technical aid, and opening possibilities for credit'.

Burke's investigations in the Lake Titicaca region (1970)[14] led him to conclude that: 'There has been no inflow of agricultural equipment in the area either for replacement or for addition to stock since 1953, because the Bolivian campesinos have neither the funds nor the inclination to purchase this type of capital'. Whilst, admittedly, with the exception of Llamacachi's Baptists, the older generation of campesinos in the two communities under review often prefers to invest small amounts of surplus cash on fiestas (according to Erasmus (1967)[15] 'the ceremonial fund' includes 'expenditures for the social relations "surrounded" by ceremonial activity and "symbolic constructions" which help to keep order in the society and "to render life predictable and liveable"'), this is by no means the whole story. In Chua Visalaya and to a lesser extent in Llamacachi it is clearly apparent that abject

poverty remains one of the chief stumbling blocks to development: the answers readily given by householders (p.225a) confirm the writer's general impressions.

It could, of course, be argued that the concept of borrowing large sums of money from an impersonal institution or pledging land and livestock as surety is repugnant to the Aymara (as already noted, this may have been the reason for the premature withdrawal of certain ex-colonos from the Chua Visalayan cooperative), but unfortunately this hypothesis has rarely been put to the test in the lakeside area. The credit facilities alluded to in the agrarian reform decree have not been forthcoming, at least not where the campesino is concerned. As García points out (1970, p.334) 'Both the Central Bank and the Bolivian Agricultural Bank have been averse to the establishment of any kind of credit system for the rural cooperatives, or for peasants who have received land through the agrarian reform. One of the reasons which explains this lack of credit in the Altiplano communities.... has been the reluctance of the Agricultural Bank to accept as collateral the titles issued by the Agrarian Reform Service'. This 'reluctance' on the part of the Bank is readily understood: as the Tennessee Valley Authority survey acknowledged (1970, p.18), 'the cost of processing and collecting very small loans exceeds the interest rate that can be charged (12%)'. This being so, Cooperativa Chua Limitada's relationship with the Banco Agrícola must be seen to be somewhat anomalous: it should be remembered that the Bank only agreed to sell the empresa agrícola to resident campesinos in the last resort i.e., after failing to interest a 'suitable' landowner in the venture.

In view of what has been said above it is hardly to be wondered at that when in 1968 the imposition of a tax on all rural lands was proposed in La Paz, 'the articulated discontent of peasants in rural communities' (Clark, 1970, p.76) compelled the central government to shelve the scheme. Not unnaturally, in both Chua Visalaya and Llamacachi the ever-present threat of such a land tax causes considerable concern to the inhabitants and helps to account for hostile attitudes towards all suspicious-looking strangers. It is greatly to be hoped that within the course of the next few years the Belén/NCDP's 'Project 21' (see p.203) will devise some effective means of making short-term credit facilities available in the lakeside district and of persuading individual campesinos to take advantage of them.

The legacy of Hacienda Chua

Much has already been written about Hacienda Chua's role in sowing the seeds of internal confusion and disunity, so inimical to socio-economic progress. An equally calamitous by-product of the estate system must not be forgotten.

García (1970, p.312) specifies as one of the major results of the Bolivian agrarian reform 'the re-establishment of the confidence of the rural communities in their capacity to take the initiative and in the social importance of communal values'. Whilst 'a capacity to take the initiative' may be characteristic of some 'rural communities', sadly, the reverse is true of Chua Visalaya. For this condition, 'the excessive paternalism' of past hacendados must be held largely responsible. As colonos, Visalayans were actively prevented from exercising any initiative on their own account: any tenant overtly demonstrating qualities of leadership and organisation was quickly removed from the scene or his activities were curbed in other ways. Whilst neighbouring comunarios were enforced to bring all their skills to bear in order to thwart the land-grabbing intentions of unscrupulous hacendados, Visalayans lived under the patrón's protection and carried out his orders (or those of his staff) to the meanest detail. To any community development planners, apathy presents almost as insurmountable a barrier as active resistance: in Chua Visalaya the problem appears to lie even deeper. Whether they regard their unhappy lot as "a punishment of God" (attributable to the malpractices of certain community members or families) or blame the central government, by far the majority of campesinos refuse to believe that by their own endeavours they could create a better life; they treat any outsider as a substitute for the patrón, expect gifts of money, food, etc., to be handed to them 'on a plate', but are totally unwilling to help themselves[16].

Unfortunately, the only Visalayans who in recent years might feasibly have taken a lead in promoting community development have been too preoccupied with the land dispute and with their own personal political aspirations: in Llamacachi, on the other hand, although some progressively-inclined individuals have failed to make a marked impact on the community (either because their Baptist beliefs have forced them to withdraw from community decision-making or because they have preferred to migrate to the city), several astute comunarios, especially the corregidor, have

taken considerable initiative and helped to mould the contemporary pattern of community life.

Malnutrition and poor health

Whilst many community development programmes in Third World countries are specifically aimed at ameliorating dietary and health conditions (usually from humanitarian motives), all too obviously, malnutrition and poor health in themselves are major obstacles to development. Inadequate feeding reduces resistance to infectious diseases (additionally, according to the Peace Corps/RISM Bolivia Project (1969)[17], 'severe protein-calorie malnutrition in early life may produce irreversible mental changes, as well as retard physical growth') and, in conjunction with ill health, saps the vitality essential for performing field or building tasks. Thus, as Adams and Havens are eager to point out (1966, p.213), 'In many traditional communities, the health characteristics of the population could be an important [limiting] factor to take into account in developing a strategy of change'. Taking this a stage further, Peace Corps/RISM experts insist (1967)[18] that 'A prime target in national development is uplifting the physical well-being of human resources.... without this, expansion of the economic sector may remain ineffective.... national development is as closely linked to levels of human energy as to capital input' (at the time of writing, the average expectation of life in Bolivia was as low as 49.71 years).

In Chapter V (pp.151-2) it was seen that, in spite of post-revolutionary increases in food consumption, the mass of Chua Visalayans and Llamacacheños are still suffering from undernourishment whilst, generally speaking, diets are poorly-balanced, deficiencies in animal proteins, calcium, riboflavin and thiamin being marked. The Peace Corps/RISM team investigating health factors in neighbouring Compi at the end of the 1960s, attributed 'the lower weights and haemoglobin values for women' to their 'poorer nutrition'; this is consistent with Albó's findings (1972)[19] that, to enable them to become 'más robusto', Aymara menfolk and eldest sons are provided with more sustenance than other household members. In the ex-hacienda a number of young mothers lamented the fact that they could not breast-feed their babies properly because they themselves lacked nourishment ('Malnutrition increases susceptibility to infectious diseases and the two together are the major causes of high infant mortality rates' - Peace Corps/RISM, 1969, p.330). One

suspects that some of the under-fed children from the same community are sent to school mainly to partake of the gruel (prepared by teachers or the school alcalde prior to the commencement of morning classes) rather than for educational purposes. Beyond all doubt, inadequate feeding precipitates the death of some elderly campesinos; lacking energy, such persons are unable to cook, to complete field tasks or to protect property, and eventually appear to lose all interest in life itself. In the absence of any form of social security it is understandable that aged lakesiders should expect government assistance in the shape of bread, milk and flour.

Not unnaturally, since the severe illness or injury of the head of the household may signify loss of economic livelihood for his family, 'the Aymara are preoccupied with illness and death' (Peace Corps/RISM, 1967). Whilst lakeside campesinos are at least fortunate to escape the tropical diseases endemic throughout lowland Bolivia, in the opinion of the Epidemiological Survey (see p.153), inadequate sanitation and lack of hygiene continue to create 'conditions highly favourable for the transmission of water- and food-borne diseases, contact diseases and insect-borne diseases'. As recorded on page 155, arthritis, rheumatism, whooping cough, scarlet fever, measles and dysentery are of frequent occurrence in both lakeside communities under review; simultaneously, debilitating tuberculosis and other chest and lung disorders are so widespread as to be considered normal conditions.

Clearly, it is impossible to divorce adequate health care from adequate nutrition. 'To raise health levels, there must be combined efforts to introduce measures to control infection as well as to improve nutrition. The administration of vaccines alone, supplementary feedings alone, or building latrines alone, may not be sufficient to reduce high morbidity and mortality rates. Therefore many health problems require a multi-faceted approach' (Peace Corps/RISM, 1969, p.330).

'Es costumbre'

'The most salient political characteristic of the Indian peoples.... is their capacity to resist cultural assimilation into the Hispanic part of the society.... the main stumbling block to their ["the

modernizing elites"] achievement has been the "power" of the Indian to resist change' (Anderson, 1971)[20]. Whilst anthropologists and sociologists have emphasised this aspect of Quechua-Aymara life, it is abundantly evident from what has been written in previous chapters that 'the supposed inertia of custom' (Heath, 1969)[21] has not proved an insuperable obstacle to the socio-economic development of rural Bolivia. Increased mobility and the experience of urban living have sorely tested traditional Aymara tenets and customary rituals. In recent years member of the younger generation of campesinos have audaciously derided the time-honoured fiesta system and openly challenged parental and community authority. The rise of Llamacachi's ever-expanding onion trade has necessitated drastic modifications in ancient patterns of crop rotation; additionally, an intensification of land usage has disrupted the centuries-old habits of planting seedlings in strict accordance with the Incan calendar and of temporarily suspending field work (because it is considered detrimental to crop growth) after Candlemas, 2nd February. Nevertheless, it would be foolhardy to underestimate the strength of tradition in the Lake Titicaca region.

For ethical reasons, 'To neglect the Indian culture, to act as if it does not exist, is an insult to these people. To send personnel among them on the assumption that these human beings have nothing of human value in their culture, that it does not need to be understood, that they are all wrong.... is intellectually a stupidity of the highest order and morally a paternalistic disdain of the Indian' (Early, 1967)[21]. From the community developer's standpoint a realistic interpretation of cultural backgrounds is obviously of paramount importance; otherwise he must expect certain innovations, however elaborately planned, to be rejected outright. 'It is possible that they will be perceived as threats to the existing social order, in that they may create hardships for certain members of the society. Changes may also run counter to established ways of doing things, attitudes and prejudices' (Adams and Havens, 1966, p.206).

For example, sundry attempts to introduce improved varieties of potatoes in Altiplano and lakeside communities have eventually been abandoned because the instigators of such projects initially failed to appreciate - or discounted - the all-important fact that bigger,

better potatoes are ill-suited to the campesinos' direct requirements i.e., for the preparation of chuño and tunta. Rashly to condemn such traditional practices solely because they do not conform to set modes of behaviour in 'the western world' is exceedingly presumptuous; it should not be forgotten that many rural customs have evolved over centuries and reflect the intimate relationship between man and the environment. The Andean Indians devised highly effective means of preserving their root crops centuries before methods of dehydrating foodstuffs were perfected in the so-called 'developed world'.

Whilst it is rarely justifiable for the community developer to seek to undermine, even destroy, those traditions that in no way conflict with the main objectives of aid programmes, one could not expect to be able to condone all the mores of any single society or group: in the lakeside region the habit of suffocating twins is abhorrent to the outsider and, to him, indefensible whether on grounds of family poverty or excessive population. In circumstances where traditional customs definitely obstruct rural development, timely and tactful persuasion is called for. It has already been seen that in both Chua Visalaya and Llamacachi certain aspects of animal husbandry and agrarian practices directly contributing towards the depletion of soil resources are formidable obstacles to progress i.e., to the establishment of an equilibrium between man and land. As a Ministry of Agriculture/Utah University team discovered to its cost: 'Cutting down numbers of low-class stock to fewer but meatier and higher wool-yielding animals is often more of a socio-cultural task than a straightforward economic proposition, although there is no doubt that cash income could be increased by the switch' (Baumann, 1970, p.194).

It should also be remembered that many customary practices, whilst in certain respects detrimental to advancement in the economic field, neverthelss have redeeming features. Thus, the patronal fiesta draws off surplus cash (which would otherwise be available for investment in agriculture), consumes work time and presents ideal opportunities for theft and crop damage by untended livestock, yet at the same time it must be recognised as one of the all-too-few unifying elements in community life. 'Feast celebration is, apart from education, the only activity in which all members of the community [Compi], including

migrants, may be involved at any one time. Because of their inclusive character, feasts provide a common language for all Compeños in which common interests, sectional differences, rivalries and competition can be expressed. In them.... both continuity and change in social relationships can be communicated' (Buechlers, 1971)[23].

Unquestionably, prior to constructing any 'strategy of change' it is expedient, if not absolutely essential, to consult with and enlist the active cooperation of traditional political hierarchies within the community structure e.g., those responsible for the organisation of fiestas and other ceremonial functions. To cause offence in such quarters could have disastrous consequences - both for planners and development programmes.

