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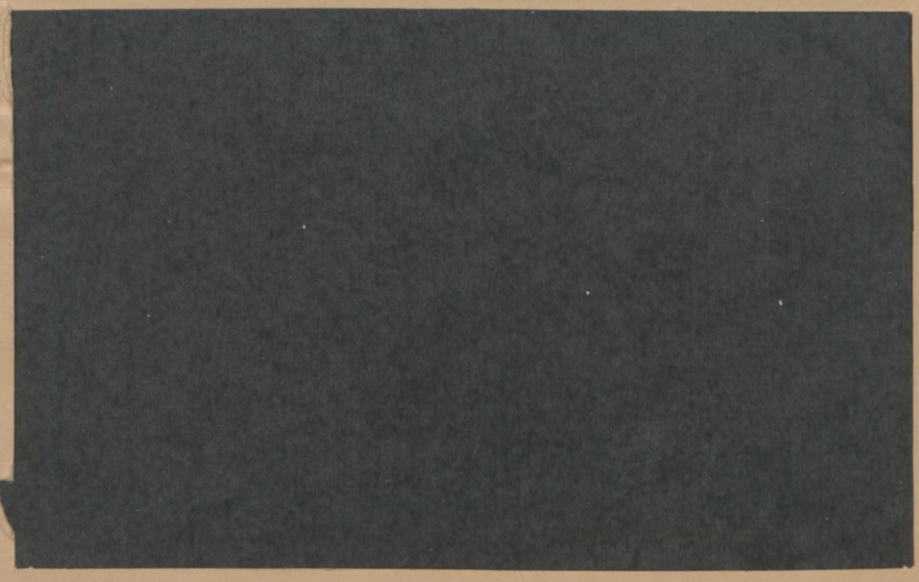

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WORLD EMPLOYMENT PROGRAMME RESEARCH

WORKING PAPER

Population, Labour and Poverty Project

Population and Poverty in Nepal

by

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Preface

For many observers, population growth is either a primary cause of poverty or a major obstacle to its elimination. For others, population growth contributes to progress. But in reality, population growth and poverty interact in a variety of ways, making simple pronouncements about the effect of one on the other dangerous.

The present paper reviews these issues in Nepal, considering in particular how the nature of the production system in Nepal conditions the impact of population growth. Patterns of land tenure and labour use, climatic and ecological considerations, inequality and deprivation, patterns of organisation and state intervention all play a part, and their interactions with each other and with population change are examined in depth.

This paper is one in a series on aspects of population growth and poverty in South Asia, which will be compiled into an edited volume for publication in 1986. Other papers will examine related issues in Bangladesh, India and Pakistan.

G. Rodgers

Geneva, April 1985

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1. INTRODUCTION

The people of Nepal live in a poor state. In 1971 94% of the labour force was in agriculture, but the annual rate of growth in food production per capita between 1961 and 1969 was zero. It was clear by the mid 1970's that the capacity of the predominantly agrarian economy to feed the population was not increasing. With a growth rate of 2.8 per cent per annum in GDP, and a population growth rate of around 2.5 per cent the prospects for the future were not good; indeed, as one major report stated bleakly, "Nepal is poor and is daily becoming poorer" (ARTEP 1974: 1). Others were even more alarmed: "Nepal in the mid 1970's is not just a very poor country that appears to be increasingly unable to provide adequately for its now rapidly growing population - that would be a misleading over-simplification, and in some respects an understatement, of the problems that exist. The country is now in a period of crisis, a crisis whose major components, over the next decade, will include serious over-population relative to employment opportunities, ecological collapse in the densely populated and highly vulnerable hill areas (where 30 per cent of the cultivable land supports 60 per cent of the country's rural population), and the elimination of certain important 'natural' resources (e.g. timber), both in the hills and in the plains. These will be associated with an increasing inability to pay for the imported commodities, with growing food shortages, and consequently with the development of widespread unrest in both rural and urban areas". (Blaikie, Cameron & Seddon 1980: 13-14).

Generally, the 'crisis' of Nepal has been seen essentially in terms of population growth outpacing economic growth. At the end of the 1970's, the World Bank concluded that "Nepal's demographic situation is amongst the worst in the world and is deteriorating rapidly. Even though demographic pressures already strain the capacity of the land to provide minimally adequate supplies of food, all reasonable projections point at an inevitable and steadily worsening situation through the turn of the century and beyond" (IBRD 1979: 35). In 1983, an article in the Far Eastern Economic Review, (headed 'running on the spot') argued that "given the population growth rate, independent economists calculate that even if the average 2 per cent annual growth in gross domestic product doubles, half of Nepal's population will still be living below subsistence levels at the turn of the century" (Ali 1983: 30). But the conclusion often drawn - that it is population growth that is largely responsible for the growing poverty of the mass of the Nepalese people is a gross over-simplification and ignores the crucial fact that demographic change, like material deprivation or poverty, is a social product, conditioned and determined in the last analysis by the economic and social structures of the state in question. Certainly, there are important connections between 'population growth' and 'the growth of poverty', but the precise nature of these connections must be explored and identified, not simply assumed in advance of such investigation and analysis, to be straightforward, direct and unilinear. In this essay I hope to be able to examine and reveal the economic and social context, both of population growth and poverty in Nepal.

2. CRISIS OF FOOD PRODUCTION

In the first Five Year Plan - for the years 1956 to 1961 - 31 per cent of the total budget was allocated to agriculture, but it has been remarked that "overall, the results were not satisfactory" (Pant 1973: 170).

If the first Five Year Plan was unsatisfactory from the point of view of agricultural development, it has been observed, of the second Plan for 1961 to 1965, that "the implementation of the Plan did not produce any marked impact on the economic condition of the common people", for "during the Plan period the national income was estimated to have risen by 7 per cent, while at the same time population increased by 6 per cent" (Pant 1973: 173).

In the third Plan for 1966 to 1970, a major priority was accorded to agricultural development, which was expected to produce an increase in food grain production of 15 per cent and in cash crops of 73 per cent. A review at the end of this planning period, however, showed that overall production of foodgrains was little more than 10 per cent above what it had been (despite significant increases in output from wheat and millet), while the cash crop production was well below the anticipated figure (Pant 1973).

Between 1964 and 1972 total cereal production rose by only 7 per cent, with the two major crops, rice and maize, registering a 7 per cent increase and 11 per cent reduction respectively and a considerable fluctuation.

In the mid 1970's it was estimated that the growth rate in production of all cereals in Nepal during the 1960's was no more than 0.6 per cent per annum while population was growing at around 2 per cent a year. Rice production increased 3.5 per cent between 1960-61 and 1970-71, but the only major increase in output was in wheat, which grew 65.7 per cent. Figures for the period 1967 to 1972 suggest an overall decline in yields for cereal crops as a whole of around 1 per cent a year (Blaikie, Cameron and Seddon 1977: 34), so that any increase in output has to be attributed to an increase in the land under cultivation rather than any increase in productivity of land. In 1974, a 'perspective study of agricultural development in Nepal' (FAO 1974) reported that Nepal's food grain production had increased at a rate of only 0.7 per cent a year during the previous decade, while the hill regions had experienced an actual decline in food production of some 2.1 per cent. As a consequence of this decline, and the increase in the population, locally available major food grain supplies had declined annually by roughly 4 per cent capita during the previous ten years. The report also stated that, although Nepal as a whole was still able to produce an annual food grain surplus of between 350,000 and 500,000 metric tonnes during the 1960's, the hill regions were already annually food grain deficit to the amount of around 150,000 metric tonnes at that period.

Detailed analysis of the relationship between grain production and the requirements of domestic consumption carried out in 1975 in the west

central region of Nepal suggested that in 1971 the hill areas of that region were already severely deficit in food grains, the mountain areas with their very low population density were marginally surplus, and the terai (plains) was still strongly in surplus. Further calculations produced estimations for the situation in the region in 1976 and in 1981; according to these calculations, the region as a whole - which was some 16,000 tons in surplus overall in 1971 - would have become deficit in food grains by just over 13,000 tons in 1976 and by nearly 40,000 tons in 1981 (Blaikie, Cameron, Feldman, Fournier and Seddon 1976: 5.27 - 5.29).

When these calculations were extrapolated to Nepal as a whole, the results suggested a deterioration from a situation in 1971 with 66,921 tons grain surplus to one of deficit by 1976 (with 108,278 tons less than required) and heavy deficit in 1981 (with 272,205 tons less than required).

In their more optimistic analysis of the probable future relationship between demand and supply of foodgrains in Nepal, carried out in the early 1970's, Pant and Jain expected that, at the end of the Fifth Plan period (1980-81), Nepal would have a surplus of about 84.94 thousand metric tonnes, but recognised that, with somewhat different assumptions, this could be a deficit of about 144.39 thousand metric tonnes. They also admitted that "for the next development decade, 1980-90, the situation with respect to the gap between demand and supply for 'total foodgrains' would be most distressing. By 1985-86, under all situations, the country will have a deficit ranging from 103.04 thousand metric tons (under the best conditions) to about 804.57 thousand metric tons (under the worst conditions). The main cause of these deficits would lie with the growing demand for paddy and relatively slow rate of growth in rice production" (Pant and Jain p.166-7).

In August 1979 the report of the special programming mission to Nepal of IFAD concluded that:

> "looking ahead, projections by IFPRI suggest that because of the slow growth of production of basic staple foods in the past, Nepal may not be able to maintain its position as an exporter much longer, even at the present inadequate levels of food intake in much of the country. Unless there is a substantial acceleration in the growth rate of food production over the 1968-78 production trend, there will be a deficit exceeding 250,000 metric tons by 1990 (measured in terms of wheat equivalent) even if incomes fail to grow and 1976 consumption levels remain constant" (IFAD 1979: 2).

The report of the Futures Group on 'the effect of population factors on social and economic development' (1979) pointed out that Nepal needs to produce 232 kgs of food grains per capita each year to fulfil the basic minimum needs of the population and that, given this requirement, the projected 1980 edible production of 202 kgs per capita would mean a shortfall of 427,000 metric tonnes of edible food grain. Assuming a rate of growth in food grain production of 2 per

cent per annum (which was higher than in fact), then at the current estimated rate of population growth (which we now know was in fact lower than the real growth rate in this period) only 187 kgs per capita would be available in 1990 and 836,9000 metric tonnes would need to be imported. "Consequently, unless drastic changes take place in population/food production, widespread malnutrition is a distinct possibility" (Sharma 1981: 5).

Even under the most optimistic projections of cereal production (eg. the assumption of a 3 per cent per annum increase in Nepal as a whole) the food deficit in the hill areas would continue to grow. The APROSC, in their country review paper on agrarian reform and rural development in Nepal (APROSC 1978: 20), showed that even with such assumptions, the annual deficit would probably, between 1980 and 1985, grow from 228,000 metric tonnes to 337,000 metric tonnes.

In fact, the Sixth Five Year Plan (for 1981-1986) records an overall drop of 14 per cent in food grain production during the period of the previous plan (1975-1980), attributing the decline to a combination of poor weather conditions and the failure to extend the irrigation systems of the terai or effectively encourage use of the new agricultural technology. Commenting on the Sixth Five Year Plan, Liberman observed that "the shortfall in food production affected a population in which a significant proportion of households were already living below subsistence levels, evidencing various symptoms and effects of malnutrition and poor health in other respects and experiencing high levels of mortality" (Liberman 1981: 5).

Early in January 1980 a special committee was established, under the auspices of the Ministry of Food and Agriculture, to make the necessary arrangements for the distribution of some 200,000 metric tons of food grain to meet the expected shortfall of 220,000 metric tons, mainly in the hill areas. Of this total, some 60,000 metric tons were to be procured from areas with grain surpluses. The areas most drastically affected by the food shortages were those in the west and the far west of the country, particularly in the hill and remote mountain districts; but even in the generally better-off central region some 5,550 metric tons of food grain were distributed by the Nepal Food Corporation to make up deficits.

In November 1980, the daily newspaper Gorkhapatra underlined the growing seriousness of the food situation in Nepal, reporting that while food scarcity had affected 31 districts in 1975-76, the number affected grew steadily in the subsequent years: 35 districts in 1976-77, 37 districts in 1977-78, 40 districts in 1978-79 and as many as 49 districts, including three in the terai, in 1979-80.

The implications of this aggregate deficit in food grains was stressed by the same newspaper the previous month when it reported that between 1964-65 and 1978-79 per capita food production had declined from 320 kgs to 226 kgs, while per capita food supply had cropped from 179 kgs to 158 kgs. The World Bank's estimates for future per capita food supply in Nepal are equally depressing; these suggest that, on the basis of current trends, per capita consumable production would

decline from 133 kgs in 1978:79 to 126 kgs in 1982-83 and 119 kgs in 1986-87 in the hills and mountain areas, giving on average 254, 240 and 226 days of minimum subsistence per year. The implications of this shortfall in production for consumption and the nutritional status of the population are discussed in more detail later.

3. CLASS STRUCTURE AND LANDOWNERSHIP

Nepal remains a predominantly pre-capitalist agrarian society as far as its productive base is concerned; the very small size of the urban population reflects the relative insignificance of manufacturing and industrial production in Nepal as a whole. The contribution of manufacturing, cottage industry and mining combined to the national GDP was less than 10 per cent in 1969-70. The ruling class of Nepal remains a landowning class based on large estates mainly in the terai, but many are essentially absentee landlords whose domains are managed and cultivated by others. If it is possible to identify a 'landed elite' or nobility, it is also possible to identify what might be termed a local gentry - a stratum of landowners whose activities are essentially local in nature, and who remain closely associated with their own smaller estates, supervising their cultivation by tenants and sharecroppers. The local gentry is to be found predominantly in the terai, although not exclusively so; the form of production associated with this social class and the tenants and sharecroppers who together constitute the direct producers may be be referred to somewhat loosely as 'semi-feudal'. But it should be noted that a significant proportion of those who work on the landowners' estates as direct producers are also smallholders whose own plots are insufficient to ensure their subsistence and are therefore obliged either to sell their labour direct or to work on the lands of another. The demand for agricultural wage labour is relatively low, even in the terai, so that many small peasants are also tenants or sharecroppers.

The political predominance of landowners and merchants, and the virtual absence of an industrial or agrarian bourgeoisie in Nepal, gives the political economy as a whole a distinctive character; social relations of production involve largely landlord and peasant (whether smallholder, tenant of sharecropper) and social relations of exchange involve landlord, peasant and merchant. In those areas where the 'semi-feudal' form of production predominates, it gives a distinctive character also to all social relations; the profound inequality inherent in landlord-tenant relations permeates the entire social environment, and other forms of social inequality - based on caste, ethnic and sexual discrimination and oppression - are heightened and reinforced as a consequence.

However, the vast majority of producers in Nepal are not confined within the 'semi-feudal' form of production and its distinctive social relations of inequality; in the hills in particular (for the most part) but also in the terai, the majority of households can be identified as 'independent' peasant producers. These are 'independent' in the sense that they own their own means of production and are not obliged to provide any surplus labour for others in order to survive. In a sample of rural households from the hill and terai areas of west central Nepal, nearly 56 per cent of households were classified as independent peasant producers not requiring to sell their labour to others for their subsistence; of these, most (44 per cent of all households) could be termed 'middle peasants' and a minority (11.5 per cent) could be termed 'rich peasants'. Even some of those who are obliged to sell their labour for some of the time to

supplement their own farm production (who constituted nearly 18 per cent of all households) can be regarded as 'independent' peasants in so far as their labour is 'employed' on a casual and occasional basis mainly by the rich peasants whose supply of domestic labour may not be sufficient to work their fields (given that these households often derive additional income from small businesses or employment outside the area, in the towns or abroad, and may be lacking members of the household for much of the year). The minority of rich peasants who systematically produce for the market should be considered as petty commodity producers rather than capitalist farmers for the most part, although in a few cases the potential for expansion and a more systematic exploitation of wage labour was evident. Those 'poor peasants' who were obliged to sell their labour to supplement their own farm production were distinguished from labourers by the fact that more than half of their grain requirement could be provided by their own fields. Just over 20 per cent of all households surveyed, however, were unable to provide even half of their grain requirements from their own fields, and these may be considered as sub-marginal peasants and landless labourers; all of these households relied crucially (for over half their basic requirements) on working for others (cf. Blaikie, Cameron and Seddon 1980: 229-253).

The demand for wage labour remains relatively low, particularly in the hill regions where the large estates of the terai are rare and where most employers of labour are only themselves rich peasants requiring supplementary labour. Under these conditions, population growth generates increasing pressure on those with small landholdings and those with none. Households reliant on wage labouring "represent a group which has not been able to respond to increasing pressures of population on account of inferior access positions - mainly with regard to the possession of land" (Blaikie, Cameron & Seddon 1980: 239).

In an agrarian economy the ownership of the means of production, and particularly of land, is central to any understnding of social and economic inequality. As Ghai and Rahman observed in their study of rural poverty and the small farmers' development programme in Nepal, "since land is a major source of income in the rural areas,... differences in landownership translate directly into differences in income distribution. The structure of landownership is, therefore, a major contributary cause of rural poverty" (Ghai & Rahman 1979: 3). In their report on the baseline survey for the Tinau Khola Catchment Area Conservation Project, APROSC stated clearly: "land, the single most important production resource in the project area (a fact which is equally common in the whole of rural Nepal), determines the socio-economic status of the population of the region concerned. Distribution of landholdings largely determines the disparities in income, while the productivity of the land determines the level of income. The distribution of landholdings and the productivity of the land jointly determine the social status of the people" (APROSC 1979: 18). The close relationship between inequality in the distribution of landownership and inequality in income distribution in the rural areas was also emphasised by the USAID Mission Director in his report for the year 1980-81: "in Nepal, ownership of land, the overwhelming item

of wealth, and thus receipt of income, is very concentrated. Two per cent of all rural households cultivate about 27 per cent of the land. Three recent publications provide estimates for concentration of income which show Nepal as having one of the worst income concentration problems in Asia" (Butterfield 1979: 2).

In 1961, in Nepal as a whole, the bottom 46 per cent of households accounted for a mere 10 per cent of the land owned, whereas the top 8 per cent of households owned nearly 40 per cent of the land; nearly 75 per cent of households cultivated a quarter of the land, owning on average less than one hectare each, while nearly half of all households farmed plots of less than half a hectare - an area of land apparently incapable of supporting a family, even at the barest minimum level of subsistence (see Table 1).

TABLE 1 PERCENTAGE DISTRIBUTION OF FARM HOUSEHOLDS AND CULTIVATED AREA BY SIZE OF HOLDING, 1961

Size in ha	percentage of households	percentage of cultivated area
0.15 - 0.50	46	10
0.50 - 1.00	29	15
1.00 - 3.00	17	36
over 3.00	8	39

Source: Central Bureau of Statistics, Agricultural Census, Kathmandu 1962.

Pressures from foreign aid donors during the early 1960's led to the passing in 1964 of a land-reform law which established an official ceiling of 25 bighas (about 15.5 hectares). However, as a programme of land reform this was extremely conservative, for "perhaps no more than 7 or 8 per cent of the cultivable land in the terai exceeded this ceiling when the Lands Act came into force in 1964 and, in the hills, landholdings that exceeded the ceiling were few" (Gaige 1975: 173). Furthermore, larger landowners were often able to transfer surplus land to relatives and thereby maintain effective control over their estates despite the new law.

In his study of land tenure in Nepal following the land reform, Zaman reported an overwhelming predominance of owner-cultivators, with a significant minority of small farmers also renting land as tenants. Nearly eight per cent of households were classified as landless (see Table 2).

TABLE 2 LAND TENURE IN NEPAL AFTER THE LAND REFORM

	No. households	% of households
(a) with land		
landlords	556	1.8
owner-cultivators	19,166	62.Ø
owner-tenants	5,893	19.1
tenants	2,885	9.3
(b) landless (and less than Ø.12 ha. including non-agricultural population)	2,413	7.8
	3Ø,913	1ØØ.Ø

Source: Zaman, 1973: 83.

Zaman shows, however, that of those in the 'landlord' category (presumably defined by the fact that they rented out their land) 15 per cent owned less than one hectare, while those owing less than 5 hectares amounted to 37.4 per cent of the total, suggesting that this category included a significant number of small farmers. Among those defined as 'owner-cultivators' 67 per cent owned less than one hectare and 85 per cent owned less than three hectares. Furthermore, 83 per cent of tenants owned less than three hectares. The numerical preponderance of small farmers (poor peasants and sub-marginal peasants) is clearly documented for Nepal as a whole.

In the hills the vast majority of farmers remain smallholders, with an increasing number possessing plots too small to live from. The Farm Management Survey carried out in 1968-69, for example, revealed that 38 per cent of 34,723 households investigated in the hills opeated less than Ø.2 hectares. Commenting on this finding, an FAO paper on policies and programmes regarding agrarian structure observed that "in view of the increasing cost of living, it can be expected that such a small area will by no means be sufficient for the support of a farmer's family during the coming years (FAO 1974: 4). More detailed studies of landholdings in particular hill areas confirm this general conclusion. Thus, Jenkin and Baird estimated that in the Kosi Hill Area in the late 197Øs farms of less than Ø.25 hectares were not economically viable, pointing out that small farmers tend to have mainly unirrigated (bari) land and that farms consisting of only bari land are predominately under Ø.25 hectares. They estimated that in parts of the Kosi Hill Area half of all farms were under Ø.25 hectares; on the other hand, the small minority (5.7 per cent) with more than 2.5 hectares owned nearly a quarter (23 per cent) of all the land (Jenkin & Baird 1978: 2Ø).

While the average size of landholdings in the mountain and hill regions in 1961 was Ø.47 ha. and Ø.56 ha. respectively according to Zaman, in the terai it was almost four time as great. On the other hand, there is substantial evidence that inequality of landownership is far greater in the terai than elwhere in Nepal. Despite the land reform of 1964, there appears to have been little change in this regard over the past thirty years. In 1972, according to a sample survey carried out in 17 terai districts, 88 per cent of households accounted for less than 15 per cent of cultivated land, while the top 3.4 per cent owned nearly 47 per cent of the land (Ghai and Rahman 1979: 3). The FAO working paper on policies and programmes regarding agrarian structure confirms this picture of substantial inequality in terai land tenure: "the evaluation of the land reform in Nepal revealed that there was still a considerable disparity between the various tenancy classes of holdings. In a small survey area of the terai, eighteen landlord households held over 5Ø per cent of the land, the average size of their holdings being 51 hectares. The average size of all sample landlord households was 18 hectares, while the average size of holdings of owners-cum-tenants and tenant-cultivators were 1.74 ha. and 1.74 ha. respectively (FAO 1974: 6).