Fatalism and fear

"What we need most is money for buying food.... as for myself, I'm not so much worried about a doctor because God would never let any ill befall my family" (a 60 years-old Chua Visalayan Baptist). "They stole my land but God will see to it that they get their deserts in the end" (an aged ex-colono). "I've only got four children now. We lost a little girl of five last year.... she became blind but what could anybody do? She was obviously meant to die, wasn't she?" (a 40 years-old Chua Visalayan father). "Once we've found out who's been stealing our sheep, we'll go and ask the magician to put a death spell on him" (another aged ex-colono). From these and other remarks recorded in earlier chapters, it is clearly apparent that, despite the pervasiveness of post-revolutionary change and an extension of educational facilities in the lakeside region, fatalism, superstition and fear remain potent forces to be contended with; especially is this true in the spheres of illness and farming. As Preston (1969, p.16) discovered: 'Fate rather than Man was responsible for declining yields and thin livestock'.

Writing about the Andean Indians some twenty years ago, Osborne claimed that 'it is impossible to draw any line between religion and superstition or to separate either from secular life'[24]; the situation remains unchanged. When in 1971 the present writer accompanied five of the better-educated young Llamacacheños and Chua Visalayans to the summit of the sacred mountain Jipi, the burning of offerings and making

of incantations - "to send away the evil spirits and hailstorms" - evoked the following outspoken comment from the only Baptist present: "They'll tell you that the God they're praying to is our God, but don't believe them - really it's Pachamama". God or Pachamama, for the researcher or the community developer to receive the answer "God knows everything... isn't that what your Church says?" to a wide range of questions (e.g., "Why don't you take your sick child to the nurse?", "How many children would you like to have?", "What caused your crops to die?" or "Why do you think you are losing so many animals?") is, to say the least, disconcerting.

A preoccupation with nature and the supernatural is no less a characteristic feature of the Aymara today than it appears to have been from time immemorial. Lakesiders persist in their belief that all illnesses have supernatural origins; hence modern medicinal cures must be supplemented by acts of contrition (p.154). In a similar manner, natural hazards (hailstorms, hurricanes, droughts or floods), animal deaths and crop diseases are recognised as God's or Pachamama's punishment for improper conduct. 'Any transgression of the natural flow of events was considered an affliction or grief-bringing act involving suffering for the person in question and for the community as well' (Buechlers, 1971, pp.92-3). Whilst younger campesinos may regard some of their parents' superstitious beliefs sceptically, they are usually careful to hide their personal feelings from community elders; otherwise they might be held accountable for some "pena para la comunidad" and accordingly be under compulsion to make retribution.

A short stay in the lakeside district convinced the present researcher of the profundity of the elderly campesinos' fear of the supernatural. To anger the spirit world is considered exceedingly dangerous: on the contrary the spirits must be revered and manipulated skilfully by men set apart (p. 154) for the task i.e., the brujos. The Buechlers provide fascinating illustrations of the sort of careless action likely to precipitate 'natural' disasters e.g., 'Alcohol must be given to the Jipi spirit to "pay" him for the water but it must not be imbibed by the magician himself, for alcohol is associated with fire and might consume the water, creating an even more severe drought' (p.96); and 'Although infanticide is decried, no special horror is attached to it unless the child is killed before it is named, for only then hail

will fall' (p.23). For any outsider to discount such firmly-held beliefs, however ludicrous they might appear to him, would be foolish in the extreme. It may be impossible for campesinos to participate in certain community development projects by reason of a genuine fear of arousing the wrath of the gods.

The lakesider's fatalistic approach towards and traditional awe of 'the elements' is more than logical. Whilst enjoying a clear advantage over his fellow-campesinos residing in communities beyond the moderating climatic influence of Lake Titicaca, he is not fortunate enough to escape 'the plagues of the highland farmer' viz., 'floods, hail, frost and drought' (Preston, 1969, p.16). As Parsons remarks (1964)[25] 'Rainfall variability may be more important to an average campesino... than economic aid': in the lakeside area both prolonged drought and excessive rainfall (devastating cereal crops and favouring grub infestation of roots) have on occasions proved calamitous. It was seen in Chapter III that hailstorms, freak winds, even hurricanes not infrequently signify immeasurable suffering for individual families or entire communities. The major source of income of the most progressively-inclined campesino may disappear overnight; until such a person has made good his financial loss, he will be reduced to living at subsistence level. Hence cash contributions to community development projects are out of the question: indeed, any former interest he might have displayed in this direction is likely to waver.

These are but a few of the obstacles confounding community development in the lakeside region of Bolivia: the list is inexhaustible. For example, the supervisor of Oxfam's Proyecto Extensionistas Cooperativas (1972)[26] stresses the problem of mass illiteracy: 'Another of the factors frustrating the development of the agrarian cooperative in La Paz Department is the alarming level of illiteracy in the campesino sector'. Similarly, Peace Corps/RISM experts (1969, p.328) focus attention on 'the general lack of skilled manpower in rural communities and how critical this often is to community projects, which fail for lack of adequate skills. Other projects cannot be started or even considered for lack of trained manpower'. The same survey reveals that the bottleneck, especially in those communities manifesting discord and schism, often lies at the level of community decision-making: this is certainly apposite to both Chua Visalaya and Llamacachi.

'A proposal from one sector is automatically suspected by another. Every decision is an opportunity to score on an opponent. Every decision is a test of power relations' (1969, p.325). Since nothing can be achieved without a unanimous decision being reached, it is not beyond the bounds of possibility for a few particularly obstreperous campesinos to confound many a worthwhile project.

Pitfalls to be avoided

'The major problem of any reform programme for the Indians is to break through the psychological barrier which shuts them off from the white man's world, and to devise measures adapted to their skills and aptitudes which do not destroy, but can be grafted onto, the body of traditional customs to which the Indians cling'; Marett's views (1969)[27] concerning socio-economic development in rural Peru are equally pertinent to lakeside Bolivia. To achieve these ends, ideally the community developer should be conversant with the native idiom; unfortunately this is rarely possible. (In the case of the Oxfam project referred to above, bilingualism was an essential qualification for prospective extension agents since many of the communities to be visited are still virtually isolated from the mainstream of Bolivian social and economic life).

The most obvious pitfall to be avoided by any outsider (whether national or foreign) intent on inculcating change at community level is that of being over-enthusiastic and rushing headlong into projects without completing the necessary preliminaries viz., consulting local opinion, studying community structure, becoming acquainted with disruptive elements in community life, detecting reasons for past failures etc. In Chapter VIII it was demonstrated that the attitudes of campesinos are often totally opposed to those of would-be 'culture brokers'; hence, in the absence of such vital background information, it is all too easy to cause deep offence, thereby destroying any reasonable chance of active cooperation. It should be unecessary to add that overt criticism and ridicule of traditional customs and superstitions must be avoided at all costs, yet a number of Peace Corps volunteers and others have been guilty of this misdemeanour. In the light of what has been said it is not surprising that Peace Corps/RISM investigations in rural Bolivia led to a general recommendation that: 'Volunteers should give more attention to planning and analysis because many more aspects of a community will be problematical for them

than for local residents' (1969), p.327). Certainly a number of those with whom the present researcher talked in eastern Bolivia in 1966 were eager to acclaim the virtues of "community development" but appeared to have neglected the fundamental fact that the campesinos' feelings as to what constituted progress did not necessarily coincide with their own.

'Careful assessment of resources in relation to problems, and distinguishing manageable from unmanageable problems, would greatly reduce.... failures' (Peace Corps/RISM, 1969, p.326). All too often community development projects have failed, if not been rejected out of hand, because their innovators have been over-ambitious and ignored 'the great gulf that exists between technically trained personnel... and the mass of people with whom they must work' (Wagley, 1964, p.47). Even in circumstances where programmes do not run counter to established practices (as would almost any livestock project contemplated for lakeside communities), changes must be introduced carefully and gradually. Thus Dion, in 'Agriculture in the Altiplano of Bolivia' (1950)[28], condemned proposals that peasants, accustomed to the usage of primitive digging sticks and clod breakers, be furnished by overseas agencies for aid with sophisticated tractors, suggesting that hand- or oxen-drawn ploughs, grain binders, potato diggers, etc., were more appropriate to their needs. Patch (1966)[29] explains why it took the anthropological team from Cornell University three frustrating years and countless demonstrations to persuade the campesinos of Vicos (Ancash, Peru) to plant a new variety of potato. Had the potatoes been 'simply an improvement of the indigenous species' instead of 'a radical new variety' they might have been more readily accepted; additionally, peasants were asked to 'apply new and strange methods of pest control and fertilization' i.e., they were expected to adopt 'a whole new attitude toward agriculture, one in which individuals were to make substantial risks of capital'.

When in 1971 Chua Visalayan ex-colonos requested the present writer to investigate the possibilities of installing electricity in the community school, the matter was referred to employees of the SNRA and an electrician working with USAID. A wind-driven generator (similar to those operating successfully in nearby Huatajata) was considered but subsequently rejected in favour of large kerosene lamps, because Visalayans were at the time unwilling to cooperate either financially or manually and no resident of the community was capable of carrying out

essential repair work to mechanical equipment.

Qualities of character on which to build a better future

To all outward appearance the section of the lakeside under close scrutiny is a community developer's paradise. Chua Visalaya and Llamacachi lie adjacent to a busy thoroughfare and within easy access of the unchallenged centre of national social, political and economic life. From the standpoint of the individual 'culture broker' both communities are physiographically and demographically 'manageable', if not ideal. Settlement in the freeholding is strongly nucleated, a factor likely to facilitate initial contact between developer and 'recipients' and the subsequent planning of work operations; even in the ex-hacienda homesteads are less scattered than is the norm in more remote Altiplano communities. New adobe buildings, bicycles and fields of onions are but several features of the contemporary landscape calculated to strike the eye of the casual visitor whilst at the same time being indicative of the lakeside communities' receptive attitude towards change and innovation. Furthermore it is wholly unnecessary for any Village Level Worker 'to stimulate the villagers to become aware of their problems, express the needs they feel' (p.241): in both comunidad originaria and ex-hacienda, campesinos are fully 'aware' of their own 'problems' and 'needs'. They know what they want and are vociferous about what "they" (the central government) should do in order to raise living standards. Any outside proposals to instigate building programmes in compliance with campesino requests or demands will almost certainly be greeted enthusiastically.

However, once he begins to look beneath the surface, even the most optimistic community developer would find it difficult to avoid a sense of frustration and depression at the communities' recent history of non-cooperation and active resistance, at the numerous obstacles - some of them seemingly insuperable - outlined earlier in the chapter and, above all, at the bitter feuds interrupting the smooth flow of community life. Indeed, such a person might be forgiven for concluding that his task is a hopeless one insofar as Chua Visalaya and Llamacachi are concerned.

Yet rarely does one encounter a small, tightly-knit rural community entirely free from dissent; this is no less true in the developed than the developing world. Whilst it would be futile to ignore such cleavage,

nothing of practical value can be gained from escessive despondency. In the writer's opinion, despite a post-revolutionary record of setbacks and failures, lakeside communities offer considerable scope for further development; moreover, there are several signs that the cooperative spirit essential for the completion of community projects is dormant rather than dead. Events of the past twenty years have proved lakeside campesinos to be endowed with certain solid character traits on the foundations of which a more comfortable and prosperous future could be constructed. Particularly is this so of Llamacacheños; the present researcher was left with a deep and lasting impression that the community possesses qualities of initiative, expertise and stamina sufficient to withstand any temporary disaster, such as the collapse of the onion trade.

Whilst it is conceivable that during the last days of Hacienda Chua's existence the patrón manipulated the fiesta institution in order to perpetuate discord amongst his tenants, thereby diverting attention from himself and the casa hacienda (Erasmus, 1967, p.36, graphically depicts hacienda houses as 'monuments of feudalism'), today it is imperative for any would-be community developer to identify and build on the few surviving unifying elements within the community structure. In the present writer's estimation, an all-important positive factor in the two communities under consideration is that of community pride. Regardless of total disharmony, internal struggles for prestige, family quarrels, etc., the vast majority of campesinos in Chua Visalaya and Llamacachi alike are intensely proud of their own community's achievements and quick to come to its defence. They are at all times anxious to present a united front to the outside world and, as already seen on a variety of occasions, not to provide their neighbours with just cause for adverse criticism: "It would be a shame if this question were not solved. What would our neighbors in Chua say if we are thus disunited?" (a remark made at a community gathering by Llamacachi's corregidor and quoted by the Buechlers, 1971, p.59). In the comunidad originaria sentiments of pride and antagonism towards local ex-haciendas are especially marked; indisputably, feelings of superiority are closely related to the community's protracted fight for survival as a separate, autonomous entity (p.70). Hence, being themselves convinced that Llamacachi should have been permitted and furnished with the necessary wherewithal to construct its own nuclear school, comunarios had in the late 1950s to be compelled to assist with the school building programme in contiguous

Compi (p.157). No less in Chua Visalaya, rent apart as it is by disputes over land ownership, the ex-colono's strong sense of allegiance to the ex-hacienda as a social and political unit cannot fail to impress outside observers: pride is focused on the attractive-looking primary school, on Visalaya's prospering football team 'The Strongest', and on the community's widely-reputed band of instrumentalists. In certain instances community arrogance and determination have been rewarded. For example, laying aside internal divisions and inter-sectional differences and firmly believing that 'cantón capitals have all the advantages and progress' (Buechlers, 1971, p.65), Visalayans joined forces with campesinos from other sections of Chua in an unyielding bid to secure cantonal status; in 1966, after a prolonged battle, Chua was granted the title of accessory cantón.

"At the moment the people of Visalaya are more united than I remember. In Holy Week both Llamacachi and Visalaya took part in the cantonal sports festival. People came from as far away as La Paz to judge the events.... the sports lasted from the Thursday until Easter Sunday. In the end 'The Strongest' emerged as champion football team and a judge awarded Davido [the notary] a diploma of honour for his good performance" (translation of a passage from a letter written by the researcher's interpreter in April, 1972). Clearly, it is to the benefit of community developers to openly encourage healthy inter-community rivalry, e.g., by sponsoring soccer matches. Without any doubt Compi's popular folklore festivals have in recent years been instrumental in promoting a competitive spirit conducive to community cohesion and interaction: in 1971 all Llamacacheños expressed pride in the fact that one of their number should have been crowned as Reina de la Papa (Potato Queen). It may not be strictly ethical to persuade campesinos to lend their whole-hearted support to development schemes from the motive of gaining a lead over other lakeside communities, but it is this type of approach that is most likely to result in the active collaboration necessary for getting projects off the ground.

Baumann (1970, p.195) reprimands social scientists for being 'wont to romanticize' 'ayni and minga', (see p.233): similarly, Flores et al. (1963, p.20) maintain that 'Without leadership and planning, they [Bolivian peasants] are loath to work together, especially since the land has been broken up and the individual portions are so small'.

Certainly, the confident hopes of leading politicians, that traditional patterns of mutual aid would guarantee the success of the agrarian cooperative movement, have been dashed: in the opinion of Flores et al. (p.21), 'The psychology of the people is basically opposed to cooperativism. They have been too often cheated and so trust no one in a position of authority'. Be this as it may and not discounting the factor of community strife, social cohesion based on close kinship ties remains a vital force in the lakeside area. On several occasions the present researcher observed upwards of ten men and boys constructing adobe houses in accordance with ayni or minka commitments. The photograph on page 128a, illustrating the ploughing and planting of a field by members of Cooperativa Chua Limitada and their immediate families, is sufficient proof that labour can still be mobilized for community tasks. Whilst nobody could deny that cooperative and syndicate meetings occupy too much work time in the ex-hacienda remarks made by neighbouring Llamacacheños, to the effect that all Visalayans became exceedingly indolent once their obligations to the patrón ceased, must be regarded sceptically. A six months' observation period leads the writer to concur with Osborne that: 'the Indian belongs to the human type capable of exceptional physical endurance; his strength is not extraordinary, but his stamina is astonishing' (1952, p.207). Conducting research in the Yungas, Léons found (1970)[30] that 'the most crucial value was linked to community judgement concerning whether or not an individual was hard-working, or lazy.... one who was judged to be lazy, no matter how quietly he lived, could never aspire to high prestige'; this applies equally to the campesinos of the lakeside region.

According to Heath (1966),[31] 'Increased education and participation in sindicatos have produced a generation of politically aware campesinos, who choose effective home-grown leaders'. Erasmus et al. (1969) question how far the 'influence' of such individuals should be 'used for undertaking rural development projects', suggesting tentatively that 'with careful direction, they could presumably become a valuable asset to rural development'. Peace Corps/RISM investigators are more dogmatic in their approach: they conclude that community leadership is an essential 'mechanism for alerting the community system'. To them, the community leader's role is 'to identify potential or developing problems, alert the community to them, and attempt to mobilize community resources to meet these problems' (1969, p.321). In neither of the

communities studied have community leaders been 'produced' by Heath's 'sindicatos'. (In common with the mass of Altiplano comunidades originarias, associating sindicalismo exclusively with the process of land redistribution, Llamacachi has never considered forming an agrarian syndicate. Chua Visalaya's sindicato, partly by reason of its stormy career, has failed to provide a 'good channel for brokerage'. Successive agricultural secretaries have made little effort to function as agricultural extension agents and, as seen in Chapter V, a number of secretarial posts became redundant in the group's formative years). On the other hand, it is clearly apparent from what has already been written that lakeside campesinos are more 'politically aware' than ever before and leaders of community opinion are not easily daunted by Paceño officialdom: for example, aided and abetted by local ex-colonos and UMSA students, Huatajatan campesinos attempted in 1971 to expropriate property belonging to the Baptist Mission, declaring that they entertained no respect for the Agrarian Reform Decree nor for any city lawyer.

Wolf insists (1956)[32] that: 'In all small peasant communities, Indian, mestizo, or mixed, there are "individuals" who are able to operate both in terms of community-orientation and national-oriented expectations.... They become theeconomic and political 'brokers' of nation-community relations... They know how to manipulate personal and traditional ties in the peasant village but also how to translate these into a different kind of power on the outside'. Unfortunately, in Chua Visalaya internal political struggles have so far engaged the attention of persons who might otherwise have been inclined 'to mobilize community resources'. However, in Llamacachi the corregidor, the TDC, the researcher's translator and several other comunarios command respect, have proved themselves more than capable of influencing community and public opinion and have already made positive contributions to their community's socio-economic development.

In conclusion it must be said that beyond all doubt the greatest hope for the future lies in the flexibility of the lakeside family and in the younger generation of campesinos. As the Buechlers comment (1971, p.104): 'One of the most adaptable behavior complexes in Aymara society is the family... Family flexibility manifests itself in migration and marketing... The networks of social relationships made possible through ties with migrants can thus be seen not only as an

adaptation to changing situations but as a mechanism promoting change as well' (see p.214). Whilst, understandably, the better-educated, progressively-minded young campesinos are deserting the lakeside in ever-increasing numbers, it does not follow per se that their opportunities for directing the course of socio-economic development in the communities of their birth cease with migration to La Paz. As previously recorded, some elderly comunarios allege that they have carried out structural improvements to their houses chiefly in order for their sons to impress Paceña fiancées. Curtains, spouting and chimneys are but a few of many appurtenances to have entered the community because Llamacacheños have been eager to imitate the life styles of city-based relatives. Furthermore, young migrants have contributed towards the success of the Compi folklore festivals and have intermittently organised football matches in lakeside communities, thereby fostering a competitive spirit and strengthening community pride.

As only to be expected, it is amongst the younger element of the population in both Chua Visalaya and Llamacachi that one encounters the more receptive attitudes towards change and innovation. The Misión Andina recognised the part young campesinos could play in stimulating development within their own communities: 'One plan is to recruit groups of young Indian men and women who will come there [Pillapi] for training in the rudiments of agriculture, health and education and then return to their own communities to put their knowledge into practice' (quoted by Alexander, 1958, p.249). It has been seen that several public-spirited Chua Visalayan youths are eager to undertake the four years' practical course at Belén to enable them to assume the roles of extension agents and improve farming standards within the community. Moreover, whilst the mass of elderly campesinos live solely for the present (as they have always been accustomed to do), younger Chua Visalayans and Llamacacheños are beginning to adopt more responsible attitudes towards the future, e.g., by thinking in terms of the advisability of completing military service and saving money prior to contemplating marriage, or of limiting the size of their families to forestall economic hardship. In pre-reform times it was exceptional for young folk to air their viewpoints in public, let alone exercise authority; with the extension of rural education facilities, the introduction of conscription and increased mobility it has become inevitable that the younger generation give vent to their opinions, take the initiative and occupy positions

of responsibility. 'New leadership requirements, such as literacy, force the community to turn to young men and bypass older men, the once acknowledged leaders. New occasions and new structures of leadership have intruded into the community' (RISM/Peace Corps, 1969, p.323). In recent years, because of their expertise in marketing and their families' dependence on their entrepreneurial exploits, young Llamacacheñas have also been accorded greater respect by community elders than would have been conceivable in pre-revolutionary Bolivia. The bargaining skills, perseverance and determination displayed by these girls in the course of negotiating market deals are qualities which could indeed prove invaluable to the community developer.

'Constructing a strategy of change'

In the present researcher's opinion, even the best-briefed community developer would do well to study the conclusions reached by the RISM/ Peace Corps Bolivia Project, 1969; rarely have investigators exhibited such perspicacity when attempting to analyse the problems involved in the community development process. The report is emphatic that 'community organization is the central factor in coping with local problems'. 'Improved health and education, agricultural technology, aspects of economic production, distribution and organization, all lend themselves to planning for action at the community level' (p.304). It recognises the indisputable fact that 'In all communities there is a focus of concern on a small range of problems' (p.308). Furthermore, 'there is generally not one solution to a given community problem, but a range of solutions, each with different requirements, different consequences, different degrees of attractiveness' (p.321). In order that the rural community derive the maximum benefit, it is important that volunteers 'work on specifiable, discrete, manageable problems'. Some problems are exceedingly complex and their remedies lie outside the scope of the individual; they call for close cooperation with national agencies. For example, to tackle rural health problems a 'multi-faceted' approach is essential: 'The specific measures needed would be many, the establishment of nutrition programs, the initiation of insect and rodent control, vaccination against infectious diseases, the establishment of treatment clinics, and so on. These measures involve very specific technical procedures, known and theoretically available' (p.320). (In Baumann's experience (1970, p.194), 'the bottleneck appeared at

the level where technical advice beyond the capability of the local worker was needed'). In rural Bolivia low educational standards pose a restraint on the methods which can be used for introducing change: this unfortunate situation the Project attributes to poor facilities ('Many are novice teachers. Their salaries are meager, they are provided limited and often inadequate materials and aids in their teaching, the physical plant is often a make-shift affair').

According to RISM/Peace Corps researchers, the community developer must endeavour to inspire confidence, 'to develop a sense of responsibility and integrity within the community' and to avoid statements and actions in the least likely to cause offence and arouse antagonism. It is his task both to interpret the community's problems and needs and to devise effective means of organising 'collective effort for community goals'. 'Trained personnel, plus command of even a few materials, can significantly aid these rural communities <u>if</u> the problem and its solution have been correctly analyzed in relation to potential community response' (p.309). Miscalculations can have disastrous consequences: 'Only after a considerable expenditure of work by the community did project officials face the fact that extensive financing would have to come from the community' (the reference is to a project aimed at installing a reliable water supply system in Coroico, Yungas). The community developer must make every effort to inlist the active support of those persons capable of directing local opinion and assuming leadership roles. At the same time he must remember to involve the community at all levels of decision-making; according to Powelson (1964)[33], active resistance towards Cornell University anthropologists was not dissipated until Vicosinos were 'allowed to make decisions in local government and share in greater profits'.

Priorities in Chua Visalaya and Llamacachi

Before recommending specific development projects appropriate to the needs of the two lakeside communities, it is the researcher's intention to review the contemporary scene from a geographical standpoint.

Beyond all doubt the gravest, most perverse of all problems confronting present-day Chua Visalaya and Llamacachi is an acute

shortage of land suited to cultivation purposes and the accompanying deterioration in man-land relationships. In both communities, tenure units are for the most part minute and exceedingly fragmented; soil erosion (especially on the overgrazed, stony hillsides) has accelerated to an alarming degree; labour productivity remains very low and disputes over land confound community life, at the same time consuming valuable time and money. Some of the diverse means whereby this depressing situation could be ameliorated were suggested on page 243; output could also be raised as the result of a concerted effort to remove large stones/rocks to the valley sides, so extending the effective area of cultivation; recommended artificial fertilisers could be applied to regenerate worn-out soils; the possibilities of adopting dry farming techniques might also be investigated. It is just conceivable that in the ex-hacienda the reconstitution of the cooperative to include all ex-colonos could prove instrumental in restoring community cohesion (though this is unlikely to occur since the $ b. 1500.00 (approx. £53.50) entry fee demanded by present members of Cooperativa Chua Limitada represents an impossible sum for most syndicate members). Be this as it may, it is more than obvious that there is not and never could be a perfect solution to 'the land question'; it is hard to imagine a time when inter-family quarrels over plots of ground will cease to be a feature of Llamacacheño life, whilst no form of land settlement could satisfy the entire population of Chua Visalaya. As Urquidi (1961)[34] reminds us, 'no amount of land distribution will solve the problem of minifundios'. Likewise, Clark (1970, p.86) acknowledges that 'at certain points [in rural Bolivia] it is not possible to settle all peasant families on quantities of land necessary for the creation of "economically viable" farms'.