All the evidence suggests that the structure of landownership in Nepal as a whole is highly unequal, with a small minority of larger landowners possessing a substantial proportion of cultivable land. In general, furthermore, these larger landowners own and cultivate the best land. In the hills as in the terai, larger farmers are more likely to own irrigable (and irrigated) land than smaller farmers and therefore to be better able to produce at a higher level of output per hectare the higher value crops. Inequality in landownership is particularly acute in the terai, despite the various efforts at land reform; but even in the hills, where the overall pattern of land tenure affords a greater degree of equality, a small minority owns a sizeable proportion of the better land, while an increasing majority find themselves farming plots incapable of providing even a bare subsistence without additional sources of income.

It has been suggested that other things being equal, families with more land get more food to eat (HMG/Nepal 1966). The USAID Mission Director estimated in 1979 that "85 per cent of hill farm households do not produce enough food to meet their own consumption requirements, and that 5Ø per cent of terai farm households are similarly deficit" (Butterfield 1979: 4). In times of poor harvest or in the season prior to harvest when previous stocks are exhausted, their level of food consumption becomes extremely precarious (FAO 1975).

The Kosi Hill area study showed that the majority of landholdings in that area did not provide farmers with sufficient staple food to feed their families over the whole year. Before each monsoon, there is a time when food shortages affect many of the households, but the most affected each year is the group of small farmers, in particular those with mostly non-irrigable land (Conlin & Falk 1979: 123). It was reported that farmers with non-irrigable land in all farm size groups produced less than they needed for subsistence even in a good year (ibid: 132), while "small bari farmers, even in a good year (1978) can

only produce 37 per cent of their modest requirements" (ibid: 133) (see Table 3).

TABLE 3 FARM SIZE AND FOOD PRODUCTION, ALL CEREALS, KOSI HILL AREA, 1977, 1978

Farm size (ha)	Average express requirement cereals per person annually (kgs)	Production as a % of requirements	
		1977	1978
Ø - Ø.5	217.1	37	52
Ø.51 - 1.Ø	262.1	56	77
1.Ø1 +	319.8	59	86

Source: Conlin & Falk 1979: 131.

It would appear that even in a good year all farms are deficient in cereals in relation to their expressed requirements, although this probably represents a small surplus on larger farms and sufficient for subsistence on medium sized farms; small farms can only produce half of their subsistence requirements in a good year. In a bad year (1977) even larger farmers suffer a real food deficit while small farmers produce even less than half of their needs.

However, because the expressed requirements include grain for the payment of hired labourers it is necessary to assess food deficits in relation to an international standard of needs as well as to expressed requirements. Needs, in this sense, are amounts of cereal which would sufficiently feed a family and do not include prestige and labour payments. An analysis carried out on this basis reveals a slightly less dismal picture, but it is clear that small farmers, and particularly those with only unirrigated land, are generally unable to produce enough for their basic needs, even in a relatively good year (see Table 4).

TABLE 4 FARM SIZE, FOOD PRODUCTION AND BASIC NEEDS, KOSI HILL AREA, 1977, 1978

Farm size	Land type	Average annual expressed requirements	Cereal production as % of: a) expressed requirements		b) basic needs*	
			1977	1978	1977	1978
Ø - Ø.5	only bari	195.5	27	37	25	34
	mainly bari	311.Ø	43	52	64	77
	bari & khet	234.6	32	45	36	5Ø
	mainly khet	271.2	53	76	68	98
Ø.5l - 1.Ø	only bari	185.8	34	5Ø	3Ø	44
	mainly bari	373.3	37	51	66	91
	bari & khet	328.2	59	85	92	133
	mainly khet	3Ø5.5	66	89	96	129
1.Øl +	only bari	222.7	62	62	66	66
	mainly bari	377.9	3Ø	45	54	81
	bari & khet	464.Ø	52	73	115	161
	mainly khet	447.1	63	97	134	2Ø7

* Basic needs taken to be 21Ø kgs of cereal annually for an adult male.

Source: Conlin & Falk 1979: 132.

4. THE DETERMINANTS AND DIMENSIONS OF DEMOGRAPHIC CHANGE

Land is the key to subsistence; without access to sufficient land, it is extremely difficult to avoid falling into serious food deficit and gross poverty. Deteriorating conditions in the hills during the 1960's and 1970's meant that an increasing number of hill households moved into the desperate category; many of these, unwilling to emigrate, took loans instead in order to maintain subsistence, even at a reduced level. So they were unable to pay back loans and fell deeper into debt so the probability of repossession of mortgaged land, if they had any, grew. Conway and Shrestha (1981) argue that the reasons for emigration have changed during the last 25 years: while emigration was apparently prompted by loss of hill land through physical calamities (landslides, floods, etc.) more than anything else between 1957 and 1964, responses indicting a loss of land due to indebtedness and repossession by creditors increased systematically over time, until it was relatively common by the 1970's. In all cases, however, loss of land was at the root of the decision to migrate. The difficulty of finding employment in the hill areas means that the landless are without the means of subsistence, and the search for land is a primary objective.

Permanent emigration for the entire household must, however, be seen as a 'last resort'; for most hill people the temporary migration of members of the household, reducing subsistence levels and even taking loans for subsistence purposes comes before the permanent departure of the household from its own village. Conlin and Falk have shown how, in the Kosi Hill area, "perennial food deficits as a result of population pressure on land is a major cause of the migration of smaller farmers" (Conlin and Falk, 1979:38) although they observe that permanent emigration of some members of the household (not the permanent migration of the entire household) can make a substantial difference, in percentage terms, to average per capita landholdings, even though the absolute gain is small; small farmers can also alleviate food deficits in the household in this way. It would appear that "emigration of the whole household occurs when a bad harvest, because of a number of climatic factors, can no longer be supported by increasing indebtedness" (ibid: 38).

A study carried out by the CEDA in the far western terai around 1975 reported that the majority of households interviewed cited population pressures, increasing family size and declining production from their farms as major reasons for moving from the hills to the terai. Many respondents also mentioned environmental deterioration, such as flooding and landslides, as a reason for their move (Dahal, Rai and Manzardo, 1977: 88-90). The authors of this study state unequivocally that "poverty, or more specifically, the inability of a farmer to grow enough grain for the year's needs from his lands, and who does not have other means of making up these deficiences through trade, short or long term temporary migration, is probably the most common cause of permanent migration" (1977: 90). The majority of these permanent migrants were landless labourers or small peasants unable, even with the additional sources of income from small businesses, to maintain adequate levels of subsistence in the hills. Thirty-six per cent of

these households owned less than 1 bigha (Ø.67 hectares) of land in the area from which they came; in their new location in the terai, only 6 per cent had less than 1 bigha, and the proportion cultivating between 1 and 11 bighas rose from 44 per cent in the hills to 87 per cent in the terai. The results of a more recent survey carried out in the hill districts of Syangja and Lamjung in the west central region and in Chitwan and Nawalparasi in the terai directly south confirm the crucial significance of environmental factors, agricultural production and particularly access to land in determining emigration (Conway and Shrestha, 1981). For households in the hills intending to emigrate, access to land for subsistence appears to have been the paramount consideration (see Table 5).

TABLE 5 REASONS FOR EMIGRATING (HILL SAMPLE)

Reason	Per cent of sample
low production insufficient to support family	31.4%
hoping to obtain land elsewhere	17.1%
more productive land elsewhere	15.7%
difficult terrain and landslides here	14.3%
hoping for better conditions elsewhere	8.6%
indebted/creditor took land	5.7%

Source: Conway and Shrestha, 1981: 147.

The households in the terai who had actually emigrated from the hills gave a variety of responses to the question, why did you emigrate? But their reasons can be easily summarised in terms of easy access to land, ability to produce sufficient for household subsistence, employment opportunities and general quality of life. In respect of all these, they expected to find better conditions in the terai (see Table 6).

But the search for land in the terai to clear and settle does not always succeed. Increasingly, as the state intervenes to control settlement and to protect the remaining forest, migrants find resistance to their demands for land to cultivate.

Attempts to control and limit settlement in the terai has led, over the past fifteen years in particular, to constant confrontation and conflict between the would-be settlers and squatters, and the personnel (such as forest guards and local police) appointed by the state to safeguard the forest and prevent 'spontaneous' settlement. The contradictions facing the government as a result of the massive emigration from the hills into the terai are very serious: on the one hand they are concerned to prevent or at least inhibit the wholesale destruction by haphazard clearance of the valuable forest resources of the terai, but on the other they are clearly aware of the growing pressure in the hills and the effectiveness of emigration as a temporary palliative. Nevertheless, a consequence is confrontation

TABLE 6 REASONS FOR EMIGRATING (TERAI SAMPLE)

Reasons given	percentage of total
no land in hills	17.8
hoping for land in the terai	15.3
not enough food in hills	9.Ø
heard of available land in terai	6.9
accompanied friends	5.9
poor facilities in hills	5.4
better prospects in the terai	5.4
not enough production in the hills	5.1
too little for family in hills	4.9
lost land through debt in hills	4.7
no employment in hills	4.4
other	4.3
lost land through calamities	3.9
no prospect of more land in hills	2.4
hoping for employment in terai	2.Ø
better facilities in terai	2.Ø
easier life in terai	Ø.15

Source: Conway and Shrestha (1981).

and violence. For example, "in years like 1972, when heavy rains made the growing season in the hill regions unusually short and the food scarcity more acute than usual, destitute hill people migrated in very large numbers to the terai forest to clear land and re-establish themselves. Therefore, the confrontations between them and forest rangers, often backed by local police, were numerous, with shootings reported in a number of terai districts. The most serious incident occurred at Ramailo-Jhora in northern Morang district, where more than 4,ØØØ landless people resisted police attempts to burn their huts and force them out of the forest. The government admitted that one settler was killed when the police fired into the angry crowd, but press estimates of those killed ran as high as seventy-five" (Gaige, 1975: 82).

Clearly, the consequences of large-scale unplanned migration and settlement in the terai are far-reaching. In addition to the mounting tension and violence as a result of confrontations between desperate landless hill immigrants and the state, there is the simple fact that population density and population pressure in the terai is also building up significantly. The density of population in the terai is very high in some areas and is increasing. As this relatively fertile region is increasingly populated and settled by small farmers aiming at survival and subsistence, so the production of food grain per capita will tend to decrease and the demand for what foodstuffs are produced will tend to increase. The capacity of the terai to produce surpluses for distribution in the food-deficit hill areas has been rapidly eroded, as has its ability to generate surpluses for export. The attraction of the terai, since the late 195Ø's, as a place to settle remains, but its capacity to absorb the continuing and

increasing flood of immigrants is correspondingly rapidly diminishing. It has been estimated that very soon it will be unable to absorb any more small farmers, assuming the current average size of landholding in the terai is maintained. In the absence of any land reform, one of the consequences will be an increasing number of destitute, landless labourers as those from the hills swell the numbers of those already living in the plains.

Differential population growth in mountains, hills and plains can be identified from as early as the 1950's. Malaria control encouraged the clearing of forest and settlement in the terai during the late 1950's and, at an ever increasing rate, subsequently. Gurung noted that "in terms of annual increase... the terai regions supersede all the hill regions including Kathmandu Valley. The population increment in the terai has been constituted both by settlers from the hills as well as from India" (Gurung 1965:11). During the 1960's, population increase in the mountain and hill regions did not exceed 17 per cent and the highest annual growth rate was around 2 per cent; in the same period, the population of the eastern and central terai grew by a third of the 1961 base figure, while in the western terai the population doubled (see Table 7).

TABLE 7 DIFFERENTIAL POPULATION GROWTH BY REGION, 1961-1971

Region	Population 1961	Population 1971	Annual growth rate	Population density 1961	Population density 1971
w. mts & hills	1,797,000	2,056,000	1.34	35	40
c. mts & hills	1,947,000	2,388,000	2.03	70	83
e. mts & hills	2,800,000	2,274,000	0.89	67	74
Kathmandu valley	460,000	600,000	2.64	814	1,062
w. terai	272,000	424,000	4.37	37	58
c. terai	645,000	991,000	4.23	71	110
e. terai	2,213,000	2,823,000	2.42	167	213
all Nepal	9,413,000	11,556,000	2.04	67	82

Source: Seminar on Population and Development, CEDA, Kathmandu, 1971, Tables 1 and 5.

The differential rate of population growth continued throughout the 1970's with the hill and mountain population growing generally at a rate of between 1 and 2 per cent and that of the terai increasing by between 3 and 5 per cent. Preliminary analysis of the 1981 census enables us to see the clear trend in population change over the last three decades (see Table 8).

TABLE 8 DIFFERENTIAL POPULATION GROWTH BY REGION, 1952-1981

Region	1952-1961 Population	1952-1961 Annual growth	1961-1971 Population	1961-1971 Annual growth	1971-1981 Population	1971-1981 Annual growth
hills & mts	6,343,493	2.19	7,210,Ø17	1.29	8,46Ø,926	1.61
terai	3,Ø69,5Ø3	Ø.69	4,345,966	3.54	6,559,525	4.2Ø
all Nepal	9,412,996	1.68	11,555,983	2.Ø7	15,Ø2Ø,451	2.66

Source: National Census: brief analysis, National Population Commission, Kathmandu, 1982.

From the preliminary analysis of the 1981 census it would appear that, although a few districts outside the terai show high rates of growth many, particularly in the mountain areas and in the already heavily populated and seriously eroded hill districts show a net loss of population. A major determinant of this uneven pattern of population growth between regions is migration.

While we know that population movement - emigration and immigration - has long been a significant feature of Nepalese economy and society, it is not until the 195Ø's that any figures are available. The results of the 1952-54 census suggest that only 2.6 per cent of the enumerated population had been absent from home six months or more; 97 per cent of such migrants were from the hills and the mountains. Most (91%) of the people recorded as migrants were living abroad and of those nearly all were in India; the impression is one of relatively little migration within the country, or indeed even outside. But by 1961 it appears that the situation had changed considerably: now 4 per cent of the counted population had been away from home for six or more months. Migrants living abroad increased from 2.3 per cent of the total counted population in 1952-54 to 3.4 per cent in 1961; migrants living elsewhere in Nepal from Ø.2 per cent to Ø.6 per cent. Again these came predominantly from the hills and mountains. The figures drawn from the 1961 census indicate clearly the tendency for migration (both temporary and permanent) to be away from the hills and mountains and into the terai (see Table 9).

Over the next decade this tendency was to become increasingly visible and the importance of permanent migration from hills and mountains to become significantly greater. In 1961 the number of persons who had moved from their area of birth was still relatively small (only 1.9% of those resident in Nepal at the time of the census); by 1971 the proportion of such lifetime migrants was 4.4 per cent. In 1971 nearly 65 per cent of internal migrants originated from the eastern and central hills; the vast majority of these moved directly south to the eastern terai and central terai respectively; the western hills also lost population, almost entirely to the western terai. Migrants from the mountains tended to move south to the terai also: from the eastern mountains, 56 per cent of emigrants went to the eastern terai, and only 22 per cent to the eastern hills; 6Ø per cent of migrants from

the central mountains moved immediately to the central terai, and omly 29 per cent to the central hills (see Table 10).

TABLE 9 LIFETIME INTERNAL MIGRATION, 1961

Region	Immigrants	Emigrants	Net gain or loss
eastern hills and mts.	5,354	74,846	- 69,492
eastern inner terai	5,345	10,552	- 5,207
eastern terai	72,030	3,848	+ 68,182
western and central hills and mts.	5,694	38,326	- 32,632
Kathmandu Valley	24,748	20,131	+ 4,617
western inner terai	3,446	16,754	- 13,308
central inner terai	27,560	2,188	+ 25,372
western and central terai	8,307	2,591	+ 5,716
far western hills and mts.	4,783	8,656	- 3,873
far western terai	21,170	545	+ 20,625

Source: Central Bureau of Statistics, Kathmandu, 1967: vol. 2, Table 11.

TABLE 10 LIFETIME INTERNAL MIGRATION, 1971

Region	Immigrants	Emigrants	Net gain or loss
eastern mts.	6,385	37,916	- 31,531
eastern hills	17,498	186,843	-169,345
eastern terai	185,799	10,267	+175,532
Kathmandu Valley	26,440	45,484	- 19,044
central mts.	1,223	2,095	- 872
central hills	29,752	140,642	-110,890
central terai	161,751	6,504	+155,247
western mts.	2,125	9,681	- 7,556
western hills	5,063	65,750	- 60,687
western terai	70,885	1,739	+ 69,146

Source: Central Bureau of Statistics, Kathmandu, 1975, vol.2, Table 10.

The scale of spontaneous migration during the last two decades is enormous; one author estimates that "between 1961 and 1971 about 0.4 million people moved to the terai" (Basnyat, 1981: 28).

The significance of population movement - emigration and immigration - lies, however, less in the absolute numbers involved, or even in the rate of growth and decline of the population in a given area, than in the economic and social causes and consequences of such large scale migration. One consequence of the immigration into the rural terai and associated rapid population growth there is rapidly increasing population density; at the same time, one of the major causes of emigration from the hills is population pressure. The relationship between population growth, population density, and population pressure

is an important one to grasp, for it is itself connected to such central issues as stagnant agricultural output, declining yields, and environmental deterioration.

The complex relationship between technical change in agriculture, the capacity of an agrarian economy to generate surpluses and the dynamics of population change is one that has been much debated. The thesis that population pressure on resources may itself stimulate innovation and encourage intensification as an adaptive response by farming systems tends to identify demographic change as an independent variable, while the argument that political and economic changes leading to technical change and increased output enable larger populations to survive and thrive suggests a different direction of causation. The two are not necessarily in contradiction, however, for there is generally a positive feed-back of a complex kind between agrarian change and demographic change. In the case of Nepal, it seems highly probable that the introduction of new crops during the 18th and 19th centuries, the demands of the newly emergent Nepalese state for increased revenue, its policies of land reclamation and direct encouragement of immigration and settlement, all contributed to a significant growth in the population of Nepal; on the other hand there can be no doubt that population growth in turn made possible and, equally, necessary, further developments in agricultural production - increasing the area under cultivation, intensifying production methods, and making possible the generation of larger surpluses from agriculture. These changes that took place during the latter part of the 18th century, and throughout the 19th century, laid the basis for the distinctive structure of Nepalese economy and society in the 20th century, as well as for the current crisis. Thus, population growth, agrarian change and the evolution of the Nepalese state are intimately inter-related; population growth cannot be regarded simply as an independent variable - it took place under specific economic and political conditions; at the same time, however, it was to have profound social and economic consequences.

The 1981 census for Nepal suggested a total population of over fifteen million inhabitants, and an annual rate of population growth of some 2.7% during the previous decade. The data derived from censuses and population estimations since the early part of the 20th century suggest that both the population and the growth rate have been steadily increasing over the last half century while in the last thirty years or so the population of Nepal has nearly doubled (see Table 11).

If these figures appear to suggest a relatively slow rate of increase during the first half of the century with a static total population in the period up to 1930, it has nevertheless been argued by at least one student of demographic change in Nepal that "the population of Nepal more than trebled in the years between 1850 and 1960, from a base of between three and four million" (Macfarlane 1976: 292), and that "the population of Nepal... seems to have been growing from at least the early 19th century" (ibid: 307). Indeed, the available evidence does support the argument that the Nepalese population was growing slowly but significantly throughout the period from 1750 to 1950, from the

TABLE 11 POPULATION GROWTH 1911-1981

Year	Population	Year	Population
1911	5,638,749	1961	9,799,820 9,471,350
1920	5,573,788	1971	11,555,983
1930	5,532,564	1976	12,393,000 est. 12,837,018
1941	6,283,649	1981	15,020,451
1952-54	8,473,478		

unification of Nepal as a tributary state under the kings of Gorkha to the downfall of the Ranas (who replaced the monarchy in effect in 1846). The nature of the evidence is not entirely satisfactory but it derives from a variety of sources, including official state archives, local oral traditions and the estimates and impressions of certain Western observers. As regards the last of these, it is interesting to note that figures derived from tax census data by Hamilton in 1810 imply a population of perhaps two and a half million (Hamilton 1810) while estimates by Kirkpatrick suggest that the population of Nepal by the end of the 18th century was possibly no more than half a million (Kirkpatrick 1811: 163, 183).

Whatever the pattern of population growth during the 19th century it seems clear that even during the first part of the present century the rate of growth was low in comparison with rates of growth in the decades from the 1940's onwards. If we are correct to argue that population was growing even in the 19th century, then no special explanation is required for the absolute growth of population during the present century, for the cumulative effect of earlier population growth would reveal itself in an exponential increase in numbers over time. However, the changing balance between fertility and mortality evident over the past thirty years does require special explanation; it is this factor which explains the increasing rate of population growth. It may be significant that the apparent take-off in population growth during the 1940's coincided with the first limited efforts by the Nepalese government under the Ranas to introduce certain welfare measures, while the subsequent decade was one in which the goverment of Nepal began explicitly to consider the question of economic and social development and to receive substantial aid from abroad. It is certain, however, that the effective control during the late 1950's of several major diseases, notably malaria and smallpox, must have had an important impact in reducing mortality rates, and have contributed greatly to subsequent population growth.

In the early 1950's, crude death rates were very high, but estimates varied between 44.0 for the period 1953-55 (Thakur 1963) and 30.0 for 1952-54 (UN Demographic Year Book 1960, Table 15). One source suggests that in 1954:

> "the high death rate obtained for Nepal can be attributed to three factors: the geographic features, the inadequacy of medical and health services, and the low level of economic development. Nepal is a mountainous country covering an area of 141,000 sq. kms. along the Himalayas with the population settled in scattered hamlets and villages, which makes communications difficult. The development of modern medical and health services was started only recently and there was hardly one doctor for a population of 80,000 in 1958. To add to these problems, the low level of living associated with a per capita income of about 50 US dollars make even the minimum standards of nutrition, clothing and housing beyond the reach of the common man. We, therefore, conclude that our estimate of the death rate of 36.7 is not inconceivable under the circumstances prevalent in Nepal" (Vaidiyanathan and Gaige, 1973:289).

It seems clear, however, that during the 1960's there was a substantial decline in crude death rates (see Table 12).

Available data on crude death rates strongly suggest a secular decline in mortality rates over the last thirty years for Nepal as a whole. Two different analyses of the 1952-54 census concluded that the expectation of life at birth in the early 1950's was of the order of 28 to 31 years. Two analyses of the 1961 census age distribution estimated the life expectation of females to be about 33 and of males to be between 30 and 35. Results of the 1971 census suggested a further increase in life expectancy to 39-40 years for females and 37-43 for males; while the life tables derived from the Demographic Sample Survey of 1974-76 estimated an expectation of life at birth of 42 years for females and of 45 years for males. Even after this general improvement, however, Nepal continues to have one of the highest crude death rates and lowest life expectancies in South and Southeast Asia: over 20 deaths per thousand in the mid 1970's.

It has often been suggested that, given the generally inferior position of women in Nepalese society (and the systematic oppression of women among particular Hindu groups), female life expectancy is likely to be lower and mortality rates higher than would be the case for males. As Bourini observed in his report on the Demographic Sample Survey of 1974-75:

TABLE 12 ESTIMATES OF CRUDE DEATH RATES, 1953-78

Period/year	Source	Crude death rate
1952/1954	United Nations (a)	30.0
1953/1955	Thakur (b)	44.0
1954	Vaidiyanathan (c)	36.7
1955/1960	United Nations (d)	36.6
1953/1961	Central Bureau of Statistics (e)	27.0
1961	Gubhaju (unsmoothed data) (f)	27.1
	(smoothed data)	34.2
	Krotki and Thakur (g)	33.0
	Rama Rao and Kulkarni (h)	29.8
1965/1966	National Health Survey (i)	27.0
1965/1970	United Nations (j)	22.9
1961/1971	Central Bureau of Statistics (e)	21.4
1971	United States Bureau of the Census (k)	24.0
1970/1975	United Nations (j)	20.3
1974/1975	Demographic Sample Survey (l)	19.5
1975	United States Bureau of the Census (k)	21.0
1976	Demographic Sample Survey (m)	22.2
1977/1978	Demographic Sample Survey (n)	17.1

Sources:
(a) United Nations, 1960, Tables 15.
(b) H.N. Thakur, 1963.
(c) K.E. Vaidayanathan and Frederick H. Gaige, 1973.
(d) United Nations, 1963, Table 2
(e) Central Bureau of Statistics, 1977.
(f) B.B. Gubhaji, 1975, pp. 115-128.
(g) K.J. Krotki and H.N. Thakur, 1971.
(h) G. Rama Rao and V.S. Kulkarni, 1969.
(i) Rombert M. Worth and Narayan K. Shah, 1969.
(j) United Nations, 1972, Table 23.
(k) United States Bureau of the Census, 1979 (mimeo).
(l) Central Bureau of Statistics, 1976.
(m) Central Bureau of Statistics, 1977.
(n) Central Bureau of Statistics, 1978.

"It is most likely that in a fully agrarian society where maternal and child health services in the rural areas do not exist, or are only very rudimentary, women are exposed to unusually high mortality conditions during conception and delivery. Furthermore, the women's daily duties, in addition to their home work consist of assiduous field work in agriculture side by side with men. Their social status is inferior and their educational attainment far behind males. Therefore, it is not unusual that women in these societies have higher mortality risk, and subsequently less survival ratios" (Bourini, Central Bureau of Statistics, 1976:19).

The available data appear broadly to support this argument from the 1960's onwards, at least (see Table 13).

TABLE 13 ESTIMATED LIFE EXPECTANCY AT BIRTH, BY SEX, 1952-1976

Period/year	Source	Males	Females
1952-1954	Central Bureau of Statistics (a)	25.6	25.7
	Vaidiyanathan and Gaige (b)	27.1	28.5
	Kramer (k)	31.6	29.4
1953-1961	Central Bureau of Statistics (c)	35.2	37.4
1961	Rama Rao and Kulkarni (d)	34.2	33.6
	Krotki and Thakur (e)	30.2	33.0
	United States Bureau of the Census (f)	34.7	32.5
	Kramer (k)	34.7	32.5
1961-1971	Gubhaju (g)	42.9	38.9
	Central Bureau of Statistics (c)	37.0	39.9
1971	SEARO (WHO) (h)	46.0	42.5
	United States Bureau of the Census (f)	41.9	39.1
1974-1975	Demographic Sample Survey (i)	46.0	42.5
1976	Demographic Sample Survey (i)	43.4	41.1
1974-1976	United States Bureau of the Census (f)	45.0	42.0
	Kramer (k)	44.7	41.8

Sources:
(a) Central Bureau of Statistics, report on the 1952-1954 census of population.
(b) K.E. Vaidiyanathan and F.H. Gaige, 1973, p.288.
(c) Central Bureau of Statistics, 1977, pp. 97-100.
(d) G. Rama Rao and V.S. Kilkarni, 1969.
(e) K.J. Krotki and H.N. Thakur 1971, pp. 89-104.
(f) United States Bureau of the Census, 1979.
(g) B.B. Gubhaju, 1974.
(h) SEARO, Country health information profiles, 1975.
(i) Central Bureau of Statistics, 1976.
(j) Central Bureau of Statistics, 1977.
(k) Banister and Thapa, The Population of Nepal, Table 6.

If mortality rates for both males and females generally have dropped, infant mortality rates - a particularly revealing indicator of the general health and survival chances of a population - have also declined significantly over the last 30 years. Prior to 1960 it would appear that infant mortality rates were substantially under-reported, but between 1960 and 1974 (according to Banister and Thapa 1981: 41) the number of infant deaths per thousand live births dropped from 182 to 156. Other sources suggest a broadly similar rate of decline (see Table 14). However, despite the clear secular decline, the overall rate remains high even by Asian standards with over 100 infant deaths per thousand live births.

As with female life expectancy generally, it has often been argued that the sexual discrimination that takes place within the majority of Nepalese families is likely to ensure a higher rate of infant and child mortality among females than among males. However, the data are not conclusive in this regard, and if anything appear to support the contrary thesis, namely that infant mortality rates are generally lower among females (see Table 14).

TABLE 14 ESTIMATES OF INFANT MORTALITY RATES, 1954-1978

Period/year	Source	Males	Females	Both Sexes
1954	Vaidiyanathan and Gaige (a)	260	250	-
1961-1971	Gubhaju (b)	200	186	-
1965-1966	Nepal Health Survey (c)	-	-	130-208
1971	Central Bureau of Statistics (d)	-	-	172
1974-1975	Demographic Sample Survey (e)	141	123	133
1974-1976	United States Bureau of the Census	135	130	133
1976	Demographic Sample Survey (g)	128	138	134
1977-1978	Demographic Sample Survey (h)	110	98	104

Sources:
(a) K.E. Vaidiyanathan and Frederick H. Gaige, 1973.
(b) B.B. Gubhaju, 1974.
(c) Rombert M. Worth and Narayan K. Shah, 1969.
(d) Central Bureau of Statistics, 1974, p. 12.
(e) Central Bureau of Statistics, 1976.
(f) United States Bureau of the Census, 1979.
(g) Central Bureau of Statistics, 1977.
(h) Central Bureau of Statistics, 1978.

Malnutrition and exposure to disease and unsanitary conditions are among the most important proximate causes of infant and child mortality. The Economic and Social Commission for Asia and the Pacific suggest in their report on the population of Nepal that, "while reliable data are not available to ascertain the major causes of infant mortality in Nepal, it is generally suspected that most of the deaths in infancy and early childhood are due to malnutrition, intestinal parasitic and infectious diarrhoeal diseases and other (...respiratory) infections" (ESCAP, UN 1980: 50).

It is clear that infants and young children are particularly at risk, given the widespread unsanitary and unhealthy conditions of existence in the villages and towns of Nepal; this is particularly the case for the children of poorer households for whom health risks and the probability of inadequate food consumption are greater than for others. Detailed investigations carried out during 1979-80 in Rapti Zone, for example, suggested that between 25 per cent and 32 per cent of all children ever born (for ever married women of 15-49) had died; but when the data on mortality are related to land-holding, it becomes

abundantly clear that the percentage of children who died was highest among the sub-marginal, marginal, and small land-holding categories and lowest among the largest land-holding category of households. Infant mortality rates (for the previous 3 years) among the sub-marginal households averaged 249, in contrast with a range of between 131 and 169 for other land-holding categories. These findings suggest a greater risk of infant death among the poorer households (Rapti Baseline Survey pp. 57-58).

The data on infant mortality suggest important differences between the three major environmental zones (mountains, hills and plains), with the hill population as a whole enjoying the lowest infant mortality rates and the mountain population suffering from the highest infant mortality rates (see Table 15).

TABLE 15 INFANT DEATHS PER 1000 LIVE BIRTHS, BY ZONE

Period	Mountain	Hill	Plains	All Nepal
1960-64	238	150	212	182
1965-69	189	149	183	168
1970-74	188	143	165	156

Source: Banister and Thapa, The Population Dynamics of Nepal, 1981: 41.

Apparently regional or locational differences in mortality rates are, however, we would argue, to be explained in terms of the different economic and social conditions of households belonging to different social classes, rather than to any simple 'environmental' differences. (Although, as we shall see, the unequal distribution of state provision in such crucial areas as health has an important spatial dimension). There is also evidence for significant differences in mortality rates between rural and urban areas, with the latter having substantially lower rates. In 1974-75 and 1976, the urban mortality rates were less than half the corresponding rural rates, although in 1977-78 there appears to have been a considerable narrowing of the gap, resulting both from declining rural mortality rates and also, more worryingly, from increasing urban mortality rates. It may be that the latter is a consequence simply of different procedures for recording deaths in urban areas, but it is more likely that the explanation lies partly in the increasing number of the poorest and most vulnerable rural households migrating to the towns, and partly in the deteriorating living conditions in some of the larger towns of Nepal. In general, however, the lower mortality rate in the urban areas reflects the higher average income level of urban households and relatively greater degree of access to health and educational facilities (UN 1980: 57).

The simplest and most common measure of fertility is the crude birth rate, which is defined as the number of births in a year per thousand population. On the basis of crude birth rates (see Table 16) there appears to have been no significant change in fertility over the past thirty years, althogh these data present a partial picture only.

TABLE 16 ESTIMATED CRUDE BIRTH RATES, 1952-1978

Period/year	Source of estimate	Estimated crude birth rate
1952-1954	United Nations (a)	45.Ø
1954	Vaidiyanathan and Gaige (b)	48.7
1951-1961	Central Bureau of Statistics (c)	4Ø.Ø
1961	Krotki and Thakur (d)	47.Ø
	Gubhaju (e)	42.1
1961-1966	United States Bureau of the Census (f)	44.6
1968	Vital Registration Pilot Project (g)	42.Ø
1966-1971	United States Bureau of the Census (f)	43.8
1961-1971	Central Bureau of Statistics (g)	43.8
1971	United States Bureau of the Census (f)	43.4
	Karki (h)	42.4
	Gubhaju (i)	42.4
	Central Bureau of Statistics (adjusted) (j)	42.Ø
1974-75	Demographic Sample Survey (adjusted) (k)	44.7
1976	Demographic Sample survey (adjusted) (k)	46.8
	Nepal Fertility Survey (unadjusted) (l)	43.6
	Nepal Fertility Survey (adjusted) (l)	45.5
1977-78	Demographic Sample Survey (adjusted) (k)	42.6

Sources:
(a) Population Bulletin of the United Nations (United Nations publication sales no. 64.xiii.2).
(b) K.E. Vaidiyanathan and F.H. Gaige, 1973.
(c) Central Bureau of Statistics, 1964.
(d) K.J. Krokti and H.N. Thakur, 1971.
(e) B.B. Gubhaju, October and December 1975.
(f) United States Bureau of the Census, 1979.
(g) Central Bureau of Statistics, 1977.
(h) Y.B. Karki, 1979 (mimeo)
(i) B.B. Gubhaju, 1974.
(j) Central Bureau of Statistics, 1974.
(k) Central Bureau of Statistics, 1978.
(l) Ministry of Health, Nepal FP/MCH Project, 1977.

A more refined measure of fertility is the age-specific fertility rate, which is the number of births during a year to women in a given age group (normally 5 year intervals) per thousand women in the same age group. The evidence of age-specific rates derived from various sources relating to the 1970's appear to be broadly consistent, with the rate of childbearing low at ages under twenty, rising to a peak at ages 25-29 when fertility is at its highest level. The total fertility rate derived from these data suggest that there has been no systematic change during the past decade and that Nepal's fertility remained steady during the decade at between 6.0 and 6.4 births per woman; but there is some suggestion of a decline in fertility among women aged 25 and over and an increase among women aged between 15 and 24 (although these trends are only tentatively identified here (see Table 17).

There is some evidence, though it is not conclusive, that fertility has been higher since the early 1960's than prior to that; the population of the terai in particular appears to have experienced a rise in fertility, possibly in response to malaria control, in the age range 15-29 (see Table 18). Given the limitations of retrospective data, it is not clear whether or not overall fertility actually increased during the 1960's; but what is evident is that there is no major change - either upwards or downwards - in the country's fertility rate since 1971. All of the three major zones of Nepal - mountains, hills and terai - suggest largely unchanging fertility levels in all or almost all age groups of women, with a steady cumulative fertility up to age 35, and there is no reason to doubt the thesis of a steady total fertility rate over time since 1971. On the other hand, data from the Nepal Fertility Survey indicate a significant difference in the fertility rates of women as between these three zones during the 1970's (see Table 18).

At every age group up to 40-44, women in the terai reported having experienced more births than women of the same age in the hills, and women in the hills reported having more births than women of the corresponding age in the mountains (see Table 19).

TABLE 17 AGE-SPECIFIC FERTILITY AND TOTAL FERTILITY RATES, 1971-1978

Year	Source of estimates	Age-specific fertility rates for ages 15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total fertility rate
1971	Central Bureau of Statistics (a)	74	267	310	261	196	109	43	6.3
1975	United States Bureau of the Census (b)	114	287	296	257	188	92	39	6.4
1976	United States Bureau of the Census (b)	119	296	295	254	192	87	30	6.4
1974-1975	Demographic Sample Survey (c)	114	270	297	260	169	89	50	6.3
1975-1976	Nepal Fertility Survey (d)	145	290	295	269	169	75	23	6.3
1976	Demographic Sample Survey (e)	138	305	284	252	170	95	34	6.0
1977-1978	Demographic Sample Survey (f)	127	294	294	252	180	92	24	6.2

Sources:
(a) Central Bureau of Statistics, 1977.
(b) United States Bureau of the Census, 1979 (mimeo).
(c) Central Bureau of Statistics, 1976.
(d) Noreen Goldman, 1979 (mimeo).
(e) Central Bureau of Statistics, 1977.
(f) Central Bureau of Statistics, 1978.

TABLE 18

AGE-SPECIFIC FERTILITY RATES BY TERRAIN: NEPAL, 1961-75
(rates per thousand women)

Age group	Terai			Hills			Mountains		
	1961-65	1966-70	1971-75	1961-65	1966-70	1971-75	1961-65	1966-70	1971-75
15-19	151	166	163	127	124	120	89	85	90
20-24	261	285	295	266	271	277	231	261	238
25-29	270	313	310	293	285	279	249	290	273
30-34	229	245	232	260	254	245	216	218	203
35-39	u	176	153	u	191	174	u	164	170
40-44	u	u	83	u	u	82	u	u	121
45-49	u	u	(8)	u	u	(18)	u	u	(30)
CFR	4,556	5,043	5,002	4,729	4,670	4,610	3,927	4,268	4,022
TFR	u	u	6,219	u	u	5,978	u	u	5,625

u - not available because of age truncation.
CFR - cumulative fertility rates up to age 35.
TFR - total fertility rates.

Source: Calculated from NFS individual and household data tapes, cf Banister and Thapa, 1980.

TABLE 19 MEAN NO. CHILDREN EVER BORN PER WOMEN

Age group of women	Terai	Hills	Mountains
15-19	.30	.16	.11
20-24	1.44	1.32	1.08
25-29	3.07	2.72	2.38
30-34	4.29	4.01	3.24
35-39	5.15	5.03	4.63
40-44	5.73	5.48	5.04
45-49	5.24	5.99	6.00

Source: 1976 Nepal Fertility Survey.

(It should be noted, however, that women in the terai aged 45-49 reported fewer children ever born than did those of hills or mountains. This may reflect under-reporting, but may also indicate that women in this range now actually experience lower parity, possibly as a result of having suffered from malaria during their peak childbearing years - malaria in the plains was not brought under effective control until the late 1950's when these women would have been in their early thirties).

In her study of the determinants of fertility and child survival in the terai, Susan Cochrane concludes that high child mortality ensures that there continues to be a strong desire for large families (and low demand for contraception). She argues that fertility is significantly related to the survival rate among infants and children and that survival rates strongly affect fertility. Thus, the relatively large number of children born to women in the terai may be explained in terms of generally high levels of infant mortality (Cochrane, 1981). As we have seen, however, infant mortality rates appear to be higher in the mountain areas than in the terai, yet fertility rates in the mountains are the lowest in each age group of women, with the exception of the 45-49 year group. Thus while it may possibly be the case that in the terai high fertility is affected by low survival rates for infants and children, the relatively low fertility of women in the mountains can hardly be explained by low infant mortality in that region. Other factors are clearly involved.

In Nepal in general, males begin marrying at a lower age than in any other East, Southeast or South Asian country; and females begin marrying earlier in Nepal and India than in any other country within those regions. As of 1971, one per cent of boys and two per cent of girls in the 6-9 age group were already formally married; and the proportion of those ever married rose to six per cent for boys and thirteen per cent for girls among those aged between 10 and 14. Although it is the case that married children may not begin cohabiting until the girl's menarche - and may apparently remain sub-fertile for several years after effective cohabitation begins - exposure evidently begins exceptionally early. In the period between 1961 and 1971, both male and female formal marriage age rose; in 1962 the legal minimum

marriage age for girls was set at 14 and for boys at 18, and a later amendment revised these to 16 and 18 with parental consent. However, these legal minima are not widely respected and early marriage remains common.

Cochrane suggests that in the terai age and fecundity are the main determinants of fertility, the only behavioural factor of significance being age at cohabitation - this itself being closely correlated with age at menarche, but also to some extent with parental landownership status and female's education level, implying that social class may play a part ultimately in determining fertility. Although formal marriage is clearly not exactly equivalent to cohabitation and exposure to sexual relations it is significant that formal marriages occurred much earlier in the terai than in either of the other two zones. According to the 1971 census, in the terai, the female singulate mean age at marriage was 15.Ø2 and the male age was 19.45. The baseline KAP survey of 1975 also found that women in the plains married much earlier than hill women (cf Tuladhar et al 1978: 23-24); while people in the mountain areas, particularly women, reported higher ages at marriage than elsewhere. The 1976 Nepal Fertility Survey found that mean age at marriage for Buddhist women - to be found overwhelmingly in the hills and mountains - was 17.1, markedly higher that for Hindu women (15.Ø) and Muslim women (14.2). Cultural differences regarding age at marriage, and correspondingly regarding age of cohabitation and initial sexual exposure, are likely to play a significant part in determining fertility. However, a comparison of the data from the three zones relating to average number of children born at each age category shows significant variations other than in category 15-19, which also require explanation (see Table 2Ø).

TABLE 2Ø

Age group	Terai	Hills	Mountains
15-19	.3Ø	.16	.11
2Ø-24	1.14	1.16	.97
25-29	1.63	1.56	1.3Ø
3Ø-34	2.66	1.29	.86
35-39	.86	1.Ø2	1.39
4Ø-44	.58	.45	.41

Source: Calculated from Table 19)

If it is the case that, at an aggregate level, there are differences in mortality and fertility rates between the three major zones of Nepal, these differences reflect, we would argue, different economic and social characteristics of the populations inhabiting these areas. Given the vast size of the areas concerned and the heterogeneity of populations within each of them, it is well nigh impossible to explain adequately differentials in fertility and mortality at this level.

If administrative zones are taken as the units between which comparisons may be made, clear differences also emerge. Thus Karki estimated on the basis of the 1971 census that while the crude birth rate in some zones (e.g. Bheri and Rapti) was over 45 per thousand, in others (e.g. Dhaulaghiri and Gandaki) it was around 38 per thousand (Karki, 1979). Suggestions have been made regarding possible explanations for these differences: the zones in which birth rates are higher tend to be those where the mean age of women at marriage and literacy rates are both low. But there are important exceptions to such generalisations among the administrative zones considered, and it is again clear that at this level of investigation and comparison very little of any real interest can be said regarding the economic and social determinants of fertility. The same difficulty arises in the case of comparisons between rural and urban areas; while estimated crude birth rates are significantly and systematically higher for the rural areas than for the urban areas (about 50% higher) throughout the second half of the 1970's (Central Bureau of Statistics, 1978: 1-3), no convincing explanations have been forthcoming from the analysis of such differences. Attempts to demonstrate correlations between fertility and economic and social variables, such as education and religion, on the basis of the statistical information available from census and survey data are not successful by and large, and we would agree with the view of the Economic and Social Commission for Asia and the Pacific that "further research and in-depth analysis of the data are required before firm conclusions on differential fertility can be reached" (ESCAP 1980: 66).

There are, regrettably, few detailed studies of the social determinants of fertility and mortality in Nepal; one of these is Macfarlane's research on the Gurungs of Thak village in Kaski district in the west central region. He explores with considerable care the various factors affecting fertility including: age at entry into sexual relations, age at marriage (and the factors affecting that), prevalence of celibacy, separation or divorce, fecundity (and factors affecting that), foetal and infant mortality, morbidity and mortality among the population as a whole. He concludes that fertility among the Gurungs is moderately high, despite the existence of several features in Gurung economy and society which might have been expected to inhibit a high reproduction rate: pensions to help deal with the problems of old age, a moderately high age at marriage, army service which takes most adult men away from the village for up to fifteen years, the absence of an ancestor cult needed to produce sons, no special emphasis on fertility or virility and no great opposition to contraception or abortion (Macfarlane 1976: 247). He argues that his material "does not provide support for the thesis that fertility and 'class' are correlated" (ibid: 255), among the Gurungs; but observes that "the poorest inhabitants of two Gurung villages, the 'untouchable' castes of Tailors, Blacksmiths and Goldsmiths had slightly larger completed families that the Gurungs, on average 0.5 more live births" (ibid: 254).