Burke (1970)[35] discovered that 'the Bolivian ex-haciendas [i.e., in the Lake Titicaca region], on the average, are twice as productive with respect to land and one fourth as productive with respect to labor as the Peruvian haciendas'. Nowhere could Thiesenhusen's perceptive comments on Latin American agriculture be more applicable: 'Capital which increases yields per acre (fertilizers, improved breeding stock, hybrid seeds) must take precedence over most machines which are primarily labor saving. A strategy which encourages rapid substitution of agricultural machinery for farm labor will increase joblessness and migration' (1967)[36]. The change over from traditional

crops to labour-demanding ones - Llamacachi's onions provide the perfect example - can certainly alleviate problems of rural under-employment (simultaneously raising the volume and value of farm produce without bringing more land into cultivation) but cannot eradicate them.

Whilst Edelmann (1967)[37] affirms that 'Besides promoting national unity, colonization would also relieve the heavy pressure on the overpopulated Altiplano and western mountain valleys' (a viewpoint still adhered to by politicians), Dozier's assessment (1969)[38] is more realistic: 'transportation and marketing conditions are still not really good enough to encourage colonists to remain' - for any colonist to decide to settle requires 'un poco de valor'. It is difficult to think in terms of <u>any</u> incentive sufficiently powerful to entice Chua Visalayans and Llamacacheños to Yungeño colonization zones, thus alleviating land pressure at home. On the other hand, as already demonstrated, migration to La Paz has for a number of years mitigated problems of economic hardship and <u>superpoblación</u> in the <u>comunidad</u>. Regardless of high levels of urban unemployment (though few Llamacacheños have to date experienced difficulties in obtaining reasonably well paid work), many factors - the ownership of family houses in La Paz, the value placed on city education and an expansion in market activities amongst them - will ensure that rural-urban migration gathers momentum. It appears more than likely that, with the passage of time, outward migration will also assume a greater significance in the life of Chua Visalaya. Meanwhile, problems of rural unemployment and underemployment remain. Instead of dwelling incessantly on internal struggles for land, and in a bid to prevent excessive rural depopulation becoming a reality, it would be far more advantageous for lakeside <u>campesinos</u> to collaborate with community developers in investigating possible alternative outlets for labour within the immediate vicinity.

It cannot be denied that over the past twenty years unprecedented changes have occurred in lakeside agriculture. Llamacachi's traditional pattern of farming has been radically transformed: ancient crop rotation systems have been abandoned; onions have superseded the time-honoured potato; improved varieties of seeds and tubers are being

habitually planted by comunarios, the majority of whom appreciate the short-term advantages to be derived from applying artificial fertilisers to their fields. Most striking has been the replacement of subsistence farming by a thriving cash economy geared to the Paceño market. However, the agricultural economist visiting the lakeside region for the first time sees the picture in a very different light.

The mass of Visalayans and a few Llamacacheños persist in sowing seeds preserved from one year to the next, irrespective of the fact that they may already be infected; hence, miserably low yields and crop disorders are perpetuated. Except on cooperative fields, artificial fertilisers are seldom used in Chua Visalaya and, in Llamacachi, only on lakeside plots devoted to onions and potatoes, consequently, soils are both deficient in vital minerals (e.g., the absence of phosphates reduces the nutritional value of the herbage), and badly contaminated (a factor which the Director of the Belén experimental station holds partially responsible for the low quality of campesino -owned livestock). Animals are inadequately supervised and not infrequently trample mature crops; lack of fencing assists in the spread of contagious diseases amongst stock and tends to discourage any progressively-minded small-holders from investing in pedigree sheep. (According to the 1971 head of the British Agricultural Mission, there is little, if any, hope of improving livestock until some form of enclosure is introduced). Rocky hillsides and any valley lands left fallow for short periods are severely overgrazed; together with prolonged droughts this renders the thin topsoil friable and defenceless against the powerful erosive action of winds and occasional storms. More affluent onion growers in Llamacachi lavishly apply selected fertilisers, insecticides, etc., solely to obtain greater yields; in neither community is there any real awareness of the harmful effects of overcropping and overgrazing, nor of the need to conserve natural resources for future generations. Irrigation ditches in Chua Visalaya are poorly maintained; in both communities, especially during the last few months of the dry season when wells dry out, water for agricultural purposes is at a premium. The stream passing through the ex-hacienda and subsequently crossing Llamacachi's orillas is often dammed at certain points for chuño preparation; stagnant water also lies in deep hollows left by removing earth for adobe bricks. Primitive digging sticks and clod breakers are still used for most field tasks, modern spades being retained purely for construction work; oxen-drawn ploughs barely scratch the surface. Taking into account all the above factors it is hardly surprising that, with the exception of onions and potatoes in Llamacachi, crop yields are normally extremely low and total crop

failures by no means unknown. Llamacacheños currently earn a sizable income from onion sales yet, despite the careful application of nutrients, over-specialisation can only prove injurious to the soil in the long term. In a sense, although no comunario recognises the fact, the community is poised on a knife edge; competition from envious neighbours and from large-scale producers in Río Abajo (on the outskirts of La Paz) could lead to a glut in the market and have disastrous implications for Llamacachi.

In ex-hacienda and comunidad originaria alike livestock are, generally speaking, of inferior quality and undernourished; by reason of their debility they are highly susceptible to disease. Deaths amongst young animals are commonplace, largely because malnutrition makes milk production impossible (though in some cases respiratory difficulties are more significant); a shortage of milk and dairy products for human consumption helps to account for a marked deficiency of calcium in the diet of lakeside campesinos. Nearly all livestock lose weight in the dry winter months when fodder is scarce; silage and legume hay are virtually alien to both communities. The services of veterinary surgeons are rarely requested and few smallholders appear anxious to avail themselves of the inexpensive vaccines and medicines procurable either from the local TDC or from Belén. Unnatural animal losses are accepted by the vast majority of lakesiders as the irreversible state of affairs: " - - is the brujo who's particularly good with animals... he always knows whether they will live or die" (the researcher's translator). Whilst Osborne claims that 'The Indian... is never known to show cruelty to his animals' (1952, p.212), undue stone-throwing and the tying of hind feet to curb straying frequently lame animals: likewise, under-feeding of stock is no mark of efficient animal husbandry.

In neither community is there any regular culling or selective slaughtering of livestock; rather, animals are sold as the necessity arises, e.g., to enable their owner to sponsor a fiesta or pay off a debt. Oxen consume valuable foodstuffs, damage crops and even endanger human life (p.123). Sheep are 'sheared once every two years with the aid of a piece of broken glass or tin' (p.128); whereas a pedigree sheep (requiring the same amount of nutriment)

gives five or six pounds of wool per clip, it is unusual for a criollo one to yield in excess of two pounds.

Farmers in all lakeside communities are subject to irregular and unavoidable setbacks on account of climatic 'plagues' viz., lake inundation, freak winds and hailstorms; yet there is no crop insurance programme guaranteeing future credit in spite of crop failure. As already seen, although 'one of the key factors in progress and development in agriculture is the availability of credit' (TVA, 1970, p.27), such facilities are almost entirely lacking in Bolivia's campesino sector, a fact which García (1970, p.335) attributes to the Banco Agrícola's 'inability to face the elementary requirements of the agrarian reform'. Chua Visalayans and Llamacacheños are thus obliged to rely exclusively on small loans from members of their families or on forward sales, e.g., it is customary for onion vendors to buy crops per irrigation unit and pay the producer on return from market.

According to RISM/Peace Corps advisers (1969, p.308), 'The overriding attention [in those communities investigated] to water needs, and secondarily to electricity and health problems, reflects the marginal position of the rural community.... Water ranks high in all the communities, the singular problem to achieve this distinction'. Certainly, in Chua Visalaya and Llamacachi the conservation of water, especially in years of below-average rainfall, is a prime consideration. Whilst in former days a covered well beside Visalaya's hacienda house provided sufficient water "to run a bath", today water supplies for both domestic and irrigation needs are wholly inadequate. 'Potable water is a key element in the control of disease' (p.307); Visalayan and Llamacacheño campesinos continue to draw 'drinking' water from open, earthen wells and rarely boil it prior to usage.

From what has been written in previous chapters it is abundantly plain that a priority throughout the lakeside zone must be 'to uplift the physical well-being of human resources'. It has been shown that in both ex-hacienda and comunidad poor health standards pose considerable problems: diets are unbalanced and malnutrition an accepted feature of community life; a total lack of (and concern for) sanitation and hygiene is hazardous to human and animal welfare, whilst individuals expect members of their families to die from illnesses normally regarded as curable.

Potential community developers

It is plainly the duty of the researcher not merely to monitor socio-economic change but to make 'concrete suggestions' and recommendations; yet it is meaningless to attempt to do so without first pausing to consider whether or not there is any likelihood of such proposals being carried out and, if so, by whom.

Which individuals or groups of campesinos are best equipped to act as 'culture brokers' in Chua Visalaya and Llamacachi? 'Traditionally, of course, the broker was a patrón' (Wagley, 1964, p.45). It is patently obvious that Chua Visalaya's ill-fated agrarian syndicate has failed miserably to step into the shoes of one of the most energetic, far-sighted 'culture brokers' in the lakeside region. It would be futile to expect the sindicato to provide any effective leadership in the direction of community development. One is inclined to hold out more hope for Cooperativa Chua Limitada. The organisation has already proved itself a potent political force to be reckoned with, has assimilated technological advice from Banco Agrícola representatives and has been trained to manage its own financial affairs; it will be interesting to follow its progress once the obligation to pay off a crippling debt is removed in 1974 (see p.209). It was pointed out earlier that Llamacachi is not handicapped by any lack of individuals more than capable of assuming leadership roles. Small groups of comunarios working towards common goals - on the lines of the loosely-knit cooperative created for the specific purpose of obtaining pedigree sheep and improved potatoes at reduced cost from Belén (p.133) - could have a marked impact on community life.

Within the immediate locality the Huatajatan Baptist Mission will continue to make its presence felt. Medical aid is available at the Huatajatan clinic as it has been for half a century; there are plans afoot to print more liturgical booklets in Aymara. Limited financial resources may persuade the mission to relinquish control of the Visalayan primary school; however, lakeside children will continue to attend the Huatajatan secondary school, at which every effort is made to provide instruction not only in academic subjects but also in health, sanitation, nutrition and house management (a task rarely undertaken by rural schools). In matters of hygiene and sanitation,

Huatajata has already paved the way for neighbouring lakeside communities; by 1971 a number of Baptist campesinos had constructed simple outdoor latrines. Similarly, NCDP stores in both Huatajata and Jank'o Amaya have for the last few years been performing an invaluable service by distributing prime quality seeds, artificial fertilisers, insecticides, pesticides, tools and pamphlets on farming topics; such activities will doubtless be extended.

Outside assistance might be expected to come from a variety of sources. It is perhaps unfortunate that the United States' Peace Corps was dismissed from Bolivia in 1971 on political grounds and is unlikely to be recalled[39], yet this is in keeping with present-day trends (e.g., both Peace Corps members and V.S.Os have since the late 1960s been excluded from Guyana). If 'one of PC/Bolivia's basic goals' was 'institution building' (Baumann, 1970, p.193), then, by participating 'in the first round-table discussions which led to the founding of the Programme' and by selecting and training the first Village Level Workers, the Peace Corps has achieved a noteworthy success. International volunteer organisations are, not unnaturally, laying ever-greater stress on the recruitment of well-qualified graduates rather than 'generalists with a lot of good will and a smattering of C.D. theory' (Baumann's expression). Alec Dickson, founder of both Voluntary Service Overseas and Community Service Volunteers (the home-based equivalent), has been invited to advise governments in a number of Third World countries (including Israel and Kenya) on methods of actively involving young nationals in the socio-economic development of their own countries. Regrettably, as Urquidi reminds us (1964), Latin American Universities - and UMSA is no exception to the general rule - suffer from 'academic isolation': the 'principal shortcoming is that they are out of touch with the communities they serve.... curricula and research projects should be oriented toward solving future problems of economic growth and social reconstruction with the help and advice of those actively engaged in such work'. However, Bolivian undergraduates have in the post-reform period lent enthusiastic and sympathetic support - at least, politically - to the campesino's cause; it is sincerely to be hoped that some of the more patriotically-minded students might come to the assistance of rural communities. A national volunteer programme organised along the lines of the British C.S.V. would have much to offer the Bolivian countryside.

Community development projects (i.e., in addition to the ambitious Yungeño road-building enterprises) have over the last few years attracted the attention of the Bolivian Army: during the researcher's stay in Llamacachi, an army corps, under the supervision of United States personnel, made detailed socio-economic surveys of both Huatajata and Huarina as a preliminary to identifying and satisfying the communities' most pressing needs[40]. Sadly, Chua Visalaya's sole contact with the military has not been to the community's benefit; the Tiquina Naval force was compelled to abandon plans for constructing a clinic because of lack of cooperation on the part of the intended 'recipients' (p.154).