He does suggest, however, that a crucial factor in the determination of fertility rates is the age of women at first childbirth; while the Nepal Health Survey discovered that nearly half the sample had given

birth to the first child by the age of 18, the Gurungs appear to have their first child, on average, around the age of 23. The same appeared to be the case for the 'low caste' groups, despite their Hindu origins and position of economic and social disadvantage, although the mean age at first childbirth may be marginally lower.

We have seen that fertility rates for the mountain and hill areas of Nepal are lower than those for the terai; and it would appear from the few detailed studies of particular communities that there is a distinction to be made between 'upland' populations, showing lower levels of fertility, and 'lowland' populations showing higher levels of fertility even within the mountains and hills. Studies by Gorer, Kihara and others on Himalayan communities in Nepal, north India and Sikkim suggest both lower rates of fertility than in the hills and a relatively late age for first child birth - between 20 and 26 (cf Gorer; Kihara; Land and Lang 1971; Goldstein 1981). This, combined with relatively high infant mortality ensures a comparatively low rate of natural growth in the montain areas as a whole. When compounded by the effects of significant emigration southwards this leads to a generally lower rate of population growth in the mountains than in any other region of Nepal, and in some districts has actually produced a decline in population.

5. POPULATION PRESSURE AND ITS CONSEQUENCES

In 1961, when the total population of Nepal was estimated to be around nine and a half million, the average population density throughout the country was 67 persons per square kilometre. About 5 per cent of the population lived in the Kathmandu Valley, where the urban areas of Kathmandu, Patan and Bhadgaon provide the only urban complex of any size in the country; here, the population density was above 800 per square kilometre (see Table 21).

TABLE 21 POPULATION BY GEOGRAPHIC REGIONS

Region	Area km(2)	% of total area	Population 1961	% of total population	Density per km(2)
1. Western mountains and hills	50,803	36.0	1,796,690	19	35
2. Central mountains and hills	28,862	20.5	1,946,502	21	70
3. Eastern mountains and hills	30,931	22.0	2,080,388	22	67
4. Western terai	7,363	5.2	271,551	3	37
5. Central terai	9,021	6.5	644,593	7	71
6. Eastern terai	13,247	9.4	2,213,282	23	167
7. Kathmandu Valley	565	0.4	459,990	5	815
Nepal	140,792	100.0	9,412,996	100	67
Mountains and hills	110,596	78.5	5,823,580	62	53
Terai	29,631	21.1	3,129,426	33	106

Source: Central Bureau of Statistics, Kathmandu

Between 1961 and 1971, the population of Nepal grew to just over eleven and a half million (an annual growth rate of somewhat over 2 per cent per year). But the rate of growth varied significantly as between the hill and mountain regions on the one hand, and the terai on the other. One of the most striking consequences of this differential growth rate in population was a differential growth in population density between hills and terai (see Table 22).

TABLE 22 POPULATION DENSITY

Region	Annual growth rate in population (1961-71)	1961	1971
west mts. & hills	1.34%	35	40
central mts. & hills	2.03%	70	83
east mts. & hills	0.89%	67	74
Kathmandu Valley	2.64%	815	1,062
west terai	4.37%	37	58
central terai	4.23%	71	110
east terai	2.43%	167	213
all Nepal	2.04%	67	82

Source: Seminar on Population and Development, CEDA, Kathmandu, 1971, Tables 1 and 5.

Over the next decade this trend continued, with the terai showing an increasing annual rate of growth (from 3.54 in the 1961-71 period to 4.20 between 1971 and 1981) and increasing population density. In the 1981 census, 15 out of the 20 most densely populated districts were in the terai (the others being Kathmandu, Chitwan, Syangja, Kavre and Dang). In the hills and mountains, taken as a whole, the annual growth rate appears to have increased, albeit significantly less dramatically (from 1.29 to 1.61). However, it would seem, from the preliminary analysis of the 1981 census that, although a few districts outside the terai show high rates of growth (such as Kaski, Myagdi, Rasuwa, Mugu and Surkhet), many - particularly in the mountain areas and in the already desperately over-populated and seriously eroded inner hill districts (such as Solukhumbu, Manang, Mustang, Rolpa, Humla, Jumla, Doti, Dandeldhura, Tehratum, Bhojpur, Syangja, Palpa and Gulmi) - show a net loss of population*.

But there is an important distinction to be made between population density and population pressure; the former is an indication simply of the number of people living within a defined area, while the latter relates to the demands made by the local population on available resources. In an agrarian economy it is the pressure on cultivable land that provides the first indication of level of demand. In Nepal,

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* It may be , however, that part of this apparent net loss is to be explained by the redefinition of district boundaries.

population pressure on cultivated land is greatest in the mountain areas of the far north, where population density is least. In 1971, cultivated land in the mountains amounted to some 97,000 hectares (4.86 per cent of all Nepal) while population (at around 1,139,000) constituted nearly 10 per cent (9.86) of all Nepal's population.

The amount of cultivated land available on average to each household was only 0.473 hectares and to each person only 0.085 hectares. In the hills, the situation was also one of very considerable pressure on cultivated land. In the early 1970's a World Bank report observed that "population density per square kilometre of arable land is probably as high as 1,100, a concentration similar to that found in certain Asiatic deltas, but where, in contrast, the soil is more fertile and the climate allows two or three crops a year" (IBRD 1973: 4). In the hills, the amount of cultivated land per household in 1971 was just over half a hectare (0.555 hectares) while the amount per person was 0.1 hectare (IFAD 1978: 3). Since that time, the pressure has increased, being alleviated only by massive emigration into the terai and to India.

Pressure on cultivated land can be reduced in two ways: by the extension of the area under cultivation or by intensification, so that output per hectare is increased and the effective resource base thus made more productive. Some intensification of cultivation has taken place in the last fifty years, with higher inputs of labour per hectare and the introduction of new crops (such as potatoes and winter wheat) which allow a greater cropping intensity, but by and large increases in productivity have been limited and in most areas - and for most crops, particularly the basic staples of rice and maize - yields have actually been declining over the last 20 years. On the other hand, there is ample evidence to suggest that the area under cultivation has been increasing over the past centuries, particularly during the last fifty years as population has grown significantly. In some areas it would seem that the limits to further extension of cultivated land had been reached by the end of the 19th century, but in general the pressure of population on cultivated land during the 19th century was localised and largely the result of the inability of those in most need of opening up new land for cultivation to do so - for legal and political reasons. The control of even waste land by those who had obained land grants and titles often prevented the poorer peasants from taking it over for their own use. Consequently, they were obliged to pay higher rents or to migrate.

In the 20th century, as population growth increased dramatically, so too did the area under cultivation. In the hills of west central Nepal, for example, Macfarlane documents how the area under rice cultivation grew between 1883 and 1933: "from the study of particular fields ...it is clear that there had been very considerable expansion, especially in the poorer area. It would not seem an exaggeration to suggest that there had been more than a doubling of the area cultivated during those fifty years" (Macfarlane 1976: 80). He shows how a considerable amount of the poorer land was brought into cultivation after the first World War, all of the good land already being in use; since 1950 apparently there has been no terracing of

good rice land, largely because with existing technology and irrigation capacity the limits have been reached. A map "showing the location of new terracing, indicates that the process since 1933 has been the last marginal filling in of potential rice-growing areas. Almost all the pieces are on the margins between already cultivated lands and unsuitable land. Even the pieces in the centre (of the map) are on poor land bordering steep cliffs. It was clear to any observer that cultivation had now almost pushed to the extreme limits, and from the point of view of soil conservation possibly beyond safe limits" (Macfarlane 1976: 81). He concludes that "for practical purposes, therefore, we must say that the period of rapid expansion of rice land really ended in the 1920's; since then only a little poorer quality land has been available. Even the small amount of poor land coming into cultivation since the 1930's has probably not balanced the effect of deterioration on land" (Macfarlane 1976: 83).

In the eastern hills, Caplan describes how by the mid 1960's "in the district of Ilam... there is little new jungle to break or virgin land to bring under cultivation. Given the existing level of technology and pattern of cultivation, the land is unable adequately to support the population... For more than a half-century, the amount of cultivable land in east Nepal has remained more or less static. During the same period the population has increased substantially, due both to natural growth and to immigration. The figures for Ilam alone have risen from an estimated 89,000 in 1920 (when tentative figures first became available) to 124,000 at the time of the 1961 census..." (Caplan 1970: 6-7).

It has always been the case that the greatest demand has been for land suitable for rice cultivation and it is significant in this regard that private individual title to such land was usually defined far earlier than for the unirrigable lands suitable only for maize or millet cultivation. In Thak, for example, in west central Nepal, "it is clear from the land records that rice terraces have been owned individually since at least 1883... maize and millet fields were less in demand and were only shared out individually during the years since about 1940. Before that, the patches of jungle were slashed and burnt by those who had the labour" (Macfarlane 1976: 52). But increasingly the needs of the local population made cultivation of maize and millet a necessity, and from the 1930's onwards waste land and forest land was brought under cultivation to a growing extent. In the case studied by Macfarlane, it was during the 1950's that the extension of cultivated area for maize and millet took place rapidly, so that by the late 1960's "only a couple of small, rocky and steep patches were being cleared. It would appear that the limits of maize cultivation have been reached" (Macfarlane 1976: 87).

One of the consequences of this reaching of the 'outer limits' of extension of cultivation has been an increasing conflict over cultivable land; in the Kosi Hill area, where many areas are now intensively cultivated, "since land cannot now be gained from the forest in those areas the demand for cultivated lands has arisen. With this increasing demand for land, conflict has also increased... the increasing demand for cultivated land is also reflected in the

rising price of land, which has doubled or trebled in the hill area within ten years, while lands in the terai have risen five or six times in cost in the same period" (Conlin and Falk 1979: 31). The increasing value of land reflects both its scarcity and its inherent productive capacity; while pressure on cultivated and cultivable land is greatest in the mountain and hill regions, the quality of land in the terai, and its capacity to respond with increased yields and output to increased investment of capital and labour, ensures that its cash value is sigificantly higher. While in many parts of the hills the absolute limits of effective cultivation have been reached, owing to the steep slopes and poor quality of soils on the remaining waste land, in the terai there still remains land that may be brought into effective cultivation, even if it means further reduction of the forest. While in Nepal as a whole, in 1970-71, only some 21 per cent of the total area was under cultivation (reflecting the nature of the terrain and climate in the northern hills and mountain areas), the cultivated area of the terai was nearly 50 per cent of the total land area (Vigny 1977: 317). Population density per cultivated square kilometre was correspondingly lower than elsewhere in the country. In the terai at the beginning of the 1970's, each household on average possessed 1.628 hectares, and each person 0.297 hectares (IFAD 1978: 3); substantially larger amounts than in the hill and mountains. The attraction of the terai, where forest and wast land remained available for reclamation and settlement throughout the period of growing population pressure in the hills (1950 onwards), is evident.

Population pressure on cultivated land must not, however, be understood simply in terms of the relationship between total population and total area of cultivated land, although this provides a useful starting point. It must be recognised that, as the population of a given area increases so its overall demands on the local physical environment grow also, and may significantly transform the character of the relationship between 'man and the environment'. Thus the expansion of cultivation to bring marginal land under cultivation has several direct effects within the cultivated area: 1) by increasing the proportion of poor quality of land it has the effect of reducing average yields and per capita output, 2) by absorbing virtually all cultivable land it reduces the possibility of farming systems which permit fallow and 'resting' periods for the soil to rebuild its fertility, 3) by cultivating steep slopes and poor quality soils with cereals it creates the pre-conditions for erosion, which given the heavy rains of the monsoon climate is always a danger facing unprotected terrain. The extension of cultivation also has other indirect effects within the cultivated area. Thus the progressive reduction of the forest in order to make available arable land changes the ratio of cultivated to forest land and reduces the capacity of farmers to provide sufficient nutrients from leafmould and compost to restore the fertility lost through persistent cultivation.

In the terai, in general, the forest was felled earlier to the south, away from the hills; land recently cleared of forest contains a greater store of nutrients than does land cleared longer ago and household surveys carried out during 1974-75 showed a distinct decline in yields from north to south, in wheat and particularly in sugar

cane. Furthermore, as farmers more distant from the forests have found the cost of collecting fuelwood too great and turned to burning cow-dung instead, the possibility of slowing up the reduction in soil fertility resulting from persistent cultivation by making use of animal manure has been significantly affected.

In both hills and terai, as yields decline owing to the progressive loss of fertility and the difficulty and cost of restoring that fertility by use of fertilisers, whether 'natural' (manure and compost) or chemical, there is a continuing pressure to extend cultivation by bringing new land into production. In the hills, however, the limits to the extension of cultivation appear to have been reached in many areas and only intensification of cultivation would seem capable of increasing output to match population growth. There has been some intensification of cultivation, but the possibility of the process called 'agricultural involution' taking place in the Nepalese hills is low and the increase in population that the hill farming ecosystem can now support is strictly limited. The low rates of population increase in the hill regions (as compared with the terai) reflect this incapacity. Even relatively low growth rates, however, pose huge problems; "on the regional basis if the present rate of out-migrations from the hills to the terai is sustained, the likely situation could be a 1.3 per cent annual population growth in the hills. Under this situation, assuming 90 per cent of the total hill people in agriculture, the bill will be 9.18 million people depending upon agriculture by 2000 which is an increase of nearly 40 per cent over the 1970 situation of 6.54 million... Since there is no scope to bring new land under agriculture in the hills and as hill agriculture is already over-populated this will be practically an impossible task to retain the many people in hill agriculture even on subsistence land" (IFAD/APROSC, 1978, p 4). As natural growth continues to take place in the hill population, emigration becomes the only way in which many households can survive. In the terai, the rapid increase in population as a consequence of combined natural growth and immigration, has increased pressure on the existing land and also on the remaining forest, which when cleared for cultivation ensures a relatively high soil fertility, at least for the first few years of farming. In the terai, unlike the situation in the hills, the new areas brought under cultivation tend to be of better quality and higher in fertility than the old fields. For the mass of immigrants, therefore, the terai appears to hold out the possibility of settlement and subsistence. For the state however, now increasingly concerned to protect these remaining areas of forest as a source of timber for export and as 'national heritage', uncontrolled felling and clearing of the forest by 'squatters' from the hills or the Indian terai (where population densities and population pressure are even greater than in Nepal) is to be met with resistance.

The growth of human population in a given area increases other demands on the physical environment beyond those resulting directly from the extension of cultivation. As Eckholm observed, "population growth in the context of a traditional agrarian technology is forcing farmers onto ever steeper slopes, slopes unfit for sustained farming even with the astonishingly elaborate terracing practised there. Meanwhile,

villagers must roam farther and farther from their homes to gather fodder and firewood, thus surrounding villages with a widening circle of denuded hillsides" (Eckholm 1976: 77). Given the mixed farming system of the hills and terai, with livestock playing an important role in providing subsistence, the increase in human population has tended to be accompanied by a corresponding increase in the domestic animal population; and the demands of buffalo and cattle in particular on the forest resources are very considerable. It has been estimated (Shephard 1978: 81-2, quoted in Agarwal 1980:16) that "there were approximately 14 million farm animals in Nepal in 1969, which exceeds the 12.25 million human population in 1979, and it is not surprising that the biomass estimated to be consmed by animals in Nepal is twice that used for fuel wood". Similar estimates of the size and significance of the animal population are provided by other sources (eg SATA 1976). The reduction of the forests for cultivation reduces the supply of fodder available and increases pressures on the remaining forest resources, thus tending to lead to a further decline in forest cover as over-cutting of trees to provide fodder reduces the capacity of the forest to regenerate itself. But, enormous though the demand for fodder may be, it is the growing use of wood for fuel - particularly after the dramatic increases in the price of kerosene in 1974 and 1979 - that has attracted most attention from those concerned with the rate of deforestation in Nepal. According to one source (Mauch 1976) the requirements for fuel wood amount to roughly 540 kgs per person per year - or a total of about 8,370,000,000 kgs for the whole of Nepal in 1981.

The demand for more arable land, more fodder and more fuel wood - all related to the growth of population - over the past century or more, has reduced the forest coverage significantly. However, it would seem that, although the process has clearly been under way for more that a century, the point at which deforestation became a critical problem in the hill regions of Nepal was not reached until around the middle of the 20th century. Recognition of the critical importance of deforestation in the deterioration of the hill farming ecosystem can be dated to the early 1970's and concern since then has increased dramatically. At the seminar on population and development, held in Kathmandu in 1971, it was observed that "visual evidence of already existing overpopulation includes deforestation, erosion and silting. Within the last decade, wooded hill tops have been cut down or severely depleted, terraces have been extended to the tops of hills, and cattle have had to graze further away. In some areas, hill-top terraces have leached out, have been abandoned, and have started to collapse on terraces below. Villagers often have to go much further to cut fodder for animals. The complex interaction of wood for fuel, cattle for manure and draught, and manured terraces for rice, etc. is becoming increasingly vulnerable to overcrowding of the hill areas. If conditions worsen, areas now cultivated will have to be abandoned" (Enke 1971: 20). The complexity of the inter-relationship betwen cereal cultivation, forest clearance and decline, livestock and human demands on local resources is here clearly revealed. As Blaikie has pointed out, "the declining yields in the hills result from an increasingly serious energy crisis in which a sufficient transference of fertility from forest to arable land (through the collection of

fodder for stall-fed animals, whose manure is composted with their straw bedding and applied to the fields) can no longer be maintained. Even with a static population, aggregate yields can only be maintained by a further clearance of forest - producing a vicious circle" (Blaikie 1979: 52).

While the inter-relationship involved in the hill farming ecosystem, and the crucial part played by the forests in this system, are becoming more clearly understood, there is still relatively little detailed or precise information regarding the rate of deforestation, in Nepal as a whole or at a regional or sub-regional level. Vigny estimates that at the beginning of the 1970's, some 32 per cent of Nepal was forested (Vigny 1977: 317), but the data are not very reliable and such general estimates have only limited value. By the mid to late 1970's several commentators were emphasising the 'crisis' of environmental deterioration in which deforestation was a crucial element. Earl, for example, argued that "the fuel wood shortage promises to be a national catastrophe. Signs of crisis are obvious throughout the hills and the plains. The desolate eroded hills between the Mahabharat range and the high Himalayas, the rapidly vanishing vegetation of the hills surrounding Kathmandu, and the constant mudslides along the mountain roads bear grim witness to man's desperate search for fuel and fodder. As the hills are denuded, erosion will increase apace, further destroying the limted farmland and vital roads" (Earl 1975: 23). And as we ourselves suggested, "Nepal in the mid-1970's... is now in a period of crisis, a crisis whose major components, over the next decade, will include serious over-population... ecological collapse in the densely populated and highly vulnerable hill areas... and the elimination of certain important 'natural' resources (eg timber), both in the hills and in the plains..." (Blaikie, Cameron & Seddon 1980: 13-14). In more detail, we argued that "in many areas in the hills the balance between forest and arable land has now been irrevocably disturbed. Arable land requires a net transfer of fertility from the forest by the transport of leaves and grass either to the field directly or more usually as fodder to stall-fed animals, whence it is distributed as farmyard manure to the fields. If this transfer does not occur in sufficient quantity to maintain nutrient levels and structure in the soil, a decline in fertility will occur. The usual response to such decline, even with a constant population, is to clear more forest for arable land to maintain total output, but with population increasing about 2.4 per cent per annum, the destruction of the forest cover gives rise, very rapidly, to an extremely precarious ecological situation. The stripping of the forest cover on hillsides leads to serious soil erosion, which further reduces the ability of the land to support an increasing population, and to a decrease in perennial water supplies, thus reducing the amount of irrigated land available. From patchy historical data... it is tentatively suggested that this process in Nepal may have been rapid and its onset recent" (Blaikie, Cameron & Seddon: 16-17).

Unfortunately, relatively few detailed studies are available which would permit a reliable evaluation of the rate of deforestation and associated environmental deterioration in particular localities. In

some places, however, the process appears alarmingly advanced. Thus, in the Dhankuta area, the disappearance of forest is now almost total: forest covers only Ø.2 per cent of the total land area, with 42.3 per cent poor quality marginal land under cultivation, 38.9 per cent 'upland' (presumably for grazing) and only 9.4 per cent irrigated rice producing fields. Here, "as a result of the depletion of resources, fuel wood and fodder are more scarce... Moreover, the decline in vegetation following the destruction of the forest has also reulted in creating a scarcity of water in the area (Abell & Dutt 1979: 31). In another instance, Hitchcock describes how a northern hill population (about 2Ø miles south of the Dhaulagiri massif) increasingly intensified its demands on the local forest resources as their farming system was transformed until by the mid 196Ø's the critical point was reached: "...if high altitude pastures still were viable and elastic... the situation in the forests above Monal and similar Bhujel winter settlements were not so fortunate. Here the forests were being harvested mainly for fodder and the trees were being destroyed much more rapidly than a regime of sustained yield would permit. With respect to tillage, forests around the winter settlements were being destroyed without an acceptable trade-off. The lower valley slopes already had been used for terraces and the new terraces were being dug on the steep valley sides. The result was a high rate of erosion and loss of manure." (Hitchcock 1977: 448). Hitchcock explains the intensification of demands on the forest as the result of a rapid rise in population from the 192Ø's onwards, but states that "why the hill population rose is not clear" (Hitchcock 1977: 449). Following a return visit to this population in 1975, Hitchcock made the following assessment of the situation: "despite conservation practices, it seems certain that fuel, building material, and fodder sources above old settlements such as Monal will disappear. The pressure due to numbers of people, each claiming the right to provide for his family and livetock, is too great for conservation measures to contain completely. For the high altitude zone it also is the woodlots that are likely to be adversely affected first. The pastures are elastic enough to hold more animals. Plenty of potato tillage still is available. The problem revolves on the forests. They are not elastic enough to meet the needs of an increasing number of herders and potato cultivators" (Hitchcock 1977: 449). As Hitchcock observes at the beginning of his essay, "in Nepali mountain population trees have become the weakest link in the ecological chain of requirements" (Hitchcock 1977: 443).

But if the deforestation of the mountain and hill regions of Nepal appears to have reached a critical point in many instances, such that one may talk of a general ecological crisis in the hills, it is also the case that the reduction of forests of the terai is eqully dramatic. We argued in the mid 197Ø's that "the implications of (the) rapid growth of Nepal's population had become painfully clear, for the predominately agrarian economy had shown itself only able to keep pace with the increase in population and its requirements largely through the cultivation of less productive land in the hills and the opening-up of forest in the plains. The first of these led to the development of widespread erosion following the massive destruction of the forest cover, while the second provided only a temporary safety-valve for

surplus population from the hills..." (Blaikie, Cameron & Seddon 1980: 11-12). Immigration into the terai from the Nepalese hills, compounded by immigration from the even more densely populated states of north India has led to massive destruction of the forests in the terai during the last fifty years. Joshi suggests that, at the beginning of the 1980's, only some 19 per cent of the terai is still forest; in the eastern terai, where population density is greatest and deforestation has occurred both rapidly and on a large scale, the 638,300 acres of forest estimated to have been standing in 1928 had been reduced by nearly a third (to 442,500) only 25 years later, while between 1952 and 1972 the remaining forest area was reduced to less than half (see Table 23).

TABLE 23

District	Population		Forest area (acres)	
	1952	1972	1952	1972
Sirha	176,915	302,304	30,400	19,700
Saptari	254,915	312,564	32,200	29,900
Morang/Sunsari	228,952	524,991	230,400	119,900
Jhapa	80,252	247,698	149,500	35,500
Total	740,777	1,387,551	442,500	205,000

In his 'Himalayan ecosystems research mission Nepal report', Rieger observed in the mid 1970's that "the World Bank estimates that 400,000 settlers migrated to the terai, accounting for 180,000 hectares, of which 130,000 were illegally settled on. FAO quotes an even higher figure and estimates that about 36,000 hectares of good forest land are lost annualy through squatting. On the basis of ERTS satellite imagery, FAO estimates that no more that 818,600 hectares of forest area remain in the terai and, according to another source, less than half of this will be suitable for cultivation. If migration into the terai continues at the pace of the last ten years, all the good farmland will be occupied in little more than a decade" (Rieger 1976: 18-20). In 1979, the United Nations 'mission on needs assessment for population activities' reported that "due to unplanned migration from the hills to the terai and at the present rate of deforestation, all exploitable forests will be finished in the terai by 1990..." (UN/UNFPA 1979: 1).

Although it has been estimated that between 50 per cent and 75 per cent of landslides in the eastern hills and mountains are purely geological in origin (Laban 1979), there can be little doubt that the process of deforestation as a result of human activity has increased the erosion of the hills and even to some extent the plains. "As pressure on forest and cultivated lands has grown and the vegetation cover has become more sparse, soil erosion has increased. In this way, the soil itself is lost and this is most striking in respect to landslides..." (Abell & Dutt 1979: 31). As Eckholm has remarked, "groundholding trees are disappearing fast among the geologically

young, jagged foothills of the Himalayas, which are among the most easily erodable anywhere. Landslides that destroy lives, homes, and crops occur more and more frequently throughout the Nepalese hills" (Eckholm 1976: 77). We observed that "although the point at which the critical thresholds of accelerated erosion are reached varies from place to place in Nepal, it is clear that many areas are now experiencing large and frequent landslips while gullying is taking place over large areas. Within living memory many characteristics of the landscape in west central Nepal have dramatically changed. Increased drainage density and declivity of streambeds, a much more variable annual flow of many of the rivers, and the failure of sources of drinking water are all symptoms of this ecological decline. Comparing our own observations with the most recent topographic survey (carried out in 1956-8), casual inspection will show that many areas marked on the one inch to the mile map as being 'dense forest' have become totally denuded and have suffered either extensive soil leaching or landslips" (Blaikie, Cameron & Seddon 1980: 17). In short, as Eckholm put it bluntly, Nepal faces "the world's most acute national soil erosion problem" (Eckholm 1976: 77).

An estimated 240 million cubic metres of soil are lost every year, according to one source (IBRD 1974: annexe 6.2), consituting, as many have noted ironically, Nepal's most precious export. Slow loss of topsoil reduces soil fertility and consequently crop yields. Farmers in one upper hill district explained their declining yields by the fact that "the rain washes away the most fertile topsoil every year. So we have to plough into the new unfertile soil every year" (Chhetri et al. 1976: 161). But erosion is not always gradual, as pointed out above: rapid gullying and landslides mean dramatic and often substantial sudden loss of land, often of land under cultivation. A study in 1974-75 of one central Nepalese valley concluded that "in addition to the natural erosion in the last twenty years has come an erosion directly linked to the demographic pressure. In its total length a considerable number of landslides can be seen in Ankhu Khola valley today, some of which are two or three kilometres wide... Each year, these slides get bigger. They cause considerable damage, carrying away fields, livestock and sometimes people and houses. In Lindjyo, a village of the upper valley, the slides caused so many deaths that the inhabitants were forced to move out and rebuild their village on the opposite side" (Toffin 1976: 40).

In short, "Nepal's rapid population growth, in combination with traditional practices in agriculture and in the household, has generated increased demand for cultivable acreage and firewood, which has led to a faster rate of environmental deterioration in recent decades. The worsening environmental deterioration, in turn, is causing hunger and a general decline in the economic situation of families; it necessitates greater physical work with less satisfactory results; it causes destruction of farmsteads, human dislocation, and even death; and it is weakening Nepal's agricultural base, from which the country's much larger future population will need to be fed" (Banister & Thapa 1981: 91).

It is also true, however, that the implications of environmental deterioration differ for different social categories; for those with inadequate and marginal landholdings, for example, the threat of declining fertility, of soil loss and even of landslips is generally greatest; the irrigated rice fields of the valley bottoms are less vulnerable than are the dry fields of maize and millet on the steep hill slopes, and it is generally the case that wealthier farmers cultivate the more productive irrigated fields while the poorer farmers eke out a living from the low-yielding and eroding terraces where irrigation is not possible. The significance of these differences for land productivity and the capacity of a landholding of a given size to provide subsistence for a farm household has already been discussed; here we are concerned merely to emphasize the fact that those with marginal land (in terms of productivity) are also generally those with land that is physically vulnerable to erosion and land loss. The fact that yields are declining most rapidly on marginal land, and that such land is most subject to erosion and landslides means that those who cultivate such land - generally the smaller and poorer peasant farmers - are those most dramatically and seriously affected by the process of environmental deterioration. At the same time, given their low productivity and generally low incomes, it is the small peasants and near landless who can least afford any decline in production and income.

Eckholm has suggested that "a common factor linking every region of acute poverty, virtually every homeland abandoned by destitute squatters, is a deteriorating natural environment. Ecological deterioration is to a great extent the result of economic, social and political inadequacies... it is also, and with growing force, a principal cause of poverty" (Eckholm 1978: 21). In the case of Nepal it has been argued cogently that "social and economic pressures that give rise to marked inequalities... tend to push the poorer sections of the community to operate in the most delicate ecological fringes which are not suitable for cultivation continuously for any length of time. This is not to imply that ecological deterioration is not found in areas where more affluent communities have inhabited, but it underscores the association between poverty and environmental degradation" (Banskota 1979: 9).

Whereas a generation ago, Nepalese hill households spent one or two hours to collect woodfuel it now can take the labour resources of one person continuously throughout the year to collect sufficient or at least a bi-annual expedition of a fortnight or more. Usually this affects the poor much more than the well-off, part of the reason being reduced labour availability to work for others, or the inability to employ others on their own farms because of the necessary allocation of labour to collect fuel. Similar examples exist for the increasing time taken to fetch water where perennial sources have dried up. In these ways, peasant differentiation and pauperisation may be accelerated. A general process of impoverishment encourages more desperate, less finely-tuned use of the environment, where there are simply few resources to be allocated to long-term consideration of soil, pasture and food conservation, and such natural resources as are still available have to be used immediately in order to survive. Also

this feedback effect ('the vicious circle') has an unequal effect within households. This point is underlined by Abell and Dutt discussing the effects of deforestation in the Dhankuta area of Nepal:

> "as a result of the depletion of forest resources, fuel wood and fodder are more scarce... Moreover, the decline in vegetation following the destruction of the forest has also resulted in creating a scarcity of water in the area. The collection of water, fodder and fuel is one of the most important tasks undertaken by women. Even though women's tasks have become more arduous, little has been done to alleviate the situation in many areas, perhaps because men... are not directly affected" (Abell & Dutt 1979: 31).

While it is possible to see 'the vicious circle' as a systematic feature of the progressive impoverishment and vulnerability of the Nepalese economy and ecosystem, for the individual households concerned environmental deterioration may become a disaster! In our investigation of the condition of those heavily dependent on income from labouring in west central Nepal we found that a significant proportion of such households in the hills had suffered from so-called 'natural disasters': the loss of livestock or the loss of land. But such accidents are only 'natural' for those who are forced to live on the edge of disaster by virtue of their poverty and inadequate resource base.

A 'disaster' has been defined as the point at which a vulnerable population is subject to an extreme physical event; in Nepal, as in many other countries where environmental deterioration appears grave, it is the small peasants and nearlandless who are most vulnerable to the extreme physical events such as landslides, as well as to the less dramatic but equally crippling slow deterioration of their means of subsistence. But while it could be said that the poor are more vulnerable to environmental deterioration by virtue of their location at the margins where deterioration of the environment is most acute, it is also the case that they are vulnerable by virtue of their own low levels of production and low levels of household income: whereas the loss of 10 per cent of cultivated area might be a set-back to a larger farmer with a more substantial resource base, it would be a disaster to a small farmer totally reliant on his fields for subsistence. Thus, the 'physical' and economic vulnerability of the small peasants and nearlandless is further accentuated by the very processes to which they are most vulnerable; in other words, the process of environmental deterioration, which touches them more than others, affects them more than others and may turn their poverty into tragedy.

6. INEQUALITY AND SOCIAL DEPRIVATION

At the end of the 1970's the Brandt Report defined freedom from hunger as one of the most basic human needs.

There is considerable concern among nutritionists with the question of suitable 'minimum requirements' definitions. In the case of Nepal 'minimum per capita daily subsistence needs' in terms of calories vary (as between different authorities) very significantly (i.e. between 2,000 and 2,500 calories). Increasingly, however, nutritionists are beginning to recognise that it is necessary to incorporate within their measures the fact that access to food is grossly unequal in most 'poor countries'; Ganey reports that "national average calorific requirements as determined by the FAO are increased in recent IFPRI and FAO studies to represent 110 per cent of recommended daily allowances - the 10 per cent increment is a rough guide to try to compensate for inequalities in income distribution and maldistribution of food" (Ganey 1980: 6).

Daily calorie intake in Nepal as a whole was estimated by one source in the late 1960's to be 2,031 (1,963 from cereals and 268 from other foods) (EAPD Consumption Survey in Nepal, 1969). Protein intake was calculated to be 44.9 grams per day, according to Damen (1974). Another source estimated in the early 1970's that national per capita supply of calories was 2,126, considered to be 96 per cent of the estimated requirement of 2,200 calories per person per day (FAO 1974: 1). In the hills, however, it was suggested that only 1,935 per person per day was provided - making up 88 per cent of requirements; while the terai produced an average per capita figure of 2,435 calories per day. Greater availability of other foods in the terai ensured a difference of some 300 calories per person per day between the hills and the terai. Protein supplies, according to this source (FAO 1974: 2), averaged 55.7, 53.9 and 58.1 for Nepal, the hills and the terai respectively - figures which exceed the estimated requirement of 40 grams. It was noted, however, that "the protein supplies... suggest better availability but they are predominantly of vegetable origin. At the national level, only 15 per cent are derived from the better quality protein-rich foods (fish, meat, milk and eggs); in the hills the proportion is about 17 per cent and in the terai 12 per cent. Due to low incomes, the high cost of foods rich in protein, faulty food habits and other factors, the distribution of protein supplies among the population is inevitably uneven, with a low consumption of protein-rich foods by the poorer sections of the population. This situation is aggravated by health factors (parasitic infections, disease), educational and seasonal factors. Futhermore, the level of calorie supplies, particularly in the hills, indicates that diets would be more deficient in calories than in proteins, with the result that the dietary proteins are made to supply the energy for vital functions, rather than perform their primary functions of growth and maintenance of tissues" (FAO 1974: 2). The FAO concluded in 1974 that "although direct evidence about the food consumption and nutritional status of the varied and geographically widespread population is limited, there is sufficient information available to conclude that there may be a shortage of calories, protein and other

nutrients in many areas. If population increases faster than food supply, the position will worsen" (FAO 1974: 5). In a recent analysis of food insecurity in developing countries, it was estimated that in Nepal only 92 per cent of daily calorie requirements were being met in the early 1970's, and that 29 per cent of the population had a calorie intake below 1.2 Basal Metabolic Rate (the critical intake limit derived from the energy cost of the human body maintainence) (Green and Kirkpatrick 1980: 189).

The National Planning Commission survey data on incomes suggest a serious shortfall in food consumption by the mid 1970s; if the minimum required expenditure per capita (for 1975-76) is converted into a per household figure and compared with the distribution of household income (for 1976-77), the bottom two thirds of rural households in Nepal would appear to have been suffering from a shortfall in food consumption, while the bottom quarter of the households had an income which is less than half the minimum required. "The gravity of the food-deficiency implied by these figures is underlined by the fact that even if we were to assume that the entire income was used for food consumption, many households would still not meet their food requirements. On this assumption, an average rural household in Nepal would require an annual income of more than 3,500 rupees in 1975-76. According to the NPC survey data of 1976-77 nearly half the households in rural Nepal had an income which was lower than this level" (ARTEP 1982:31). Food balance sheets compiled for 1978-79 indicate that there was an overall shortage of foodgrains of between 7 and 15 per cent. Table 24 shows that the availability of foodgrains for domestic consumption was only 0.4 kgs per capita per day in 1978-79.

The calorie equivalent of this has been calculated to be 1,433. Assuming that the total calorie required per person per day is as low as 2,050 and that 75 per cent of it has to be provided by cereals, the per capita availability in 1978-79 turns out to be 7 per cent less than the requirement; if however, the figure of 2,256 suggested by the FAO is used, the deficit is as great as 15 per cent (cf ARTEP 1982: 32).

A World Bank study estimated that calorie intake in Nepal in 1977 represented only 84.9 per cent of requirements and that already by 1976 total food grain available for consumption in Nepal had fallen below minimum subsistence levels. (The study utilised two criteria of subsistence: 2,500 calories per day per adult consumption unit (ACU) according to the Nutrition Advisory Committee, India; and 2,350 calories per day per ACU, according to the FAO. It also assumed that cereals constitute 80 per cent of the calories in a typical hill diet and 85 per cent in a typical terai diet.)

TABLE 24

FOOD BALANCE SHEET, NEPAL, 1978/79

	Rice	Maize	Wheat	Millet	Barley	Total
1. Total production (m tons)	2,339.000	743,000	454,000	133,000	22,000	
2. Seed, feed, wastage	280,680	89,160	54,480	15,960	2,640	
3. (1) - (2)	2,058,320	653,840	399,520	117,040	19,360	
4. Milled/converted	1,234,992	588,456	359,568	99,484	17,424	
5. Official exports	92,300					
6. Unrecorded exports	123,499		17,978			
7. Available for domestic consumption	1,019,193	588,456	341,590	99,484	17,424	2,066,147
8. Calorie equivalent (million)	3,607,943	2,053,711	1,134,079	330,287	59,242	7,185,262
9. Total population (million)						13,737
10. Foodgrain availability/ person/day (kg)						0.41
11. Calories available/person/day						1,433
12. (a) Calories available as percentage of requirements (2256)						84.69
(b) Calories available as percentage of requirements (2050)						93.20

Source: Islam et al, Employment and Development in Nepal, ARTEP, 1982, p.34.

In his Country Development Strategy Statement for 1981, the head of USAID in Nepal reported that "the Nutrition Status Survey, conducted four years ago with AID financing, found that 54 per cent of the reference population (children below six years of age) in the hills an 45 per cent in the terai were less than 90 per cent of median height for age (long term nutritional deprivation), and that 17 per cent of the entire survey population showed definite short-term nutritional deprivation. No similar data is available for the entire population (including adults), but suggestive information is available which corroborates information cited from income surveys that much of the population exists below 'minimum subsistence'. For example, calorie intake as a percentage of requirements is listed as 86 per cent in the recent IBRD 'Nepal Country Economic Memorandum'. This could be an overstatement. For example, one authority provides an estimate that 85 per cent of hill farm households do not produce enough food to meet their own consumption requirements, and that 50 per cent of terai farm households are similarly deficit" (Butterfield 1979: 4).

The World Bank has recently produced figures for food sufficiency based on the aggregate data relating to population growth and food production projecting forward from the mid 1970's to the late 1980's in which the hills and the terai are distinguished. These projections suggest an overall secular decrease in food sufficiency for Nepal as a whole from 363 days of normal subsistence in a year in 1976-77 to 338 by 1982-83, and only 308 by the end of the decade. While in the terai the number of days normal subsistence per year on average provided by local food production remained more than sufficient (although declining significantly from 569 days a year in 1976-77 to 477 by the end of the decade), in the hills and mountains the situation of food deficit already existing in 1976-77 showed a further marked deterioration: from 238 days of normal subsistence per year on average in 1976-77 to 219 days by 1982-83 and 197 days at the end of the 1980's (see Table 25).

As Ganey (1980) points out, the food situation is more severe for many than aggregate data and average figures would indicate, and we have already argued that, for the mass of the population of Nepal, and particularly for specific vulnerable and deprived sections of society, access to food is determined less by overall availability than by the economic and political structures which locally, reqionally and nationally determine production, exchange and consumption, and thus, levels of nutrition.

TABLE 25 FOOD BALANCE PROJECTIONS FOR NEPAL 1976-77 - 1989-90

1. Hills and Mountains

	Population ('000)	Gross Production ('000 tons)	Net Production ('000 tons)	Consumable Production ('000 tons)	Daily Calorie Equivalent	Total Available Calories	Days of Minimum Subsistence per year	Days of Normal Subsistence per year
1976/77	8,071	1,612	1,419	1,107	1,255	1,569	260	238
1977/78	8,244	1,622	1,427	1,113	1,238	1,548	257	234
1978/79	8,382	1,631	1,435	1,119	1,222	1,528	254	231
1979/80	8,544	1,641	1,444	1,126	1,206	1,508	250	228
1980/81	8,707	1,651	1,453	1,113	1,191	1,489	247	226
1981/82	8,886	1,661	1,462	1,140	1,174	1,468	244	222
1982/83	9,069	1,671	1,470	1,147	1,157	1,446	240	219
1983/84	9,255	1,681	1,479	1,154	1,141	1,426	237	216
1984/85	9,433	1,691	1,488	1,161	1,126	1,407	233	213
1985/86	9,638	1,701	1,497	1,168	1,109	1,386	230	210
1986/87	9,850	1,711	1,506	1,175	1,092	1,365	226	207
1987/88	10,070	1,722	1,515	1,182	1,074	1,343	223	203
1988/89	10,299	1,732	1,524	1,189	1,056	1,320	219	200
1989/90	10,535	1,742	1,533	1,196	1,039	1,299	216	197

TABLE 25 (continued) FOOD BALANCE PROJECTIONS FOR NEPAL 1976-77 - 1989-90

11. Terai

	Population ('000)	Gross Production ('000 tons)	Net Production ('000 tons)	Consumable Production ('000 tons)	Daily Calorie Equivalent	Total Available Calories	Days of Minimum Subsistence per year	Days of Normal Subsistence per year
1976/77	5,065	2,362	2,079	1,622	2,930	3,447	629	569
1977/78	5,197	2,393	2,106	1,643	2,893	3,404	621	562
1978/9	5,331	2,424	2,133	1,664	2,856	3,360	613	555
1979/80	5,466	2,456	2,162	1,686	2,823	3,321	606	548
1980/81	5,607	2,487	2,189	1,707	2,786	3,278	598	541
1981/82	5,760	2,520	2,218	1,730	2,748	3,233	590	534
1982/83	5,896	2,553	2,247	1,753	2,721	3,201	584	529
1983/84	6,077	2,586	2,276	1,775	2,673	3,145	574	519
1984/85	6,244	2,620	2,306	1,799	2,637	3,102	566	512
1985/86	6,413	2,654	2,336	1,822	2,600	3,059	558	505
1986/87	6,588	2,688	2,365	1,845	2,563	3,015	550	498
1987/88	6,768	2,723	2,396	1,869	2,527	2,973	543	491
1988/89	6,954	2,758	2,427	1,893	2,491	2,931	535	484
1989/90	7,147	2,794	2,459	1,918	2,456	2,889	527	477

The report of the IFAD special programming mission to Nepal recognises this and explains the 'alarming amount of malnutrition' identified among other things by:

> "the very low per capita incomes and purchasing power of most rural people. This applies both to the hills and the terai, but because of the less equitable distribution of land and land-ownership in the terai, there may be more absolutely poor people there than in the hills... In addition, the prevalence of intestinal parasites and gastroenteritic diseases reduces the effective food intake even further" (IFAD 1979: 21).

Consequently, while average figures for food intake, and for calorie and protein levels are higher in the terai than in the hills and mountains, these figures obscure - because of the gross inequality in that area in land-ownership and in income distribution - the very low level of nutrition among a significant proportion of the terai population.

In the hills, given the situation of food deficit from production on their own land, some small farmers rent land or sharecrop to increase the possibility of subsistence production. For the majority, however, it is necessary to purchase food grains in the market in order to make up the deficit. In the Kosi Hill area it was found that, although both cash income and cash expenditure were significantly smaller for small farmers than for larger farmers, a greater proportion of cash expenditure went on food on the case of the small farmers (see Table 26).

TABLE 26 CASH INCOME, CASH EXPENDITURE AND FOOD PURCHASE, KOSI HILL AREA

Farm size (ha)	Average cash income	Average cash expenditure	Food as a % of expenditure
Ø - Ø.5	1,427	2,157	57
Ø.51 - 1.Ø	2,233	2,196	46
1.Ø1 +	3,775	3,527	33

Source: Conlin & Falk 1979: 136, 142.

Of the amount spent on buying food, the greater part went in the case of the small farmers, and particularly those with only un-irrigable land, on cereals (see Table 27).

TABLE 27 HOUSEHOLD EXPENDITURE: CEREALS AS PERCENTAGE OF ALL FOOD

Land types	Ø - Ø.5Ø ha		Ø.51 - 1.Ø ha		1.Ø1 ha +	
	Food Expenses Rs	Cereals as %	Food Expenses Rs	Cereals as %	Food Expenses Rs	Cereals as %
Only bari	1,193	69	1,175	85	975	62
Mainly bari	666	59	912	62	1,218	33
Bari & khet	882	51	1,193	55	982	35
Mainly khet	1,792	47	862	37	1,316	36

Source: Conlin & Falk 1979: 138.