Unquestionably, one of the greatest hopes for community development within the lakeside area must continue to lie in the National Community Development Programme and its extension agents. 'Project 21' (p.203) has tremendous potentials, especially if a workable means of extending credit to individual campesinos is devised. Overseas aid programmes, e.g., Oxfam's Proyecto Extensionistas Cooperativas, operating in conjunction with the NCDP could also exert a powerful influence on the direction of rural change and development.

Recommendations

To avoid repetition and tedium no attempt will be made in the concluding section of this chapter to present the reader with an inexhaustible list of measures that could be taken to improve living standards and raise income levels in Chua Visalaya and Llamacachi. The problems and wants of each community, as specified by the inhabitants themselves, were recorded in Chapter VIII: the researcher has already analysed the present state of farming and intimated how many of its defects might be redressed. Recommendations will not necessarily be placed in order of priority. Beyond all doubt there is an urgent need for intervention in both social and economic fields; on the other hand, it would be virtually impossible to decide whether improvements in health or agriculture should take precedence. It could, of course, be argued that recommending specific projects is at all events superfluous - that to make practical suggestions as to how innovations can be introduced or development programmes accomplished is of greater value.

1. Health care

To expect even the most carefully planned health campaign to be an unqualified success would be exceedingly presumptuous. No person, whatever the depth of his conviction, has the right to force obdurate campesinos to avail themselves of medical facilities against their will; half a century has been insufficient time for the Huatajatan Baptist Mission to win the arduous struggle against Aymara prejudice, superstition and fatalism. Observations and interviewing lead the present researcher to conclude that infant mortality and tuberculosis rank as the two outstanding problems requiring immediate attention. The suggestion (made by more than one medical practitioner consulted) that a high infant mortality rate provides a natural, even desirable safeguard against overpopulation, is indefensible on humanitarian grounds. In the writer's opinion, a respected, well-informed, mobile, female Village Level Worker assigned to lakeshore communities between Huarina and Tiquina (and preferably native to the area) could perform an incalculable service both to entire communities, e.g., by advocating the boiling of contaminated 'drinking' water and the construction of simple latrines, and to individual campesinas, by holding ante-natal classes in child care, house management and hygiene. (If more rural teachers with a basic training in home economics, etc., were willing to assume the weighty responsibility for inculcating upon their pupils the need to accept and maintain higher standards of health and nutrition, such measurs might not be necessary). A tuberculosis eradication campaign, such as the one envisaged by Oxfam, would certainly be expensive to conduct but must be considered a priority in the lakeside region as a whole. Whilst 'Given the drugs and time nothing else is really essential for the treatment of the patient with advanced tuberculosis' (Cooper, 1968)[41], the mass of campesinos have come to regard debilitating chest and lung disorders as incurable, if not normal, health conditions. In both Chua Visalaya and Llamacachi this deplorable situation is exacerbated by the high susceptibility to disease generally: 'Measles and whooping cough [of common occurrence in lakeside communities] frequently have a disastrous effect, turning an uncomplicated primary tuberculosis lesion into a rapidly fatal disease' (Cooper, p.8).

2. Alimentation

The intimate relationship between nutrition and health has been stressed on several occasions. As previously recorded, a number of factors, viz., increased mobility, an expansion of marketing activities and the opening of community stores offering an ever-widening range of canned and dry foodstuffs, have in the post-reform period served to relieve the monotony of the traditional lakeside diet; nevertheless, malnutrition and diet deficiencies continue to sap vitality and lessen the campesino's resistance to infection and disease. Any nutrition programme must obviously take into account age-old customs, prejudices and farming practices. If only Llamacacheños and Visalayans could by some means be persuaded to reduce total numbers of livestock and concentrate instead on raising prime quality animals to supply dairy produce for human consumption, the problem of a serious calcium deficiency might be resolved. At the same time lakesiders should be encouraged to modify well-established market patterns, e.g., to conserve home-produced eggs for household needs and compensate for the resultant cash loss by selling additional quantities of roots and cereals. Fresh water fish is readily available at low cost in the Huatajatan market and can be obtained by barter at the lakeside; in view of its high protein content it should not be regarded solely as a delicacy but as an essential diet component. Of late some Llamacacheños have ceased growing quinua, dismissing it as "a poor man's crop": conversely, TVA agronomists point to its exeptionally high nutritional value (especially in terms of protein), suggesting that it could provide an excellent substitute for wheat flour. It is strongly to be recommended that the new improved, very high-yielding and low-saponin variety of quinua be introduced into the communities; there is no reason why some of the less-badly eroded hillside terraces should not be devoted to such purposes.

3. Water control

A wholly inadequate supply of water both for domestic and irrigation purposes acts as a veritable stumbling block to development in ex-hacienda and comunidad originaria alike. Water for household usage has normally to be transported great distances in tins or buckets; towards the end of the dry season (i.e., in the months from August to November) it becomes an extremely scarce commodity. Clothes,

sometimes utensils, are washed in the stream flowing through the communities (although a growing number of Llamacacheña onion vendors prefer to take advantage of their weekend excursions to the city for washing clothes)[42]; the same stream also serves as the major source of supply for livestock and for crops during drought periods. According to Osborne 'The Indians still retain their old skill in irrigation and have an astonishing knowledge of the ways of water' (1952, p.214); this does not appear to be the case in the communities studied. The rise of the onion trade is unquestionably to blame for a gradual worsening of the situation over recent years (campesinos maintain that nursery beds require a constant supply of water); it is also probable, as was alleged by the corregidor, that the planting of eucalyptus trees is mainly responsible for the drying out of certain wells in Llamacachi. Yet it should be remembered that with respect to water resources Llamacachi and Chua Visalaya enjoy considerable advantages over the vast majority of communities on the dry, wind-swept Altiplano: Lake Titicaca itself is close at hand, the water table in both communities is accordingly high and numerous gushing springs are to be found at the head of the Visalayan valley and up in the llama pasturelands (p.51).

At the time of the researcher's visit in 1971, the local TDC was seeking expert advice on the feasibility of creating a small reservoir in the environs of several such springs and piping water approximately $1\frac{1}{2}$ miles down to Llamacachi for the purpose of ensuring a steady supply of water during periods of drought (see p.52). Such a project certainly has possibilities but would be too ambitious and costly to accomplish in the near future; it is unlikely that comunarios would be prepared to cooperate either financially or manually, especially as the benefits would not be felt immediately. Bearing in mind the flatness of the orillas and the campesinos' claim that the lake water is not sufficiently saline to be detrimental to plant growth, it would seem more practicable to erect a simple pump at the lake's edge and extend the existing, somewhat haphazard system of irrigation channels. Any elaborate scheme would be inappropriate; whilst the NCDP undertakes to make a 50 per cent contribution towards worthwhile water projects, campesinos would be unwilling to satisfy their part of the bargain and incapable of carrying out routine maintenance work (RISM/Peace Corps advisers

reported that several water pumps installed by volunteers had ceased to function 'purely for lack of greasing'). A number of deep, stone-walled, covered wells should be drilled at strategic points in each community; the NCDP, Bolivian Army or United Nations (already operating a well drilling campaign on the Altiplano) might be expected to provide the necessary skilled manpower and equipment. Again, the simpler the enterprise the greater the chance of success: 'It was also discovered that simplicity of approach and equipment was the best solution. Where possible, machinery must be rugged and uncomplicated' (Ketcham, 1970, writing about well drilling experiences in the Malagasy Republic)[43]. Finally, although campesinos suffer tremendous losses from crop damage at times of lake flooding, to construct any effective barrage as a preventative measure would call for resources far beyond the means of Visalayans and Llamacacheños; there is more than an element of truth in the lakesider's contention that the silt cover left by the retreating flood waters helps to compensate for the temporary distress caused by inundation.

4. Electricity

'The lack of electric power is one of the most critical gaps in Bolivia's infrastructure.. the development of the industrial, agricultural and mining sectors continues to be restricted by the inadequate power supply' (Peace Corps, 1970)[44]. Despite the fact that a substantial number of Visalayans and Llamacacheños regard the installation of electricity (more specifically, lighting) as a prime requisite (p.226), it is improbable that their ardent hopes will be realised for some time i.e., until a full-scale programme of rural electrification is put into operation. On the other hand, Llamacachi and Chua Visalaya may have to wait fewer years than less advantageously-sited communities. In view of Huatajata's population growth, increasing prosperity and the ever-expanding activities of its flourishing Yacht Club, the installation of an adequate power supply in the community would appear imminent (the Baptist Mission and Yacht Club currently use their own generators); hence it is conceivable that neighbouring communities should receive electricity from this source. It is also just possible that power lines might be extended from the Matilde zinc mine to this section of the lakeshore; several communities have recently benefited in this way and it should not be forgotten that Chua Visalaya has already established contact with Mina Matilde for the

purpose of selling eucalyptus timber (p.60). Likewise, the construction of a rural crafts centre or a textile factory within the locality would doubtless hasten the advent of electricity.

5. Arable farming and soil conservation

It goes without saying that in both communities output could be appreciably increased and crop disorders averted by planting prime quality seeds and tubers and by applying carefully selected artificial fertilisers, insecticides, pesticides and fungicides. It is essential to convince many comunarios that infected oca, cañahui, broad beans, etc., contaminate the soil and can eventually endanger prized onion and potato crops; in the ex-hacienda tactful persuasion along these lines is even more necessary. Campesinos in Chua Visalaya and Llamacachi alike must be actively encouraged to make better use of the advice on crops, fertilisers and farming techniques currently available from NCDP/Peace Corps pamphlets (sold in Huatajata and Jank'o Amaya), from the local TDC and direct from Belén's Soil Section; it is to be hoped that the comprehensive ten-years' 'fertilizer program and education calendar' for the Altiplano, devised by the TVA in 1970, will be put into operation at an early date.

In the lakeside region generally there is a pressing need for further crop experiments and demonstrations on the holdings of progressively-inclined farmers. TVA experts suggest that more could be achieved were community developers to offer incentives e.g., small prizes for highest crop yields would induce campesinos to adopt newly-learnt techniques. Of particular value to Llamacacheños and Chua Visalayans would be a project aimed at augmenting supplies of winter fodder: it should emphasise the advantages of including legume hay in rotation systems and incorporate demonstrations on silage making. Long-term experiments oriented towards the regeneration of badly eroded hillside terraces are equally desirable; as Flores et al. point out (1963, p.9), 'one of the most vital areas in which farmers need technical counseling is soil conservation practices'. The dangers implicit in Llamacachi's over-specialisation in onions have been stressed on a variety of occasions; comunarios should be given every encouragement to diversify crop production, i.e., to experiment with other horticultural crops, especially carrots, radishes and cabbages, already being cultivated successfully in Huatajata.

6. Livestock

It has been shown that in both Chua Visalaya and Llamacachi animal losses resulting from inadequate feeding, salt deficiencies and infectious disease are excessive; overgrazing due to overstocking and a lack of substitute foodstuffs exacerbates an already-critical problem of soil exhaustion, whilst wool, milk and meat yields are miserably low; in no sense could today's sytem of animal farming be considered an economic proposition. To persuade campesinos to cut down total numbers of livestock and rear fewer, healthier beasts is clearly a prime necessity; as already demonstrated, it is a task fraught with difficulties. 'To many campesinos, the sheep are more of a status symbol than an economic asset; i.e., the bigger the flock, the more respected one is in his community' (Baumann, 1970, p.194). Unfortunately, the few progressive comunarios who have taken a lead by jointly purchasing Corriedale sheep from Belén (a research station that has devoted much time and attention to improving Altiplano stock) have derived little benefit from their initiative; malnutrition and high susceptibility to infections (although some sheep are vaccinated there is no form of pest control) are conditions common to pedigree and criollo animals. Clearly, what is required in the lakeside region is a composite programme organised by 'sheep management technicians who explain better breeding, better parasite control, better shearing, better pastures' (Baumann, p.194). A number of Llamacacheños interviewed in 1971 specified the need for a sheep dip; such an innovation - could sufficient enthusiasm be aroused for the necessary financial backing and construction work - is to be strongly recommended. In view of the remarkable achievements of Chua's last patrón (Ch.IV), there is no reason why sheep should not prove as valuable a source of income to campesinos as have onions; good quality wool (as distinct from the inferior, carpet-grade wool produced at the present time) could provide a sound basis for a small rural crafts industry. Pig production could also be commercialised as in Batallas and Huatajata; several comunarios have already bought pedigree animals and are feeding them supplementary rations but do not appear to appreciate the importance of disease control. The expediency of reducing numbers of oxen and concentrating instead on raising a few pedigree dairy cattle has been emphasised previously.