The small farmers, with less than half a hectare, spent most on food (to supplement their inadequate own production) and most on cereals, but relatively little on meat (see Table 28).

TABLE 28 COMPOSITION OF FOOD PURCHASED, KOSI HILL AREA

Farm size	spent in Rs	Percentage spent on different food items					
		Cereals	Oil/fats	Milk/eggs	Meat	Alcohol/ Tobacco	Other
Ø - Ø.5	1,222	57	9	6	9	9	1Ø
Ø.51 - 1.ØØ	999	54	9	3	15	8	11
1.Ø1 +	1,18Ø	39	11	4	15	15	16

Source: Conlin & Falk 1979: Table 4/14.

Insufficient work has been done by this project as yet to determine the effects of differential access to food of differing nutritional value, but hypotheses suggested included the suggestion the 'total production and production per caput in a geographical area will not give an indication of the incidence of malnutrition but that in areas where land is most unevenly distributed, the incidence of malnutrition will be greater'. A second suggestion was that 'a high incidence of malunutrition of various kinds (stunting, wasting, Vitamin A deficiency, etc.) among small bari farmers compared with other groups' would be found.

Very little detailed analysis of the condition of poor peasants and landless labourers has been carried out in Nepal, and in almost all studies these social classes are submerged within the category of 'small farmer'. In our own investigations in the west central region, however, we distinguished between 1) landless labourers and sub-marginal peasants, 2) poor peasants for whom labouring provided a

crucial source of additional income to their own production, and 3) middle peasants who were not generally obliged to sell labour in order to maintain adequate subsistence levels but were distinguished from rich peasants by virtue of their reliance on domestic rather than wage labour. (It should be remembered, however, that if the landless labourers of today are the poor and even middle peasants of yesterday, then it is also the case that the poor and even middle peasants of today are the landless labourers and sub-marginal peasants of tomorrow.)

An investigation of the household budgets of those within the second category - poor peasants dependent in large part on income from agricultural labour - revealed that income in grain and in cash was very low, with expenditure on consumer durables extremely low (on average about Rs 137 a year - or about $6), and that the majority were in debt, with their cash expenditure exceeding their cash income most of the time. What cash income they managed to obtain went mainly to feed household members. The grain entering the household (a total of 990.4 kgs a year on average) came mainly from their own production (988.6 kgs), with some from sharecropping (15.0 kgs) and more from agricultural labouring, both permanent and seasonal (23.0 kgs and 39.9 kgs respectively). Of this, the greater part (between 858.8 kgs and 866.2 kgs) was consumed by the household - although even in this category a small amount of grain went as payment to hired labourers (28.9 kgs) and a substantial amount on gifts and other social transactions (102.7 kgs). Total household consumption of grain produced on the farm and coming from labour (as payment in kind) averaged around 860-867 kgs; with average family sizes of between 6 and 8 members this would only provide between 100 and 145 kgs per capita a year; when it is recognised that cash coming into the households also tended to be below the amount spent, then it is clear that the capacity of these households on average to fulfil even the basic needs in terms of grain requirements (basic needs taken to be 210 kgs of cereal annually for an adult male) was less than adequate. On average these households earned 660.7 Rs a year by permanent and seasonal labouring (44.6 Rs and 478.8 Rs respectively) but of the total cash income of 662.7 Rs a year, 582.2 Rs went on necessary weekly consumption; when other payments (including the purchase of consumer durables (137.1 Rs), religious festivals (71.2 Rs), life-cycle ceremonies (50.5 Rs), hire of oxen, ploughmen and other farm labour (21.8 Rs) and tax (21.4 Rs) are taken into consideration, it is clear that total income in cash is insufficient to cover total expenditure (993.5 Rs).

If the situation of the poor peasant household is extremely difficult, sub-marginal peasants and landless labourers are also significantly deprived. A detailed investigation of the circumstances of four sub-categories of wage labouring households showed that the majority of these were also in debt. The four sub-groups were: 1) those with no non-agricultural income and little (i.e. less than 250 Rs) income from farm sales; 2) those with no outside income but a more significant (i.e. more than 250 Rs) cash income from sale of own produce; 3) those with little farm income from sale of produce but some non-agricultural income; and 4) those with larger income from farm sales as well as

non-agicultural income. The four groups accounted for 10.2 per cent, 3.3 per cent (groups 1 and 2), 6.7 per cent and 0.6 per cent (groups 3 and 4) of all rural households interviewed in our survey; that is, over 20 per cent (20.9 per cent) of all rural households sampled. Those with additional non-agricultural income were, according to our data, just able to maintain a positive balance between cash income and expenditure, but those without were generally in deficit. The most vulnerable category was that of households with sales of less than 250 Rs and without any additional non-agricultural income; they were also by far the most numerous. Those without additional income from remittances or small businesses clearly had less cash to spend, and household expenditure for categories 1 and 2 has 854 Rs and 999 Rs on average in comparison with 1,615 Rs and 1,829 Rs for the other two (3 and 4). The total amount of grain entering the household, however, (through own production combined with sharecropping and payments in kind for labouring) was greater in the case of the households without additional income: 1,003 kgs and 1,652 kgs on average (for categories 1 and 2) in comparison with 883 kgs ands 908 kgs. It is clear that sharecropping and, more significantly, labour on the farms of larger landowners provides the same function as does non-agricultural income: it ensures the survival of the household. It is significant in this regard that, despite the differences in the source of food grain - own production, sharecropping, labouring and purchased with cash from remittances and small business - all of the labouring households had much the same level of grain consumption per capita. The average ranged from between 100 kgs and 150 kgs for the categories of wage labouring households with non-agricultural income (clearly those most reliant on total income from wage labour and least able to provide their requirements in grain from their own plots) to between 120 kgs and 260 kgs for those without non-agricultural income. This level was undoubtedly, however, below the minimum subsistence level in many years for many households, even if it appears that, in general, the condition of households in which labour provides more than half the cash value of grain consumed is somewhat better than that of households where, for various reasons, labour is not able to provide such a substantial income. These reasons include the structure of the household itself - particularly the number of persons of working age available to work for wages - and the local and regional demand for labour.

In all such households, the crucial determinant of the ability of the household to survive is the availability of employment in agriculture and elsewhere at adequate wage levels. In this regard, the evidence suggests that there has been no appreciable increase in employment opportunities for individuals from such households owing to the stagnation of Nepalese agriculture generally, the numerical predominance of small producers making use of their own domestic labour for the most part and employing additional labour from outside only as a supplement to family labour. Employment opportunities in agriculture tend to be few and sporadic, leading to a heavy reliance on casual and uncertain forms of employment - and self-employment. At the same time, the growing population ensures that real need for basic foodgrains is increasing; one consequence has been for food prices to grow significantly, increasing the effective cost of living and

affecting those needing to purchase foodgrain to supplement their own producton (if any) disproportionately. One recent study (Islam 1982) suggests that, despite the generally poor data regarding agricultural wage rates, it would appear that in all but one district for which data are available, the rice equivalent of wage rates fell between 1968-69 and 1976-77 very substantially. In the three hill districts referred to in the study, the magnititude of the fall ranges from 23 per cent to 57 per cent; in the terai districts from 12 per cent to 54 per cent, with only one district showing a small rise - Chitwan. In general, therefore, it appears that the rice equivalent of the money wage fell during the decade between 1968-69 and 1976-77 by around 30 per cent. In fact, many wage labourers are dependent on maize rather than rice for their basic consumption; and if maize equivalents were used, the fall in wages would appear sharper still, the price for rice having increased 64 per cent during the period under consideration, compared with a startling 84 per cent for maize (Islam 1982: 23). Islam concludes that "since cereals account for a large proportion of consumption expenditure of poorer groups (75 per cent for the landless in Nepal) and since rice is the most important cereal in Nepal, a decline in the rice/paddy equivalent of wage rates should indicate a decline in real wages also. It is thus most likely that the real wage of agricultural labourers in Nepal has declined during the last decade" (Islam 1982: 26).

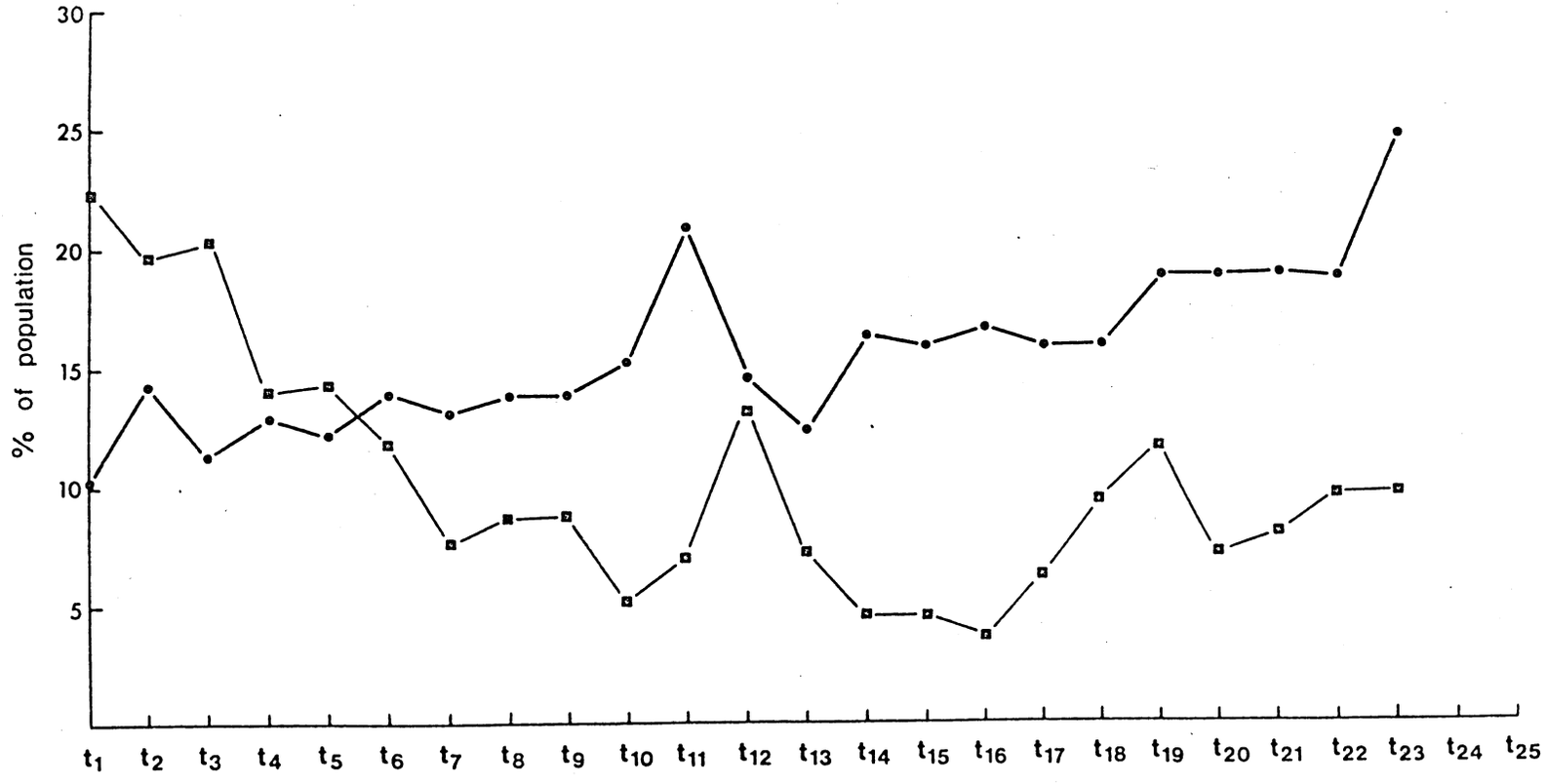
Islam suggests that "no information is available on the trend in employment opportunities for the rural poor. But it would be difficult to argue that the availability of employment has increased so much as to compensate for the fall in real wages and prevent a decline in the real income of the rural poor in Nepal" (Islam 1982: 26). In fact, the decline in real wages, which appears to be generally supported by our own somewhat impressionistic data for the 1970s, is almost certainly related to the growing supply of labour available and the relatively stagnant demand for that labour; competition between would-be labourers is considerable. Furthermore, the logic of the dynamics of the Nepalese agrarian economy (as discussed previously) is such that the numbers of landless or near landless looking for work are likely to increase, while the probable rate of growth in demand for wage labour is very substantially less. Our own computer simulation for the prospects of labourers in west central Nepal, based on the same survey carried out in the mid 1970s suggests just such a pattern. (Even if wages were to remain much the same as they were in 1975 <four kuruwas of rice in the terai = 9 rupees> and continue to support approximately 1.5 adults per day, a substantial proportion of households with ratios of workers to dependents of less than 1: 1.5 would be unable to meet their requirements). Firstly, our simulation runs suggested a far larger number of emigrants from the hills searching for land in the terai than of migrants successfully finding land on which to settle (see Fig.). Secondly, the runs show a relatively small number of landowners in the terai increasing their demand for labour, and consequently an overall decrease in demand for labour as many of those landed households previously able to hire some outside labour are themselves squeezed and forced to rely on domestic labour; as a result there is a decline in total cash and kind payments being made to

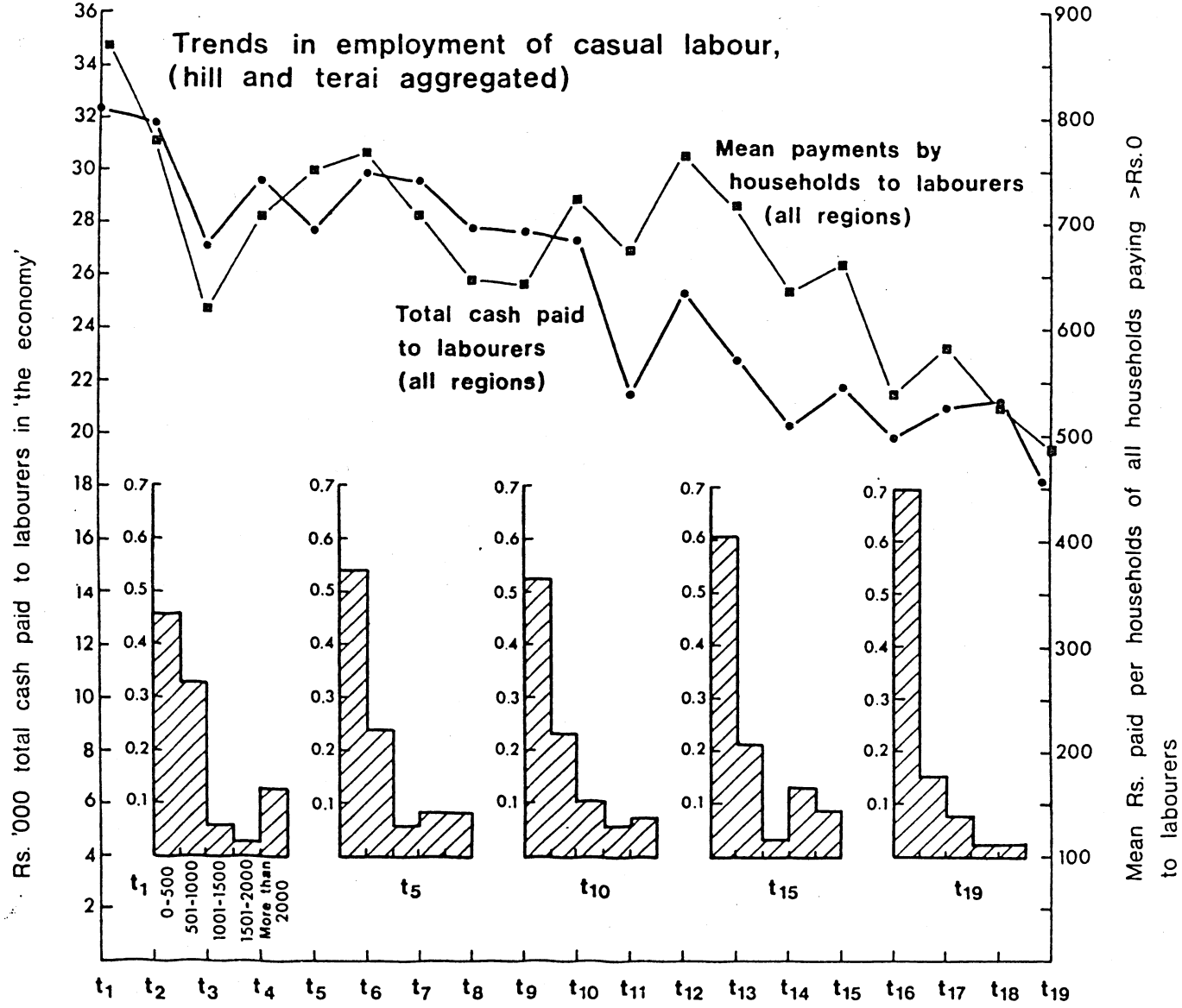
labourers a rapid decline in the terai and a slower decline in the hills, wih the terai and hills converging after about fifteen years where the labour market is supported by an increasing number of rich peasants and petty commodity producers, each employing relatively little labour, and a very few large landowners (see Fig.). At the same time, the numbers of households or persons within them 'deciding' to sell their labour in any one year do not decline significantly (see Fig.).

The substantial and growing gap between the need for employment on the one hand as a means of survival and the demand for wage labour by potential employers creates a decline in the average wages paid to labour; more seriously it threatens the very survival of many households reliant on the income from wage labour (see Fig. 5). In a computer simulation taking 43 sample households with such a heavy reliance on wage labur we attempted to estimate their 'survival' abilities. In the three runs we provided an optimistic, a pessimistic and a 'best estimate' scenario: on the best estimate, 1Ø households failed to survive the first 1Ø years, while by 15 years the number of surviving households was 21. Even the most optimistic run had 'lost' 18 households after 15 years. As we wrote, of these results, at the time: "except for the rare instances where a household is deleted because all its members die, all deletions are assumed to take place in the terai. Hence a hill family which migrates to the terai but is unable to find land and cannot support itself by selling its labour will be 'deleted'. What this euphemistic jargon means in real life is left to the imagination of the reader but a common enough situation is that in which the family disintegrates into nuclear families or single persons who then migrate throughout the plains and into India looking for casual work" (Blaikie, Cameron & Seddon 1977: 134).

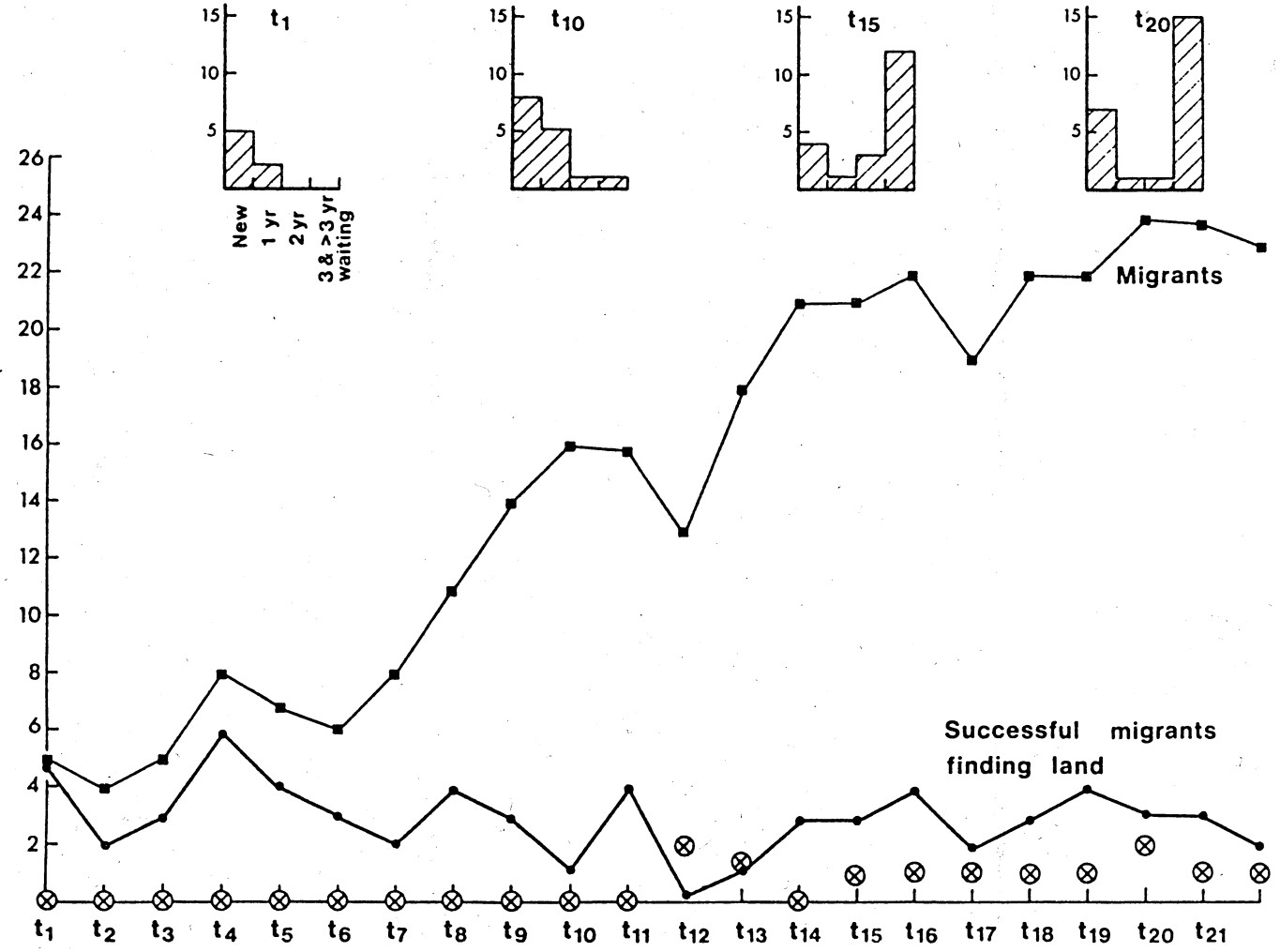
A minority of those landless or nearlandless households discussd above rely for income on other activities besides agricultural employment: portering, 'self-employment' and employment outside agriculture, often in towns. As we have already mentioned, the size of the urban population in Nepal is very small, amounting to less than 5 per cent of the total; but it is also the case that, particularly over the last 15 or so years, the urban population has been growing rapidly. A proportion of this new population is casually employed or self-employed, and constitutes an increasing element of the urban economy and society. There have been few detailed surveys or studies of the urban working poor in Nepal, but our own work in west central Nepal in the mid 197Øs provides some indications of the pattern of growth in the urban labour force (see Blaikie, Cameron and Seddon 198Ø: 188-212), and in particular the growth of the numbers of 'low-paid' workers and of those petty traders and petty commodity producers so

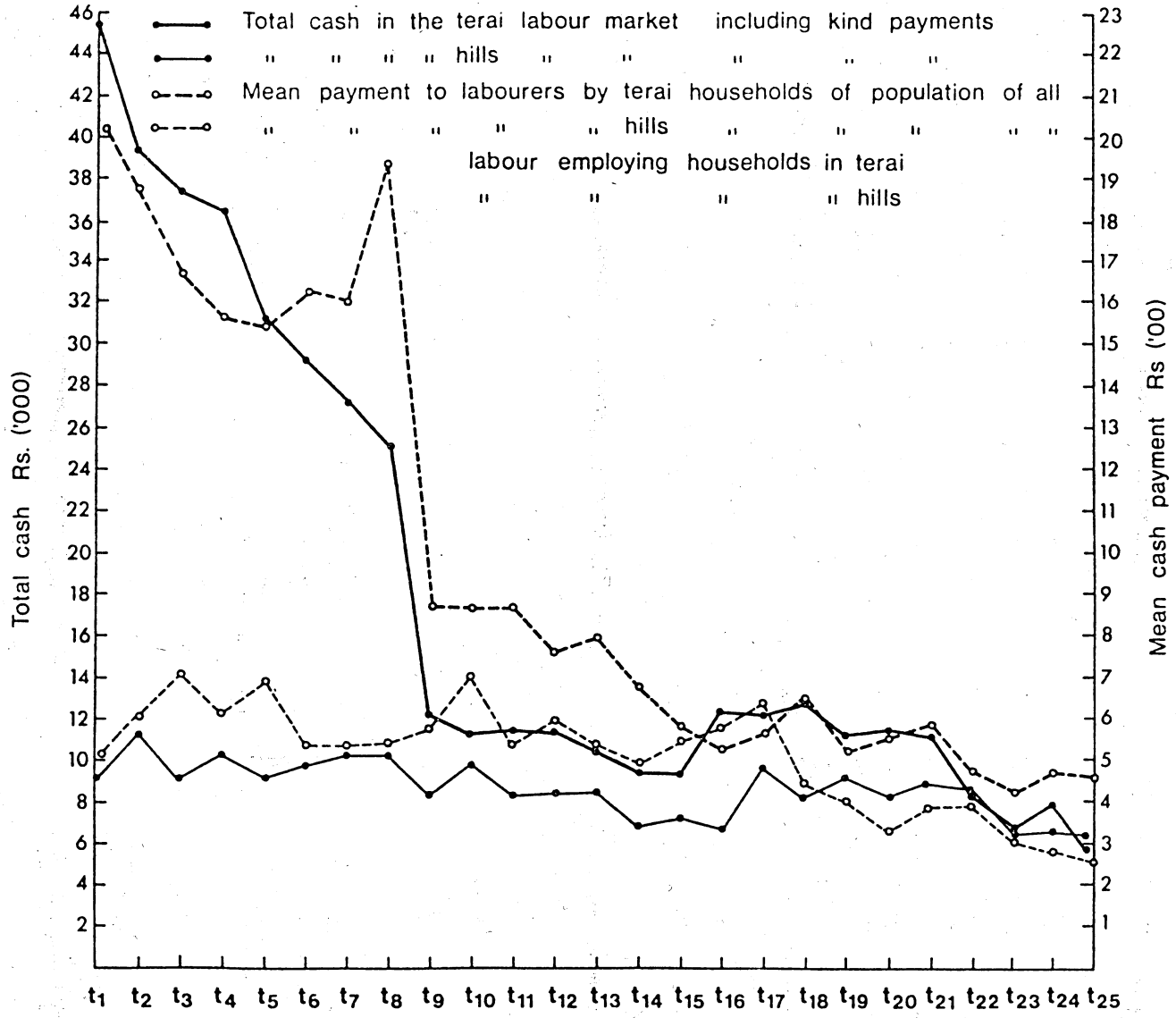
Proportion of total population taking decision to sell labour in any one year for terai (•——•) and hills (▪——▪)




Trends in employment of casual labour,
(hill and terai aggregated)
Mean payments by households to labourers (all regions)
Total cash paid to labourers (all regions)
Rs. '000 total cash paid to labourers in 'the economy'
Mean Rs. paid per households of all households paying >Rs.0 to labourers
0-500
501-1000
1001-1500
1501-2000
More than 2000
t1 t2 t3 t4 t5 t6 t7 t8 t9 t10 t11 t12 t13 t14 t15 t16 t17 t18 t19

Numbers of migrants from hills to terai, (▪——▪) numbers of migrants finding any land (•——•) in terai for t_1 - t_{21}, and numbers of households deleted by model (⊗ ⊗)




Total cash in the terai labour market including kind payments
" " " " hills " " " " " "
Mean payment to labourers by terai households of population of all
" " " " " hills " " " " "
labour employing households in terai
" " " " hills
Total cash Rs. ('000)
Mean cash payment Rs ('00)
46 44 42 40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2
23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
t1 t2 t3 t4 t5 t6 t7 t8 t9 t10 t11 t12 t13 t14 t15 t16 t17 t18 t19 t20 t21 t22 t23 t24 t25

widely described and analysed in the literature on the 'informal sector' in south Asia (Seddon 1979a and b). It would seem that the demand for labour in the urban areas has grown less rapidly than the demand for employment hence the expansion of so-called small business - of the 'self-employed'. The majority of all enterprises surveyed (75 per cent) employed between one and five persons; these were predominantly male, and between the ages of 16 and 35. A substantial degree of inequality, with regard to income, job security, prospects of advancement, fringe benefits and so on, is to be found within the broad range of urban employment. For example, between 20 per cent and 30 per cent of workers in three towns surveyed in the west central region in 1975 earned less than 50 rupees a month (well under 2 rupees a day 'subsistence income' for one person only), while 1 per cent of employees in the public sector earned over 1,000 rupees a month. In the survey, 'low paid' workers were identified as those earning less than 200 rupees a month; these constituted around 56 per cent of all employees in the private sector in the towns of the region. Most low paid workers were 'first generation' urban workers, with fathers involved in farming (between 77 per cent and 90 per cent in the three towns investigated); furthermore, almost all of those interviewed retained strong and in most cases permanent links with the rural areas and with the land through the members of their family who remained directly involved in farming. In some cases, however, the workers' father were themselves without land (eg manual labourers, personal servants and retainers, petty functionaries or small artisans and craftsmen); the average monthly wage of urban workers with landless fathers ranged between 32 rupees and 98 rupees. Job turnover was high and conditions generally regarded as poor, but such employment sometimes provided additional income for the household with which the urban worker continued to maintain contact and to which he (sometimes she) would send some of the wages as remittances. Of the enterprises in the urban areas, the large majority were very small in scale, with as many as half barely providing the basis for subsistence (with net incomes of less than 2,000 rupees a year = 170 rupees a month).

Household and personal incomes are higher on average in the urban areas than in the rural areas, but it must be realised that in town, as elsewhere, average incomes obscure the very substantial, and growing, inequality that exists. For those with low incomes in the urban areas and litte or no income from their own land in the countryside, the problem of physical survival is acute in many cases. The increasing price of foodgrain bears heavily on households with small incomes, who are generally obliged to purchase the cheaper maize and millet rather than rice. Even so, and with often extremely low monthly expenditure, foodgrains generally account for around half of the household expenditure in the case of urban workers and self-employed. A comparison of 10 selected urban households from Pokhara in the west central region illustrates the way in which class differences and inequalities in income affect the patterns of expenditure and consumption (Table 29).

TABLE 29 10 URBAN HOUSEHOLDS (JUNE 1974) IN POKHARA

household	main income source	no. other sources	monthly expenditure rupees	% on all foodgrain	% on maize	no. household members
1	labouring	-	28	46.4	46.4	2
2	cooking	1	53	55.5	36.7	6
3	own tea shop	1	86	61.5	15.1	6
4	tailoring	-	86	57.4	22.6	6
5	general grocery	-	81	34.2	-	4
6	general grocery	2	164	31.5	-	5
7	hotel	2	176	47.0	-	7
8	hotel	2	219	44.1	-	10
9	cloth shop	1	263	59.3	-	15
10	cloth shop	3	582	59.5	-	12

Source: Seddon 1979: 204

The monthly expenditure compares interestingly with the figures for the four categories of labouring households in the rural areas derived from our rural surveys in the mid 1970s; type 1 households spent 71 rupees, type 2 households 83 rupees, type 3 households 134 rupees and type 4 households 152 rupees. But the rural labouring households, in most cases, were able to produce at least some of their food and, on this basis, the poorest labouring households in urban areas may be even worse off than those in the countryside. Type 3 and 4 households in the rural areas depended more than the others on income from the employment of family members outside agriculture or from small businesses, like those of urban households 3, 4 and 5 which could be termed small self-employed (households 6 to 10 are enterprises of a more substantial kind).

Detailed studies, of this kind, on income, food consumption and expenditure on food stuffs, by social class, are few and far between. Even at a more aggregated level, there is remarkably little data on this crucial subject. The Preliminary Report of the National Planning Commission Survey provides some data regarding average annual expenditure on food, but in a very general form (see Table 30).

It appears that average annual per capita expenditure varies from 950 Rs for the far western region to 1,108 Rs for the eastern region, giving average daily expenditure per capita figures that barely exceed the minimum subsistence level arbitrarily fixed at 2 Rs a day per person by the National Planning Commission survey (see Table 31).

TABLE 30

	REGIONS				
	Far West	West	Central	East	All Nepal
Annual per capita consumption food (kgs)	297	344	480	373	373
Daily per capita consumption food (gr)	815	943	1,315	1,021	1,032
Annual per capita expenditure food (Rs)	705	733	734	833	751
Daily per capita expenditure food (Rs)	1.93	2.11	2.11	2.28	2.10
Food as percentage of total consumption	77.9	71.5	79.5	74.9	76.6

Source: APROSC, Agrarian Reform and Rural Development in Nepal, Country Review Paper, APROSC, Kathmandu 1978: appendix K.

TABLE 31

Region	Average annual household consumption expenditure	Average size of household	Average annual per capita consumption expenditure	Average daily per capita consumption expenditure
Far West	6,649 Rs	7.00	950 Rs	2.6 Rs
West	6,480	5.99	1,082	3.0
Central	6,578	6.53	1,007	2.8
East	6,525	5.89	1,108	3.0
All Nepal	6,558	6.35	1,037	2.8

Source: APROSC, Agrarian Reform and Rural Development in Nepal, Country Review, APROSC, Kathmandu 1978: appendix L.

Given that these data refer to average consumption expenditure, it is clear that a very substantial proportion of the population is able to spend less than 2 Rs per head on food consumption. The implications of this situation for the nutritional status of the mass of the rural and urban population are extremely serious.

The National Planning Commission survey of 1976-77 identified Rs 2 (the equivalent of 17 c) per person per day as a national 'minimum subsistence level' for both rural and urban populations, and other researchers have arrived at a roughly similar figure as the shadow

price of unskilled labour or as the minimum wage recorded. Below this level, it is clear that it becomes extraordinarily difficult to obtain even the barest necessities of life. When this level of income is applied to different survey results it is evident that a very large proportion of the population of Nepal lives below this official 'minimum subsistence level'; the figure suggested by the National Planning Commission survey was 40.3 per cent of the total population (see Table 32).

TABLE 32

	minimum subsistence income	minimum subsistence consumption
urban population	22.1%	19.9%
rural population	41.2%	34.3%
all population	40.3%	33.6%

Source: National Planning Commission, Preliminary Report on the Structure of Employment, Income Distribution and Consumption Patterns in Nepal, Kathmandu 1977 (in Nepali).

Taking the major development regions of Nepal, it is clear that the situation in the far west and in the east is considerably worse in terms of the proportion of households and of population below the 'poverty line' of minimum subsistence income (see Table 33).

TABLE 33

Development region	% households below poverty line	% population below poverty line
far western	59.2	51.8
western	43.9	40.6
central	35.8	29.8
eastern	48.1	44.8
all Nepal	45.1	40.3

Source: National Planning Commission, Preliminary Report on the Structure of Employment, Income Distribution and Consumption Patterns, Kathmandu 1977.

The survey of employment, income distribution and consumption patterns carried out by the National Planning Commission in 1976-77, showed that 50 per cent of families in the rural areas receive less than 13 per cent of the rural income while the top 9 per cent receive 55 per cent of the income. The Gini coefficient for income distribution, on

the basis of this survey, was equal to Ø.6Ø in the rural areas and Ø.55 for the urban areas. It is true that income inequalities on a per capita basis are somewhat less as higher income groups tend to have larger households; but this does not alter the distribution significantly. These figures place Nepal among the countries in the world with the most uneven income distribution. The Mission Director for USAID pointed out in 1979 that "three recent publications provide estimates for concentration of income which show Nepal as having one of the worst income concentration problems in Asia" (Butterfield 1979: 2).

Ghai and Rahman suggest that "the bulk of the rural population - 6Ø to 8Ø per cent - would be classified as absolutely poor... more than 42 per cent of the rural households live in poverty, which is based on a minimum subsistence requirement of Rs 2 per person per day. This would appear to be a highly conservative estimate; more realistic estimates of absolute poverty would undoubtedly place at least 6Ø per cent of the rural population in the impoverished category" (Ghai and Rahman 1979: 2). If the rural areas generally appear to have lower incomes on average and a higher proportion of the population below the 'poverty line' of the minimum subsistence income, it is also the case that, except for the bottom 2Ø per cent, incomes in the terai are substantially higher on average than in the hills; on the other hand, inequality in income distribution is far greater in the terai, where the range of household incomes is very considerable. According to one source (Risal et al. 1982: 27), the Gini coefficient concentration ratio of income per family was Ø.51 for the terai and Ø.43 for the hills.

When own production is incapable of providing household subsistence, the purchase of foodgrains and other foodstuffs is necessary. As we have seen, however, the price of cereals has increased, while the level of wages has declined in real terms. This means that those households reliant on the sale of their labour to obtain foodgrains - either through direct payment in kind or through the purchase of grain with cash earned - are increasingly in a disadvantaged position. In their efforts to improve their level of grain consumption to meet their food requirements they tend to borrow and thus fall into debt. For example, of the type 1 households in our survey, "most households are in debt (total cash earned minus total cash spent for the sample year 1974-75 was a negative amount) (662.7 rupees cash income minus 993 rupees cash outflow, giving an average deficit of 331 rupees). Their cash earnings are largely spent upon foodstuffs (both shortfalls in grain from their lands and other items not produced by the farms, such as salt and spices). Other expenditure upon investments such as improved seed and fertiliser is clearly precluded by the household's inability to save in the short-term, and for expenditure upon consumer durables it is one of the lowest of all groups (137 rupees)" (Blaikie 1979: 69). Even with extremely low levels of expenditure on food, clothing, medical care and farm inputs, the domestic commitment to provide adequate levels of consumption and the social commitment to participate in religious and social festivals and ceremonies (which accounted for just over 12Ø rupees on average for the type 1 households) frequently pushed such households into debt.

According to Zaman, in 1964-65 a total of 197,000,000 rupees were owed by the rural population, of which only 10 per cent was credit for agricultural purposes; the remainder was, for the most part, credit obtained to finance consumption by small farmers unable either to meet their basic requirements from their own farm production or to purchase additional food for subsistence purposes without borrowing in order to do so. We have seen that indebtedness was a major factor behind the permanent emigration of many hill households to the terai; and the scale and significance of indebtedness is hard to overestimate.

In the eastern hills, Caplan has recorded that "about 70 per cent Limbu lands are pledged to creditors. The percentage of irrigated lands pledged is much higher than that of dry lands. Almost 80 per cent of the former and about 40 per cent of the latter are in the hands of the creditors" (Caplan 1971: 696). The Limbus need credit for a variety of reasons but, "above all, the majority of Limbu households must borrow just to meet food and other regular household requirements" (Caplan 1971: 695). The KHARDEP study revealed that "many farmers, especially those with small bari farms, do not produce the bare subsistence minimum. They therefore are obliged to seek cash income sources to meet their expenses on food. Often cash income does not meet expenses and credit is needed. Many loans by farmers are taken in kind or cash... The larger khet farmers are normally involved in making loans of paddy which is one of their principle sources of income... Much of the credit is required for consumption purposes. Difficulties of repayment lead to the loss of assets by some small farmers... It is through credit, or debt, that the food deficits have the most lasting consequences for the socio-economic status of the different groups of farmers" (Conlin and Falk 1979: 149). Our own studies in west central Nepal showed that in eastern Palpa, "in the panchayats studied, there were not enough wealthy farmers to produce a grain surplus sufficient to make up the food deficiency in the area, and few people borrowed food from their neighbours. They preferred to borrow money from usurers, generally wealthy landowners, or sell livestock in Narayangath to buy cereals in the terai. In (one) panchayat, 60 out of 306 households were in debt. Interest rates varied from 20 per cent to 32 per cent and few borrowers were able to repay a loan within the first year, and eventually were obliged to mortgage their land to repay creditors" (Blaikie, Cameron, Feldman, Fournier and Seddon 1976: 5.42).

If indebtedness is a widespread phenomenon in the hills, where overall food deficits are common in a majority of districts, it is also very pervasive in the terai, despite the overall foodgrain surplus; for the nexus of social relationships which encourages the poor peasant and sub-marginal producer to borrow from wealthier neighbours is even more tightly drawn where 'semi-feudal' forms of production prevail. In his study of Padipur, a village in the terai, Bista records that, while a mere 5 per cent of households were lending to others (in both cash and

kind), nearly 35 per cent of households were in debt, owing money, with over twice that (74 per cent) owing food grain (Bista 1973: 13). Borrowing was apparently heaviest during the 'hungry months' between April and June, with repayment being made, where possible, in the period between September and November.

In the Rapti zone, the most frequent purpose for which loans were taken was consumption; in the report on the Rapti baseline survey (APROSC 1980) it is stated that nearly 12 per cent of households surveyed had taken loans for consumption purposes over the previous 12 months, reflecting food or cash deficiencies. The interest rate charged varied between 9.55 per cent and 22.95 per cent and it is suggested that where food is relatively more abundant the interest charged on loans for consumption purposes is less, so that "there appears to be a positive association between food availability and low interest rates" (APROSC 1980: 118).

The implications of widespread indebtedness are manifold: those in debt may be obliged to 'disinvest' (sell assets) in order to make the repayments and thus further their capacity to ensure their own subsistence requirements; in the last resort they may have to sell land or see it repossessed by their creditors. Where tenants are in debt they may not be able to exert their proper tenancy rights - as Bista puts it, "the majority of Padipur tenants, because of their economic dependency upon the rich are in the grip of the landowners and, therefore, do not claim their tenancy rights, even though they would very much like to do so..." (Bista 1973: 13). Economic indebtedness may also carry with it other social obligations, as when the debtors are called upon to provide political support for their 'patron' and creditor; here again, Bista reports that "a large number of other poorer families are not independent or even neutral, because they are sharecropper tenants of one or the other rich family group or faction group who are in debt to them. Thus a large degree of partisanship is not out of choice but due to economic dependence on the faction leaders who happen to control larger areas of land and other resources" (Bista 1973: 8). Caplan also emphasises the way in which indebtedness may generate a nexus of what he calls 'convergent ties', and argues that "it is essentially these multi-purpose, convergent links which prevent the Limbu debtor from exercising the full range of choices as to how his best economic interests can be served. As he becomes 'hemmed in' by overlapping linkages, his freedom to manipulate the rights conferred on him by kipat ownership is severely constrained" (Caplan 1971: 700).

The significance of indebtedness as one element in a comple nexus of unequal relationships was clear to us in west central Nepal. With regard to the poorest, labouring households, we wrote: "usually the household is in debt, owing money or grain which are taken to finance immediate consumption or occasionally a costly life-cycle ceremony. Most have debts outstanding and are unable to pay the principal, let alone the interest. However, debts are rarely recalled forcibly, and the giving of loans is so widespread that they may be interpreted as an economic redistributive mechanism reinforcing status and local power rather than as a mechanism to bring attractive financial rates

of return. Some of the debts are very large ones; creditors lend many thousands of rupees, with little prospect of ever getting repaid and, whilst the redistributive element must not be dismissed, the debtors (usually wage labouring households with little land) are at the beck and call of the creditor to do work for him at any time" (Blaikie, Cameron and Seddon 1980: 242). This passage underlines the fundamental inequality of the debt relationship, while at the same time not underestimating its capacity to function to some extent as a means of providing 'maintenance' for households which might otherwise be unable to subsist. Patronage always carries with it this ambiguous quality.

In Nepal, as in other parts of south Asia, where the ideology of the caste system is strong, the complex pattern of patron-client relations whereby landowners are linked to landless, wealthy to poor, and powerful to politically insignificant is often conceptualised and actualised in terms of the hierarchy of groups identified by the caste ideology. The social relationships that tie creditor and debtor together all too often also ensure that the social status distinctions of caste are reinforced by inequalities of wealth and power. It is rare indeed for the so-called 'untouchable' groups, for example, to figure among the rich peasants and larger landowners, whether in the hills or the terai, and although the caste hierarchy by no means coincides with the class structure, there is sufficient overlap for caste to 'stand for' economic and political differences in many circumstances.

Class relations consitute a complex structure of social relations in which economic, political and cultural dimensions are all of significance; a class analysis must take into consideration all these dimensions. In Nepal, where the ruling classes have historically been identified in terms of socio-religious superiority as well as in more mundane terms as a consequence of their economic and political dominance, ideas of 'caste' have acquired a very considerable social and cultural force.