7. Credit facilities and technical advice

'Two very potent growth arresters in the Bolivian agrarian sector are

the lack of capital and modern technology' (Burke, 1970, p.444). The vital necessity of making small loans at low interest rates available to the Bolivian peasant cultivator has received attention in the preceding sections of the chapter; it cannot be exaggerated. 'A well organized and administered farm credit program could provide a means for farmers to expand and diversify crops to increase their farm productivity and to broaden the local market demand for consumer goods. The farmer then has more money to spend, a larger demand develops for consumer goods, and industrialization is stimulated' (TVA, 1970, p.28). As already remarked, 'Project 21' may go some way towards solving the crucial problem of inadequate credit services. Most desirable would be the development of a comprehensive rural banking system: 'The bank [Banco Agrícola] officials have indicated they would like to shift this responsibility for agricultural production loans to rural banks if and when they are established' (TVA, p.28).

'It is not necessary that the country [Chile] rely solely on Ingenieros Agrónomos for technical agricultural assistance. Lower level technicians with but one or two years in college or even trade school and with as heavy an emphasis on extension methods as on technical agriculture could perform an invaluable service and would not be separated by such a vast social gap from the people served'; Thiesenhusen's observations (1966)[45] are equally relevant to the case in hand. It is regrettable that as yet few campesinos from the lakeside have availed themselves of the four years' practical farming course offered at the Belén Farm Institute; several young Visalayans in 1971 expressed an eagerness to enrol but were prevented from doing so by lack of financial resources (the yearly fee at the time was $ b. 1200.00 i.e., approximately £43.0). It is greatly to be hoped that in the very near future community elders will be prepared to set aside their differences and agree to sponsor at least one young campesino. In order that the community at large derive maximum benefit from the student's newly-acquired theoretical knowledge and technical skills, sponsorship should be conditional on his consenting to remain in the community for a period of no less than two or three years after completing his course.

8. Promotion of rural crafts

In the present researcher's opinion it is unfortunate that several of Peace Corps/Bolivia's 'arts and crafts promoters who help with the marketing and improvement of local crafts products, especially alpaca, llama and sheep wool items' (Baumann, p.194) were never – at least, as

far as can be ascertained - assigned to this section of the lakeshore. Beyond all doubt, either a rural crafts centre at which home-woven articles could be bought by tourists or a small textile factory selling goods direct to La Paz could prove a tremendous asset to local communities. It is strongly recommended that the possibilities and potentials of such an enterprise be thoroughly investigated. Any worthwhile project must obviously take into account the need to organise the wholesale purchase of wool and the selling of finished products; by organising the manufacture and marketing of cushion covers, tapestries, etc., the Huatajatan Baptist Mission has already paved the way (pp.142-3). In the absence of the Peace Corps, it is questionable whether any organisation or individual would be prepared to instigate and invest in a scheme of this nature. However, since a leading politician assured the writer of the national government's willingness to "support" rural crafts in the lake area (i.e., in the hope of stemming migration to La Paz), it is feasible that at some future date the NCDP's activities might be extended in this direction.

To the geographer there would appear to be a number of factors favouring the development of a small-scale textile industry in the Chua/ Llamacachi neighbourhood. In the first place, some of the womenfolk within the region are highly skilled weavers and would require little, if any, further training; the aguayos woven by Chua Visalayans (see photograph p.142a) rival any made on the Altiplano. At present the campesina's profits are marginal; more often than not she is compelled to sell articles at unreasonably-low prices to middlemen because cash is urgently needed at home. Were a crafts centre to be opened, some of Llamacachi's most successful entrepreneurs could be gainfully employed selling woven and knitted items direct to tourists. Clearly, a well-organised rural industry would be instrumental in alleviating the serious problems of underemployment and in raising abysmally low income levels; no longer would Visalayan girls find it necessary to seek domestic work in the city. Whilst at the moment the inadequacy and inferiority of home-produced wool force Llamacacheñas and some Visalayans to make bulk purchase of low-priced, good-quality wool at regional fairs, a local textile industry would provide lakeside farmers with a powerful incentive to improve the quality of their stock and concentrate on wool production. Moreover, the communities are advantageously situated from the point of view of marketing. On the one hand they are within easy

reach of La Paz, the principal outlet for tourist goods; additionally, communities are adjacent to a busy road frequented by an ever-increasing number of Paceños spending holidays in Copacabana or southern Peru, by overseas visitors to the Lake Titicaca region and by Peruvian tourists. At certain times of the year, e.g., on the days of the Compi folklore festival and of pilgrimages to Copacabana, a rural crafts centre could be expected to operate a particularly lucrative trade. Finally, there is no need for the actual building to occupy precious farming land; in the researcher's estimation, the yard of Chua's old hacienda house would provide an ideal location.

9. Tourism

The South American Handbook for 1971[46] makes the pretentious claim that 'At Chua, on the lake, there is shooting, fishing, sailing...' What in fact the editor would discover were he to visit the Chuan waterfront would be a derelict estate house surrounded by rotting machinery, a half-built motel, several redundant stone piers and a disused boat factory together with a substantial quantity of broken tackle. Had the North American patrón not met with an untimely death in the later 1950s (p.37), the contemporary scene might have been markedly different; indeed, it is conceivable that Chua would by now have been the centre of a prospering tourist industry. Barbour's achievements are impressive by any standards: he played a dominant role in the formation of the Yacht Club (whose boat-house, but for the patrón's decease, would have been positioned in Chua rather than Huatajata), he ran a well-equipped boat factory eventually employing as many as 30 men, in Marca Chua he had begun work on a sizable motel designed with the foreign visitor in mind and he had constructed piers in Chua Visalaya and Chua Cayacota as a preliminary to developing lake sports. At the time of his death he was making elaborate plans to build a landing strip and purchase a small plane for conveying tourists direct from La Paz to Chua. One could imagine that were he still managing the empresa agrícola, Visalayan campesinos would be supplementing their income from farming in a variety of ways, e.g., as cooks, cleaners, handymen, boat men and boat builders. It is more than likely that he would have organised a rural crafts industry geared to the tourist trade.

Unquestionably, there is vast potential for tourism in the Chua/

Llamacachi region. In the writer's opinion, this is one of the most attractive sections of the lakeside; its beauty is enhanced by the mountains and by eucalyptus plantations. It is a convenient stopping place between La Paz and Copacabana; as already noted, several comunarios are accustomed to providing overnight accommodation for pilgrims. It is the perfect location for lake sports i.e., for the Handbook's 'shooting, fishing, sailing'. Yet it would be meaningless to recommend that the boat factory be re-opened, that work on the motel be resumed or a youth hostel built. Any such undertaking calls for considerable capital expenditure and is far beyond the means of the local population; the North American landlord was not only a man of drive and initiative but extremely wealthy into the bargain (he is said to have been a millionaire). It is, of course, possible that an organisation such as the Bolivian Tourist Board or an enterprising individual with financial backing, realising the advantages of the site, may purchase a strip of land and attempt to 'develop' it. Whether this would be desirable from the residents' viewpoint i.e., even taking into account the prosperity it could bring them, is an unknown quantity.

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Footnotes and References - Chapter IX continued

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CHAPTER X CONCLUSIONS

'We have seen the light and it is not our desire to be thrust back into darkness'

(Simón Bolívar)

In the preceding chapters of this dissertation the researcher has endeavoured to describe and analyse post-1952 socio-economic change in two Aymara communities of Bolivia's Lake Titicaca region. Notwithstanding the communities' present-day needs and problems, the magnitude of recent change is irrefutable; undoubtedly traditional modes of life have been disrupted to a far greater degree during the last two decades than throughout the entire two hundred-years period pre-dating the National Revolution. The more remarkable of the multifarious post-revolutionary changes overtaking Chua Visalaya and Llamacachi may be summarised as follows: improvements in housing standards and living conditions; the acquisition of material possessions virtually unknown to the peasantry in hacienda times; an extension of rural education facilities and access to city schools; the 'politicization' of the campesino; increased mobility; the replacement of subsistence farming by a thriving cash-crop economy in the comunidad originaria; a dramatic expansion of marketing activities both locally and in La Paz; and the creation of durable social and economic rural-urban ties. Perhaps most significant is the fact that, whereas formerly the two communities were to all intents and purposes divorced from the world beyond their physical boundaries, of recent years they have become integrated into the social, political and economic life of the nation[1].

A number of salient points, in the writer's opinion, have emerged from the study. In the first place, whilst it would be foolhardy to deny the persistence of inhibiting fatalism and superstition amongst the older generation of lakeside campesinos, it is abundantly clear that the Aymara is receptive to change and innovation. McBride, whose dictum - 'Nothing will induce them [the Altiplano Indians] to move' - was quoted on page 168, would have been astounded at the transformation. In Llamacachi, to a lesser extent in Chua Visalaya, migration to La Paz has become a well-established feature of community life; moreover,

rural-urban migration is proceeding apace, not solely in response to overwhelming economic pressures at home but equally because the values and aspirations of young campesinos are constantly changing. It has also been shown that changes seldom take place abruptly overnight; both communities are today passing through a transitional (sometimes painful) phase of adaptation and readjustment - new patterns are still evolving gradually. Not infrequently innovations are introduced as and when the need arises, e.g., the rapid development of Llamacachi's onion trade necessitated dislocating ancient crop rotation systems. As Thorn astutely remarks (1970)[2]: 'In retrospect, the 1952 revolution was more evolutionary than revolutionary in the economic sphere'. Certainly there would appear to be no lack of Buechler's 'continuities from the past' (see p.85) in either comunidad originaria or ex-hacienda. The importance of relating the change process to historical backgrounds has been emphasised throughout: no other logical explanation for Chua Visalaya's seriously lagging behind Llamacachi in the economic field was forthcoming.

The researcher's findings lead her to concur with Carter (1964)[3] that 'In spite of... involvement in the state mechanism... the peasant's concern is still almost invariably with local and not supra-community phenomena.. Tragedy to a neighboring community is looked upon with complete indifference'. Few onlookers could fail to be impressed by the lakesider's pride in the community of his birth and by his antagonism towards other communities in the neighbourhood. At the same time it is patently obvious that not all farming communities on the Bolivian Altiplano are - as has been rashly claimed by certain social scientists and politicians - 'integrated entities'; both of those investigated were seen to be split apart by violent land disputes and by conflicts attributable to discrepancies in age, educational attainment and religious belief.

Ample evidence has been produced to substantiate the researcher's original hypothesis that campesino attitudes towards change and progress are on occasions diametrically opposed to those of outsiders, be they government officials, representatives of overseas organisations for aid or research workers. In Chapter VIII it was demonstrated that members of Chua Visalaya and Llamacachi alike are fully aware of priority needs and problems at both family and community levels, i.e., the 'stimulating' services of the Village Level Worker (p.241) are superfluous. Regrettably, the campesinos' reluctance to set aside inter-family differences and

collaborate with would-be community developers is detrimental to their own advancement; the majority of community developers for their part have made little attempt (some have even behaved indiscreetly) to 'bridge the cultural gap' and establish the all-essential rapport between themselves and their 'intended recipients'. Likewise, whilst on the one hand campesinos refuse to acknowledge the harsh reality that the central government has insufficient financial and manpower resources at its disposal to satisfy all their urgent wants, state politicians have sadly misinterpreted the true sentiments and aspirations of lakeside communities, i.e., particularly with respect to cooperativism and colonization.

In the writer's opinion, community developers operating in other Third World countries can learn an invaluable lesson from the Lake Titicaca region's unfortunate record of set-backs and failures. It is clear that unless the opinions of rural peoples are consulted and analysed at the outset and determined efforts are made to awaken a spirit of mutual trust and cooperation, little success will come of even the most elaborately planned development projects.

Chua Visalaya and Llamacachi in perspective

As we are reminded by Heath (1966), 'The diversity of the Bolivian population remains a real obstacle to national unity.... even the peasant groups who do not have distinctive languages and cultures are often intensely regionalistic in their orientations'[4]. Whilst overpopulation and unemployment continue to epitomize the northern Altiplano, the Yungas has from colonial days been a region 'marked by both a surplus of land and a shortage of labor'. In this 'land of violent contrasts, excessive in everything' (Osborne's description), considerable inter-regional variations in patterns of socio-economic change are only to be expected. For example, 'the [agrarian reform] experience of the Bolivian Oriente is radically different from that of either the valleys, the Yungas, or the Altiplano' (Carter, 1971)[5].

To suggest, therefore, that Chua Visalaya and Llamacachi are representative of Bolivia's peasant farming communities would be absurd. Can it even be claimed that they are 'typical' or 'average' lakeside - let alone, Altiplano - communities?

Certainly, it would have been incongruous to apply such terms to either community in the pre-reform era; whilst the activities of its exceptional patrón singled out Chua from the mass of inefficiently-run haciendas, Llamacachi was also in a category on its own by reason of being the sole surviving freeholding within the immediate vicinity. However, with the passage of time distinctions between comunidades originarias and ex-haciendas have blurred; likewise, for the youngest generation of Visalayan campesinos the colonato system holds no meaning. Much attention has been paid throughout both to Chua Visalaya's critical 'land question' and to the total disharmony perplexing life in both communities. Yet, according to local informants and other research workers, such a situation is by no means unique; on the contrary, lakeside communities entirely devoid of deep-seated conflicts over property rights are rarely encountered. In the writer's estimation, Cooperativa Chua Limitada's business arrangement with the Banco Agrícola (unusual though it may be) is no more symptomatic of abnormality than is Compi's annual folklore festival or Huatajata's Yacht Club.

It is clearly apparent that a number of communities in the Lake Titicaca area, Chua Visalaya amongst them, have experienced considerable difficulties in their efforts to adjust to the post-revolutionary scene and have not availed themselves of unprecedented opportunities and facilities; more enterprising communities, such as Llamacachi, Compi and Huatajata, have forged ahead and made impressive strides in the field of economic development. Similarly, as the Buechlers record (1971)[6]: 'migratory patterns [in the environs of the lake] differ from place to place. Thus in free communities on the peninsula of Santiago de Huata, less than ten miles from Compi, a large number of men work regularly in the sub-tropical Yungas valleys. Across the lake, on the peninsula of Copacabana, men specialize in selling jerked llama meat in the Yungas and dealing with coca leaves which they sell in La Paz'. In spite of these and countless other discrepancies - obviously distance from La Paz is a vital factor to be taken into account - many aspects of Aymara life are repeated ad infinitum throughout the lakeside region. Land for cultivation purposes is everywhere at a premium; health and hygiene standards leave much to be desired; diets are ill-balanced and inadequate; attitudes and aspirations are basically similar; tradition and fatalism still hold sway; the gains of the National Revolution viz., the abolition of 'feudal' obligations, access to formal education, improvements in living conditions, increased mobility and participation in marketing, are ubiquitous. Though remarkably different from each other and from neighbouring communities in numerous minor details,

Llamacachi and Chua Visalaya are beyond all doubt 'typical' of Bolivia's Lake Titicaca region.

On the other hand, it would be wholly misleading to imply that the Lake Titicaca area is 'representative' of the much more extensive Altiplano, for the most part 'a high, bleak, barren, wind-swept tundra with the paradox of a tropical sun blazing through frigid air' (another of Osborne's graphic descriptions). Its propitious climate and richer soils, enabling farmers to cultivate a wider range of temperate crops, in addition to its excellent (by Bolivian standards) transport links with the city, place the lakeside region at a considerable advantage over remoter sections of the plateau. Whilst those communities in close proximity to La Paz have shared in the post-revolutionary fortunes of their lakeside counterparts (this is illustrated by Clark's survey of 51 northern Altiplano ex-haciendas), 'There are still many areas, isolated for want of better roads, communications, and transport links, where the effects of the land reform have not been so dramatic. Instead, peasants provide for their own subsistence needs and sell very little for cash because they lack markets for their produce. These same peasants still wear mostly homespun clothing, and purchase few consumer durable goods' (Clark, 1970)[7].

Barnes von Marschall, Clark, Preston and others have written at length about the formation of new peasant towns on the Bolivian Altiplano; indeed, Preston claims (1969) that 'the development of completely new urban centres in some parts of Bolivia is the most striking development noted during the last fifteen years'[8]. Whilst in the 1950s and '60s several lakeside communities, e.g., Jank'o Amaya, constructed small plazas in a deliberate endeavour to establish a periodic market or gain cantonal capital status (see p.145) the entirely new market town is definitely not a characteristic feature of the lakeside; building space is severely restricted, generally speaking communities are small and a number of the more progressive ones, such as Llamacachi, prefer to trade directly with La Paz.

The lakeside's role in the economic development of Bolivia

Throughout this study the researcher has been principally concerned with socio-economic change at community level; the process has been viewed

from the campesino's angle and recommendations made with him uppermost in mind. It remains to ask: What contributions have lakeside communities made to the economic development of Bolivia as a whole? Could they play a more effective role in the future? Before attempting to answer these questions it is expedient to give a brief résumé of the current state of the national economy.

Bolivia, Thorn maintains (1971, p.213), is 'on the verge of a golden age': gross domestic product increased 5.7 per cent in 1967 and 6.0 per cent in the following year. 'When adjusted to reflect estimated population growth, there was a real per capita increase of 3.7 per cent in 1967 and 4.0 per cent in 1968 - both figures well above the 2.5 per cent yearly goal set by the Alliance for Progress' (Carter, 1971a)[9]. Nevertheless, Bolivia's income per head remains amongst the lowest in Latin America (p.5); as mentioned on page 189, the average monthly wage of a city labourer in 1969 was only US $ 37.00. Exports continue to be completely dominated by tin. It has to be acknowledged that industry has made minimal progress in the post-revolutionary period, manufacturing still being confined to food-processing and the production on a modest scale of textiles, leather goods, furniture, glass, ceramics, cement, chemicals, pharmaceuticals, paper and printing. This unhealthy state of affairs the United States Department of Commerce ascribes to 'the small market, the shortages of raw materials and fuel and power, the scarcity of skilled labor and managerial talent, and basic infrastructure deficiencies'[10]. Carter (1971a, p.97) adds a valid point: 'the general focus is on making sufficient money to live well now, rather than creating a giant, cold, impersonal corporation'. Between 1950 and 1970 Bolivia's urban population doubled; during the same two decades the percentage of urban dwellers rose from 26 to 35. Regrettably, in La Paz, as in countless other Latin American cities, industrialisation and urban services have failed entirely to keep pace with population growth and to absorb the influx of expectant young rural migrants. Consequently, 'Downtown streets are packed with the unemployed and underemployed' (Carter, 1971, p.364).

'Major migrations from rural areas to the capital cities under conditions of widespread unemployment in these cities is a measure of the failure of the agricultural sector in these countries, not a measure of its success'; Dorner's comments (1966)[11] can be aptly applied to

Bolivia. If land reform was aimed at stimulating 'greater productivity and commercialization of the agricultural industry, facilitating the inversion of new capital.... developing cooperatives, lending technical aid, and opening possibilities for credit' (Decreto Ley de la Reforma Agraria), then its success would indeed appear to have been limited. In 1968 agriculture and stock raising employed some 59 per cent of the country's labour force yet accounted for only 23 per cent of the gross national product. Although latterly Bolivia has become self-sufficient in sugar, rice, cotton and maize (in consequence of commercialising production in the Santa Cruz area), she is still heavily dependent on imported foods. 'Substantial savings could be made in imports of foodstuffs, particularly wheat and flour, if the agricultural potential of the country were fully developed, but such imports seem likely to continue at a high level in the foreseeable future' (Lloyds Bank, 1969)[12]. Taking all things into consideration, Bolivian agriculture is still - twenty years after land reform - inefficient and totally incapable of sustaining national industrial growth.

It has been seen that marketing patterns in the Lake Titicaca region have been radically transformed since the promulgation of the agrarian reform decree. Whereas in pre-reform days the mass of lakeside campesinos had been 'economic hermits' (p.86), their marketing activities being restricted to bartering small surpluses of staple products at local ferias, 'as a result of the land reform the full burden of getting the agricultural products to urban markets in sufficient quantities became the responsibility of the peasantry and buyers from rural areas and the city' (Clark, 1968)[13]. As Clark continues, 'It is unfortunate that a decrease in agricultural production is associated with the Bolivian Land Reform in the minds of so many'. Certainly productivity has declined in Chua (p.121); in view of the last patrón's remarkable organisational abilities and heavy capital expenditure this was only to be expected. (It should be remembered that the majority of lakeside hacendados had never attempted to modernise farming and increase output; not infrequently they had withheld grain and potatoes from sale in order to stimulate price rises). However, there is no reason to suppose that crop production has fallen in the lakeside region as a whole (see p.121); indeed, official government statistics indicate that agricultural produce sold in the market has equalled pre-reform levels, i.e., in spite of the fact that lakeside campesinos are retaining larger quantities of

foodstuffs for their own families' consumption. In a number of lakeside communities, including Llamacachi, Compi and Huatajata, farming has gradually ceased to be merely 'a way of life' and become instead a business concern with production oriented towards the Paceño market; simultaneously these communities have provided a ready market for the widening range of consumer goods (many of them manufactured outside Bolivia) available in La Paz.

Burke reasons that whilst land productivity has undoubtedly increased throughout Bolivia's Lake Titicaca region, since the post-reform period has been marked by a rapid population growth (see p.108), labour productivity has accordingly declined. Although the more 'go-ahead' communities, such as Llamacachi, have been able to mitigate critical underemployment problems by specialising in labour- and land-intensive horticultural crops and by bringing terrain previously considered marginal into cultivation, bearing in mind the acute shortage of land it is virtually impossible for the lakeside region to absorb its entire labour force under the present agricultural system. There being few other work opportunities within the neighbourhood it is only natural, if not inevitable, that ever-increasing numbers of young educated campesinos should seek their fortunes in La Paz, thereby exacerbating the city's unemployment problems.

Concluding that 'the toughest problem in Bolivia's strategy is what to do with the surplus people in the highlands', Flores et al. (1963)[14] offer the following suggestion: 'It may be that a country simply can't do anything better for many of these people than to leave them living in traditional subsistence for a matter of a decade or two until other kinds of work besides farming have been developed in the economy'. Burke (1971)[15] is of the same opinion: 'because alternative employment in Bolivia is limited, the increase in marginal subsistence farming might be considered an efficient allocation of resources in the short run'.

From what has been written in the preceding chapters it is clearly apparent that the young lakeside campesino does not intend to be 'left in traditional subsistence'. If rural-urban migration is to be curbed - assuming it is not already too late - immediate, direct government

intervention is of paramount importance. The central government must be prepared either to provide land-hungry Altiplano campesinos with far more powerful incentives for settling in colonization zones, or to extend credit facilities to densely-peopled areas already under cultivation[16], at the same time promoting rural crafts, tourism, etc., to assimilate the excess labour force[17]. Unquestionably large-scale financial investment is vital if the agricultural sector is to prove capable of sustaining future industrial growth: the present low priority rating of Bolivian agriculture is illustrated by the fact that whereas 15 per cent of the government's 1968 budget was earmarked for defence, only 3 per cent was assigned for agriculture. Anderson (1970)[18] is critical of the mass of Latin American countries for maintaining a 'disparaging' attitude towards farming; he commends the Cuban government for having 'sought to inspire an interest in agriculture and a respect for the way of life of the peasant among those who work in the cities'. What is urgently needed in Bolivia, as throughout Latin America, is an 'ideological re-orientation' - an acceptance of the basic fact that the development of agriculture and industry are interdependent.

It seems appropriate that this dissertation should end as it began with a quotation from Antezana:

> 'When the announcement of the reform was made, they [the Bolivian peasants] began to walk on their own land and to feel free as if they were standing on the top of a mountain. They learned to speak with a loud voice, with pride and without fear... From that moment the word "Indian" disappeared and was wiped from the language to become a relic in the dictionary. Now there existed the "peasant". The worker of the countryside had been dignified by being given land and liberty in all of its aspects. "Indian", a feudal concept, was the serf of an epoch which had disappeared. Today the peasant is the equal of anyone... a human being capable of receiving instruction, of reaching the University, of being owner of the land he works and making it produce, since the land belongs to him who works it.....'[19].

Footnotes and References - Chapter X

1. 'Despite the difficulties, Bolivia's land reform seems to have paved the way for long-run progress. One of its most important effects have been to break down the barriers that have traditionally separated the Indian population from the national life. The "two cultures" world of the Indian and the white is being dismantled'. W.C. Thiesenhusen and M. Brown, Survey of the Alliance for Progress: Problems of Agriculture (Reprint No.35, Land Tenure Center, University of Wisconsin, 1967) p.25.

2. R.S. Thorn, 'The Economic Transformation' in Beyond the Revolution: Bolivia since 1952, J.M. Malloy and R.S. Thorn (ed.) (University of Pittsburgh Press, 1971) p.207.

3. W.E. Carter, Aymara Communities and the Bolivian Agrarian Reform (Gainesville, University of Florida Press, 1964) p.86.

4. D.B. Heath, 'A View from the Grass Roots: Peasant Syndicates among the Aymara of the Bolivian Yungas' (Preliminary draft for Conference on Peasant Movements, Ithaca, New York, 1966).

5. W.E. Carter, 'Revolution and the Agrarian Sector' in Beyond the Revolution: Bolivia since 1952 (1971) p.254.

6. H.C. and J-M. Buechler, The Bolivian Aymara (Syracuse University, 1971) p.105.

7. R.J. Clark, Land Reform in Bolivia (USAID/Bolivia and Land Tenure Center, University of Wisconsin, 1970) p.73.

8. D.A. Preston, 'The Revolutionary Landscape of Highland Bolivia', Geographical Journal, 135 (March 1969) p.4.

9. W.E. Carter, Bolivia: A Profile (New York, Praeger Press, 1971a) p.73.

10. United States Department of Commerce, Basic Data on the Economy of Bolivia (Overseas Business Reports, Washington, 1969) p.5.

11. P. Dorner, Land Tenure Reform and Agricultural Development in Latin America (Reprint No.27, Land Tenure Center, University of Wisconsin, 1966).

12. Lloyds Bank Limited, Economic Report: Bolivia (Overseas Department, London, 1969) p.3.

13. R.J. Clark, 'Land Reform and Peasant Market Participation on the Northern Highlands of Bolivia', Land Economics, XLIV (May 1968) p.166.

14. E. Flores et al., 'Land Reform in Bolivia: An Informal Discussion' in The Progress of Land Reform in Bolivia (University of Wisconsin, Land Tenure Center Discussion Paper, May 1963) p.14.

15. M. Burke, 'Land Reform in the Lake Titicaca Region' in Beyond the Revolution: Bolivia Since 1952 (1971) p.332.

Footnotes and References - Chapter X continued

16. 'If the Latin American nations are to increase their food supplies substantially in the forseeable future, they will have to expand agriculture "at the intensive margin", exploiting presently occupied land more productively through the use of fertilizers, protective chemicals, hybrid seeds, and improved breeding stock. FAO technicians have reported that in Latin America "resources are unquestionably ample, without approaching their full utilization, to meet the estimated increase required"'. W. Thiesenhusen and M. Brown, Survey of the Alliance for Progress: Problems of Agriculture (1967) pp.7-8.

17. 'It is recommended as an emergency measure that, to alleviate the present state of affairs - not to correct it - experts in rural crafts be contracted to put to use certain traditional skills of the Indians, for the development of several home crafts to absorb part of the existing surplus labor force and to open additional sources of income to peasant families, and thereby improve their standard of living'. E. Flores et al., 'Land Reform in Bolivia: An Informal Discussion' (1963) p.10.

18. C.W. Anderson, 'The Changing International Environment of Development and Latin America in the 1970s', Inter-American Economic Affairs, 24: 2 (1970) p.81.

19. R.J. Alexander's translation of a passage from L. Antezana E., Resultados de la Reforma Agraria en Bolivia (Cochabamba, 1955) pp.7 and 18.

List of Abbreviations

CEPAL (ECLA)	Comisión Económica para la América Latina. (United Nations Economic Commission for Latin America).
CIDA	Inter-American Committee for Agricultural Development, Washington D.C.
CIPCA	Centro de Investigación y Promoción del Campesinado (Centre of Investigation and Promotion of Peasant Affairs, La Paz).
CNRA	Consejo Nacional de Reforma Agraria (National Council for Agrarian Reform).
COMIBOL	Corporación Minera de Bolivia (Bolivian National Mining Corporation).
FAO	United Nations Food and Agriculture Organization.
FDTC	Federación Departamental de Trabajadores Campesinos de La Paz (Federation of Peasant Workers).
FPN	Frente Popular Nacionalista (National Popular Front): current Coalition of the MNR, FSB (Falange Party) and the Bolivian Armed Forces.
GEOBOL	Servicio Geológico de Bolivia (Bolivian Geological Service).
MNR	Movimiento Nacionalista Revolucionario (National Revolutionary Movement).
NCDP	National Community Development Programme.
RISM	Research Institute for the Study of Man, New York.
SNDC	Servicio Nacional de Desarrollo de la Comunidad (National Community Development Service).
SNRA	Servicio Nacional de Reforma Agraria (National Service for Agrarian Reform).
TDC	Trabajador de Desarrollo de la Comunidad (Extension agent of the NCDP).
UMSA	Universidad Mayor de San Andrés (San Andrés University, La Paz).
USAID	United States Agency for International Development.
YPFB	Yacimientos Petrolíferos Fiscales Bolivianos (National Petroleum Corporation).

Glossary

Sp. - Spanish, Aym. - Aymara, Qu. - Quechua.

(Meanings given below relate specifically to the context in which the words are used in the thesis).

adobe (Sp.): literally an unburnt, sun-dried brick but often, as in the present text, denoting a house built of adobe bricks.

aguayo, awayo (Aym.): peasant woman's brilliantly-coloured shawl used for carrying baby or produce on back.

ahijadero (Sp.): pastures preserved for the grazing of hacienda livestock.

aini, ayni (Aym.): system of reciprocal labour, lending and borrowing (see page 103).

aljería (Sp.): hacienda warehouse cum shop in La Paz.

altiplano (Sp.): Andean high plateau.

anticrético (Sp.): arrangement whereby creditors enjoy usufruct rights to certain of their debtors' land parcels in lieu of receiving financial payment.

a partir (Sp.): share cropping.

arroba (Sp.): unit of weight equivalent to about 25 pounds.

awatiri (Aym.): hacienda shepherd.

ayllu (Aym.): Aymara community or extended family.

aynoka, ainoka, aynoqa (Aym.): community lands cultivated on an individual basis but in strict accordance with a prescribed rotation system.

balsa (Sp.); yampu (Aym.): reed boat.

barriada, barrio (Sp.): quarter, migrant zone in city.

bayetas (Sp.): baize but also applied to coarsely-woven sacks used for transporting field produce.

brujo (Sp.), yatiri (Aym.): magician, sorcerer.

c'ajja, k'ajja (Aym.): rasping cough.

calamina (Sp.): roofing sheet ofcorrugated metal.

camana (Sp.): guardian or supervisor e.g., camana de productos, the person assigned to making chuño in hacienda times.

campesino (Sp.): rural dweller, peasant, officially replacing the pejorative term 'indio' after 1952.

cañahui(a) (Qu.): small-grained cereal, native to the altiplano.

cantón (Sp.): smallest administrative unit in the Bolivian system of local government.

casa hacienda (Sp.): estate house, residence of hacendado and family.

c'aya, claya (Aym.): frozen and dried oca.

chacra (Sp. from chacara i.e., farm or small-holding): used in common with kallpa (Aym.) and parcela (Sp.) to denote a land plot.

chalona (Sp.): dried, salted mutton.

chanko, changa, chanque (Aym.): lake weed valued by campesinos as animal fodder.

charqui (Sp.): meat cut into strips and dried in the sun.

chicha (Sp.): 'Indian beer made from masticated maize flour, plus fermentation and boiling' (RISM/Peace Corps, 1969, p.356).

chola (Sp.): 'upwardly mobile migrant wearing silk peasant style clothing' (Buechlers, 1971, p.111); chola decente: 'a Paceña who is expensively clothed in several layers of silk skirts, a blouse, a silk-fringed shawl and felt bowler hat, decked in fine jewels, who speaks and writes in Spanish' (Buechler, 1972, p.228).

chuño (Aym.): dehydrated potato (black).

coca (Qu.): leaf of box wood-like bush, traditionally chewed as a stimulant.

colono (Sp.): peasant or serf working for an estate owner in pre-reform times in return for usufruct rights to small plots of land.

comerciante (Sp.): merchant or trader.

compadrazgo (Sp.): 'spiritual relationship between a child's parents and the godfather' (Cassell's Spanish-English English-Spanish Dictionary, 1966).

comunario (Sp.): peasant from a comunidad originaria i.e., a freeholding or free community, not subject to landowners in the pre-revolutionary period.

'contagio' (Sp.): fever, illness resembling pneumonia.

cooperativa (Sp.): in the text, Cooperativa Chua Limitada, formed in 1964.

corregidor (Sp.): in hacienda times the mestizo who ruled a cantón; presently, aide to the intendente, the highest authority in the cantón.

costal (Sp.): bag or sack; according to lakeside campesinos 1 costal of potatoes or oca = 4 arrobas i.e., approximately 100 pounds.

c'uchu (Aym.): irrigation unit.

curandero (Sp.); qolliri (Aym): curer using herbal remedies.

(en) descanso (Sp.): fallow.

dotación (Sp.): process of land settlement; dotado: new owner of land.

empresa agrícola ganadera (Sp.): a landholding 'distinguished by employing wage labour, by being fully mechanized or by using improved agricultural methods on a large scale' (Agrarian Reform Decree, 1953).

encomienda (Sp.): Royal land grant in Spanish colonial period.

estancia (Sp.): sub-division or section of an estate.

ex-colono (Sp.): peasant from a former landed estate.

ex-hacienda (Sp.): term frequently employed for a land estate after 1953.

expediente (Sp.): dossier compiled by the SNRA as a preliminary to land redistribution and containing accumulated documents relating to the property.

evangelistas (Sp.): Protestants, often used by campesinos in a derogatory sense.

feria (Sp.): weekday market: feria franca, open market in La Paz.

fiesta (Sp.): festival, holiday.

finca (Sp.): farm or estate, used synonymously with hacienda.

forastero (Sp.): landless comunario.

'gringo' (Sp. corruption of griego): foreigner, sometimes specifically a North American.

habas (Sp.): broad beans, an important crop in the Lake Titicaca region.

hacienda (Sp.): landed estate cultivated by a system of serfdom (colonato system) until eradicated by the agrarian reform decree of 1953.

hacendado (Sp.): landlord or patrón of the hacienda.

ichu (Qu.) paja brava (Sp.): stiff, spiky grass native to the altiplano.

isañu (Aym.): an edible tuber rich in almedin and able to grow between 3000 and 4000 metres above sea level.

intendente (Sp.): 'head of a cantón, with judicial and police functions, develops public utilities in the cantón capital' (Buechlers, 1971, p.112).

jilakata (Aym.): Aymara term for chief, the highest traditional official of Indian communities; in haciendas the jilakata was the task master directing work on hacienda land.

kallpa (Aym.): land plot, field.

kantuta (Bolivian national flower often used in magical rites.

karachi (small, palatable lake fish.

lluch'u, ch'ullo (Aym.): pointed woollen cap with earflaps worn by campesino.

machismo (Sp.): cult of masculinity, virility.

manta (Sp.): shawl.

'maria' (Sp.): local name for balsa boat with one pointed end.

mayordomo (Sp.); hacienda administrator.

mestizo (Sp.): ' "mixed" blood, or cross between Spaniard and Indian; a social status between blancos (those claiming direct descent from the Spanish) and cholos in pre-1952 Bolivia' (RISM/Peace Corps, 1969, p.359).

minifundismo (Sp.): excessive fragmentation of landholdings.

minka, minq'a (Aym): traditional pattern of mutual cooperation; minka labour is usually on a short-term basis and is salaried, pay varying according to the arduousness of the task in hand.

'la miseria' (Sp.): local expression for the period of hardship and food shortage from November to April. -year?: 52/3

mote rosa (Sp.): derogatory term for a vendor who cannot speak Spanish, who stutters or stammers and is dressed in country attire (Buechler, 1972, p.227).

negociante (Sp.): trader.

oca, oka (Sp.): root vegetable native to the altiplano; in pre-reform times the oca was second in importance only to the potato.

originario (Sp.): original settlers in comunidades.

orillas (Sp.): lake shorelands.

papa lisa, papalisa (Sp.): small, sweet, edible tuber.

parcela (Sp.): patch of land.

patrón (Sp.): landlord of pre-reform days.

persona (Sp.): in the lakeside region a colono with access (reputedly) to 9 hectares of cultivable land.

peso (Sp.): Bolivian unit of currency; in 1971 the exchange rate was $ b. 28.00 (28 pesos) to £1.00.

plaza (Sp.): square.

polleras (Sp.): voluminous skirts, worn by cholas and some campesinas.

poncho (Sp.): square, woollen garment with hole for the head, worn by campesino.

pongueaje (Aym. derivation): personal and domestic services which colonos were obliged to render to the landlord and his family.

quinua (Qu.): millet-like cereal of high protein content and native to the altiplano.

quintal (Sp.): unit of weight (see page 102).

resolución suprema (Sp.): supreme resolution granted by the CNRA and authorising the implementation of land redistribution within an ex-hacienda.

reunión (Sp.): meeting or gathering of cooperative or syndicate members.

Rosca (Sp.): word used in Bolivia for the wealthy aristocracy.

salteña (Sp.); spiced meat pastry, a speciality of La Paz.

sayaña (Aym.): houseplot, sometimes used by campesinos when referring to all but aynoka plots.

sindicato (Sp.): syndicate, peasant union.

sot'a (Aym.): chief task master on the hacienda, nominated by the patrón.

surcos (Sp.): furrows of land.

tambos (Sp.): (originally tampus (Aym.) were rest houses along the roadside): open markets in La Paz serving as distribution centres for other markets, where truckers unload their goods directly.

taquia: local name for manure collected on hillsides.

tienda (Sp.): general store.

totora (Aym.): lake reed used for making balsas, thatching, as animal fodder etc.

tunta (Aym.): dehydrated potato (white).

warmi (Aym.): derogatory term used in La Paz for a woman living in the country or recently arrived from there, attired in home-spun wool clothing and speaking Aymara or Quechua (Buechler, 1972, p.227).

(de) vestido (Sp.): a Paceña or other city-born woman wearing western dress and speaking Spanish fluently.

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