Studies of Nepalese economy and society have very often given primacy to the divisions by caste and ethnic group which undoubtedly exist; consequently, a large body of data is organised in terms of these divisions, and it can often appear that caste and ethnic differences operate as determinant variables in such matters as the distribution of landownership, income and consumption patterns. In our view, however, significant though the hierarchy is in creating the social and ideological preconditions for a distinctive form of oppression and discrimination, it remains ultimately subject to the dynamics of class relations and the various forms of economic inequality outlined previously. The study by Janice Sacherer in two villages of Dolakha district in north central Nepal, for example, suggests very substantial variation in landownership between the different caste and ethnic groups but also emphasises the fact that in general the so-called 'untouchable' caste groups have poorest access to arable land. In the village of Namdu, where Brahmins and Chetris, Newars, Tamangs and so-called 'untouchables' coexisted, 13 per cent of Chetri households and 11 per cent of 'untouchables' were without land, while

among the other three groups the percentage of households that were landless was 1 per cent (Brahmins), 3 per cent (Tamangs) and none (Newars) respectively; in Kabre village, where the population may be divided into Brahmins, Chetris, Sherpas and Jirels, and 'untouchables', only 3 per cent of Chetris and 2 per cent of 'untouchables' were landless; all the housholds of the other groups owned land (Sacherer 1981:). In our surveys and studies of Nepalese villages, the only general common feature with regard to the relationship between caste and landownership was the relatively deprived situation of the historically labouring and artisan classes whose caste position rendered them 'untouchable'. There was, however, a broad tendency (not borne out in every single village however), for 'high caste' groups to be large landowners, particularly in the terai. This can, we suggest be explained historically in terms of evolving class relations and the role of the state in making land grants to members of the ruling class and to local notables. The effect of this historical process has been to consolidate the postition, in Nepal as a whole, of the landowning 'high caste' groups. In many villages, on the other hand, it must be stressed, so-called 'high caste' groups may be landless or poor peasants (as is clearly the case for the Chetris in the two villages studied by Sacherer).

In his discussion of land and social change in east Nepal, Caplan explores the relationship between the local tribal Limbus and the Brahmin immigrants and again emphasises the importance of the historical process whereby the Brahmins acquired land in the area. This enabled them to establish a position of economic and political dominance which today ensures that division of caste and ethnicity largely coincide with class differences: "interests in scarce land create ties of interdependence. Brahmins and Limbus are linked as creditors and debtors, landlords and tenants, farmers and agricultural labourers. These two groups are interdependent in a political context as well. The political hierarchy created two centuries ago by Brahmin dependence on Limbu land grants gradually collapsed and was replaced by one in which the Brahmins have become the most powerful group" (Caplan 1970: 9). In other hill regions, such as, for example, the northern hills of west central Nepal, by contrast, the local tribal groups such as the Gurungs have maintained their general dominance over other caste and ethnic groups through their continued control over the greater part of the more valuable arable land and their more substantial access to important external sources of income (employment in the army). Here, in general, the 'high caste' groups are smaller rather than larger farmers, and in the villages we studied many small farmers were Brahmins and Chetris.

In the Kosi Hill area, it would appear that "the relative difference in landholding underlies antagonisms in the area which are expressed by reference to caste and ethnicity" (Conlin and Flak 1979: 68), suggesting that differences in terms of control over land underly the more overt divisions of caste and ethnic group and give them local political significance. The authors of that study point out that

"ethnic antagonisms disguise the situation in which small farmers of all ethnic groups have lost control of their lands. The larger farmers who have gained control of the land are also of all ethnic groups" (Conlin and Falk 1979: 68).

The importance of this argument - namely, that class divisions underlie the sometimes more visible divisions of caste and ethnicity and generate antagonism where class and caste divisions coincide, or appear to coincide - becomes obvious when we consider the suggestion, for example, that in the terai, caste may appear at first sight to explain income differentials: "Brahmins, Bhumihars, Chetris, Rajputs and Thakuris (all high caste) averaged Rs 4,Ø74, while Magars, Tamangs, Gurungs and Rais (all 'tribal' ethnic groups) averaged Rs 1,329" (ARTEP/ILO 1976: 29). Almost certainly this correlation reflects the class dominance of larger landowners with better access to non-farm income who are indigenous to the region as compared with the situation of predominantly small farmers originating from the hills. It is not possible from caste label alone to determine the landholding status, wealth or income of a particular household or even group of households in a given village - Chetris, for example, may be affluent large landowners; but they may also be sub-marginal peasants or landless labourers. Correlation is not the same as a casual relationship. Caste we would suggest, is not a determining variable in the analysis of landownership, class relations or income distribution, although caste differences may well in many circumstances coincide with other differences.

Jenkin and Baird found that, in the Kosi Hill area, "food habits are determined to a large extent by caste and ethnic status. Malnutrition, however, affects all castes and ethnic groups in the pre-monsoon months, March - May. Illness, especially chronic diarrhoea, contributes to malnutrition, but the overwhelming factor is the inadequate landholdings leading to insufficient staple crop production and the inability to earn cash to buy the extra food required. Small farmers in all areas are those most at risk" (Jenkin and Baird 1979: 21).

Malnutrition is caused by lack of food or insufficient food of the correct kind over a period of time; in many parts of Nepal, the months immediately prior to the monsoon are often months of 'hunger'. The KHARDEP project found that "the majority of landholdings do not provide farmers with sufficient staple food to feed their families over the whole year. Before each monsoon there is a time when food shortages affect many of the households, but the most affected each year is the goup of small farmers, in particular those with mostly non-irrigable land" (KHARDEP 1979: 123). In our own studies in the mid 197Øs we found that in eastern Palpa district, where overall levels of food production are low and environmental deterioration far advanced, that the predominantly Magar population suffered considerably from food shortages during the late spring and early summer. "In 1975, at the end of June and in early July, food scarcity affected between one half to three quarters of the populations in four out of the five panchayats studied. The hunger season sets in between mid-February and early March, and finishes with the first maize or

upland rice harvest at the end of July or early August. During this period, the cereal intake is progressively reduced by up to 5/6ths by the poorest inhabitants, and by up to half by the less poor. To bridge this gap in their cereal intake, people gather jungle products such as wild yams, taro, berries, mushrooms, nettles, asparagus, lichen, etc., while only a few resort to hunting or fishing. It frequently happens that families are reduced to eating their seeds for the following year's crops" (Blaikie, Cameron, Feldman, Fournier and Seddon 1976: 5.42).

Several studies have attempted to confront the question of whether caste and ethnic differences - which are often considered by social scientists working in Nepal to be of paramount importance in determining behaviour patterns with regard to a wide range of spheres of social life - are of central importance in determining patterns of food consumption and thus of nutritional status. Schroeder and Sisler, for example, argue with reference to the population of the Pokhara Valley that "caste is not an important factor in determining the diet of the valley inhabitants... In general, meat, sugar, cloth and to a lesser degree eggs and ghee seem to be the only items which are significantly affected by the caste of the consumer. A more satisfactory explanation of differences in household consumption of other items is the location of the consumer within the valley" (Schroeder and Sisler 1971: 11). They then relate location to the production conditions and conclude that production costs differed significantly as between locations, and that these affected household income and thus consumption patterns. Their analysis "indicates that families of the same caste living in different locations have distinctly different patterns of consumption" (1971: 12).

Janice Sacherer's study of two panchayats in Dolakha district in north central Nepal appears to suggest a more crucial role for caste and ethnic group in determining food sufficiency and nutritional status. In both panchayats the 'high caste' Brahmins and Chetris had more 'months of food sufficiency' than did either the local members of various tribal groups (Newars, Sherpas and Jirels and Tamangs) or the so-called 'untouchables' (see Table 34).

TABLE 34 MONTHS OF FOOD SUFFICIENCY BY ETHNIC GROUP AND CASTE IN TWO HILL VILLAGES

Group	Namdu village months sufficient	Group	Kabre village months sufficient
Brahmins	9.Ø	Brahmins	7.Ø
Chetris	6.9	Chetris	5.9
Newars	6.8	Sherpas	4.8
Tamangs	8.4	'low caste'	4.6
'low caste'	5.Ø		

Source: Sacherer 1979: 17.

It would seem significant, however, that the higher rate of food sufficiency generally in Namdu village was associated with the ability of the villagers to rent land in addition to their own fields; furthermore, it would seem that differential access to irrigable land played a considerable part in determining the levels of food sufficiency for each social group identified here in terms of caste and ethnic affiliation. But Sacherer argues that dietary practices affect access to food within the family and that, despite this clear hierarchy in food production and food sufficiency, the Sherpas and Jirels of Kabre and the Newars of Namdu showed the lowest malnutrition levels, while the 'high caste' Brahmins (with their special restrictions on meat and dairy products) suffered almost exactly the same rate of malnutrition as the 'untouchables'. Her conclusion is that dietary taboos and customs play a significant part in determining patterns of food consumption (Sacherer 1979: 17-21.

Other studies suggest a tendency for location, production conditions, levels of household income and caste or ethnic group status to coincide. Thus, in Rapti zone, Rolpa district had a very low level of food production in comparison with the zonal average: 56.6 kgs per capita compared with 130.6 kgs, while in Rukum district the average level of per capita food production was 86.1 kgs (in the mid 1970s). In these areas the 1975 Nutrition Status Survey found the highest rates of malnutrition in the entire Rapti zone. But even within these areas of low food production and malnutrition, members of the Magar tribal/ethnic group were found to have at least twice the rate of disease and anaemia of 'high caste' communities (Pre-Feasibility Study for Rapti Zone, 1977: 71). Landownership among the Magars in these districts tended to be relatively egalitarian, but the Magar communities also tended to inhabit distinct localities, often cultivating poorer quality land than their 'high caste' neighbours. Under these circumstances one can talk of a form of 'shared poverty'.

By contrast, in Dang, where average per capita food production was 243.4 kgs - twice that of the zonal average - malnutrition rates calculated in the 1975 survey were almost as high for Rolpa and Rukum. Here, overall food supply was significantly greater, yet access to food for some groups was clearly insufficient. Sample surveys revealed that the tribal Tharus, who constituted some 43 per cent of the total population and who were predominantly landless labourers, were severely malnourished in comparison with the rest of the population who had access to land for cultivation and accounted for the relatively high level of food production. Under these circumstances, poverty is clearly not shared, except by those who are obliged by virtue of their lack of land for their own subsistence to 'share' conditions of employment which fail to ensure their adequate nutrition.

Having emphasised the central and crucial importance of landownership and access to resources in the structure of inequality and in the pattern of class relations, it is also necessary to recognise that ideas of religious superiority and inferiority connected to conceptions and practices related to social status, have a very real significance for the rural population. It is the social and cultural

dimensions of unequal relationships among the rural population which permit us to speak not only of exploitation and 'material' oppression, but also of social discrimination and 'ideological' oppression, which is also experienced on a daily basis in the context of routine social contacts and encounters. Even the poorest Brahmin is, as a consequence of the dominant socio-religious ideology, able to maintain a degree of social superiority simply by virtue of being a Brahmin (supposedly pure and 'above' other social categories); by contrast, even the wealthiest member of the 'occupational castes' remains stigmatised by virtue of his or her 'untouchability'. When, as is generally the case, material deprivation and poverty coincide with social deprivation and discrimination the lived experience of the poverty-stricken 'untouchable' is grim indeed. Unfortunately, the 'caste system' appears to be so far taken for granted by students of Nepalese society that there are no studies to our knowledge in which the detailed investigation and analysis of social (and economic) discrimination based on caste or ethnic differences - casteism - is undertaken. In the absence of such detailed work, it is only possible to draw attention to the fact that, in virtually every study yet undertaken, the position of the so-called 'untouchables' - the formally occupational castes, such as blacksmiths, tailors and leatherworkers - is economically and socially inferior to that of virtually every other group. In the terai, it is also the case that the local tribal Tharus are often socially oppressed, but there are also wealthy Tharu landowners and generalisations in this regard are dangerous. In Nepal, although officially it is illegal to discriminate against a person - in employment, for example - on grounds of religious or ethnic affiliation, there is no doubt whatsoever of the social discrimination against the so-called untouchables. While low paid employment in open air jobs is possible - such as portering, agricultural labour and other forms of manual labour - many forms of employment are ruled out on the grounds of their so-called untouchability - which is held by believers to contaminate others. Given the ideological dominance of the Hindu faith in Nepal, even members of ethnic groups not normally regarded as Hindu share to a greater or lesser extent these feelings regarding the 'untouchability' of those with the relevant characteristics.

Historically, the so-called untouchable groups provided the artisan and craft skills required in a predominantly agrarian society: they were blacksmiths, tailors and leatherworkers throughout the hill areas, but a greater variety of specialised occupations could be found in the terai and in the Kathmandu Valley (as mentioned in chapter one). They tended to rely for subsistence less on their own farm production than on payment in kind by their customer-patrons. In the villages, from the eighteenth century onwards, if not before, "the artisan was enmeshed in a complex network of social relationships which tied him to the households which customarily paid him; he was not free to work for others once the relationship was established and perpetuated, nor was he free to alter his price as in a market relationship. Throughout Nepal, in 'Hindu' and 'non-Hindu' villages alike, each artisan was involved in what is known in the hills as a bista and in the terai as a juga, an arrangement whereby peasant households could call upon the artisan for his special skills, as

needed, and whereby the artisan households were assured of a payment, after harvest (once or twice a year) in the form of a fixed amount of grain, thereby guaranteeing a basic subsistence from year to year" (Blaikie, Cameron and Seddon 1979: 78). Over the last century, the increasing flow of manufactured goods into the Nepalese plains and hills has tended to undermine not only the demand for the products and services of the former occupational groups but also for the position of these groups in rural society; the vast majority are now landless labourers, although a very small minority have been able to move where demand for their products and services is greater and become petty commodity producers and small businessmen. In our survey of rural households in west central Nepal in the mid 197Øs we found that only one quarter of households with an occupational caste name were practising that occupation; the majority were simply poor peasants and landless labourers. For those who continue to provide their previous goods and services, the demand is less and the number of households providing payment correspondingly lower. And if economic pressures are transforming the immediate social and economic environment for the occupational castes, and pushing them in increasing numbers into the category of landless labourers, the social discrimination against them as 'untouchables' remains powerful.

However, as has recently been observed, "concern with equal participation for the disadvantaged sectors of society cannot stop short at the household level" (Acharya and Bennett 1983: 45). In virtually all households in Nepal, women play a full and active role in the domestic economy; in some ethnic groups and social classes their role in the economy goes beyond the domestic sphere - as when Thakali women are involved in the hotel and catering business, or when educated Gurung and Chetri women are employed in clerical positions in the private and public sectors, or when women from labouring households and from the so-called occupational castes work as field labourers or porters for other. Acharya and Bennett estimate that women account for 57 per cent of adult input time into subsistence agriculture and related activities, and contribute in effect half of household income (men accounting for 44 per cent and children for 6 per cent). On the other hand, women are little involved in 'outside' activities as a whole, beyond the domestic subsistence sphere. "In our field studies we found that women's greater involvement with spheres I and II was associated with a tendency to depend on men as mediators - not only with the market economy but with all complex structures of the modern world. For women, the legal system, the local panchayat government, credit institutions, health services and agricultural extension - all of the increasingly important bureaucratic structures of development - are part of the 'outside'. Hence, for many rural women, these systems and services are both socially and conceptually inaccessible" (Acharya and Bennett 1983: 45).

If women are confined to their domestic and subsistence activities - which may include a variety of heavy duty tasks, such as fetching water, collecting firewood, working in the fields and more general labouring, in addition to cleaning, cooking, and generally 'looking after the home and the family members' - they are confined both by the

male members of the family and by the expectations of the local village society. The extent to which women are dominated and oppressed within the family, and within the individual household, however, varies considerably. The most important factors here appear to be the social class of the household and its caste or ethnic group affiliation. In general, where good access to material resources and to such facilities as education prevails - as in many rich peasant and landowning households, the chances of a greater degree of emancipation are more substantial; this, however, can be significantly affected by the conventional expectations and behaviour patterns of particular caste and ethnic groups. Thus, there is a strong tendency in 'high caste' Hindu families, and particularly among Brahmins, for women to be treated more unequally and to be socially more oppressed, than among the tribal groups - eg Limbus, Magars, Gurungs - or even among the so-called 'untouchables'. The pattern of male-female relations within the household is reinforced by the expectations and general behaviour patterns of the local village community within which the household exists; it is significant here that, as has been remarked already, village 'communities' tend to be single caste or ethnic group communities.

The consequences of sexual discrimination within the household are manifold. At the most basic, they include a generally lower life expectancy for women and a generally poorer level of health and nutrition for the female members of the household. It is not coincidental that women in the terai, where Hindu caste ideology is strongest, tend to experience both high fertility and mortality in comparison with the hill women, whose social life is far more equal and emancipated; early age at marriage in the terai also reflects the overwhelming concern to 'protect' young women of childbearing age from scandal and shame; in many hill groups, young women are freer in their behaviour and even in some instances able to have boyfriends and lovers before marriage. Where women are socially discriminated against strongly, as in most Brahmin and many Chetri households and communities, access to education and even to health facilities for women is severely reduced. Just as it was possible to make a crude distinction between the conditions of 'shared poverty' experienced by many hill villages of tribal affiliation and the conditions of extreme inequality where the poor live among plenty, so it is possible to distinguish those households where the social deprivation of the female members is a consequence of the general and shared poverty of the household itself and those where the social deprivation of the females is a consequence rather - or perhaps also - of sexual inequality and discrimination within the household.

Those who emerge as the most socially deprived and poorest in Nepal are the landless labourers, the sub-marginal and poor peasants, the 'self-employed' small artisans, craftsmen, petty commodity producers and petty retailers, so-called 'untouchables' and women ;their social deprivation is, as we have seen, a consequence of the particular social, economic and physical environment within which they exist; they do not, however, simply accept their condition - they struggle to survive, and in some instances to change that environment in order to defend or even advance their own interests. Their struggle is rarely

at a conscious level a struggle to transform their society; more often it is an immediate struggle to secure better living conditions, either individually or, occasionally, collectively; ultimately it is a struggle for the basic needs of food, health, education, housing and - perhaps most crucially for all these - control over their own lives. The future of the socially deprived is not predetermined, even if the social, economic and physical environment has an overall dynamic and tendency which will exacerbate their difficulties; their struggle can, and may, affect that dynamic in such a way as to alter the parameters of social, economic, and even environmental change.

7. THE STRUGGLE FOR BASIC NEEDS

In 1976, the United Nations General Assembly endorsed the 'declaration of principles and programme of action' adopted earlier in the year by the World Employment Conference. In the words of that declaration, "Basic Needs includes two elements: first, certain minimum requirements of a family for private consumption: adequate food, shelter and clothing, as well as certain household equipment and furniture. Second, they include drinking water, sanitation, public transport and cultural facilities" (Article 2). In addition, the declaration emphasised that "in all countries freely chosen employment enters into a basic needs policy both as a means and as an end. Employment yields output. It provides an income to the self employed and gives an individual a feelingof self respect, dignity and of being a worthy member of society" (Article 4). Finally, and in our view crucially, "a basic-needs oriented policy implies the participation the people in making the decisions which affect them through organisations of their own choice" (Article 3). For the mass of the Nepalese rural population and a significant proportion of the urban population as well, many of these basic needs were unfulfilled at the time this declaration of principle was being adopted by the United Nations, and remain so today. As regards food, we have documented in detail the extent and nature of food shortages and of inadequate access to food for a substantial proportion of the Nepalese population; a precise picture of the situation with regard to shelter and clothing is more difficult to obtain, as is that relating to household furniture and equipment Our own data on households in west central Nepal suggest a very low level of expenditure on consumer durables (between 115 rupees and 182 rupees a year for the labouring households in our survey). Data from the Rapti Baseline Survey, on the other hand, suggest that in all districts but one in Rapti zone, households spent more on clothing and house maintenance (with the latter accounting for relatively little cash expenditure) than on foodstuffs; between 25 per cent and 44 per cent of household expenditure went on clothing (APROSC 1980: 115). In general terms, however, we would argue that the first of the two elements of basic needs identified by the declaration of principle mentioned above are not fulfilled for a very substntial proportion of the Nepalese population; we would also argue that the two major constraints on the successful fulfillment of these 'private' consumption elements of basic needs are 1) inadequate land available to the household for own production, and 2) inadequate income from other sources; in both instances the demand is greater than the supply, in part because of the forms of control exerted by a minority of landowning employers over the 'supply' of land and employment opportunities, and in part because of the general shrinking of resources relative to population.

Individuals and households attempt to act within the evolving social and physical environment in order to defend their living standards and control over crucial resources and in order to improve their circumstances where possible. In our analysis of the struggle for basic needs in Nepal (Blaikie, Cameron and Seddon 1979) we suggested a schema in which three kinds of strategy were adopted. The first is concerned with the immediate search for food and security, frequently

manipulating patron-client relationships and their contradictions in order to provide the most elementary condition of existence" (Blaikie, Cameron and Seddon 1979: 56); this could be called a struggle for survival of the most basic and primitive kind. Importantly it involves an acceptance of existing social and economic relationships, and indeed often implies a dependence on them, even when fundamentally inegalitarian, exploitative and oppressive. It is in this context that indebtedness takes on its full social character as a mechanism whereby unequal relationships are on the one hand perpetuated and yet on the other are able to ensure the survival at the mimimum level of those most entangled in the debt relationship. Thus, "in cases of temporary and exceptional misfortune (which can occur quite often in extremely poor households), gifts are sometimes forthcoming from other households in a fundamentally similar socio-economic situation but which find themselves temporarily relatively advantged. The limits of such redistribution (shared poverty, JDS) are soon reached and in the situation of widespread exteme poverty the deprived must use relationships with richer households in a mode of 'institutionalised' begging of wide socio-economic significance. The vast majority of poor households (in our study, JDS) had relations with at least five and in some cases up to twenty potential or actual employers who could be visited in the hope of begging a little foodgrain for the next meal. Almost invariably the poor household performed some labour service during the year for the richer household, eg tailoring, repairing tools, house construction, agricultural or other labouring, portering (especially for shopkeepers). Thus considerable ambiguity existed around the nature of reciprocation expected. Was the food a gift, or an advance on wages, or a credit sale with or without interest? The manipulation of this ambiguity was often percieved as an arena of struggle by both parties" (Blaikie, Cameron and Seddon 1979: 58). Begging of this kind may be said to reproduce a local labour force in conditions of servility and dependence at a bare subsistence level. In the context of multiple relationships between rich and poor, employer and employee, creditor and debtor, the struggle is a silent one of negotiation and manipulation in which the 'cards are stacked against' the weaker party.

Where such devices and strategies are incapable of sustaining the household, it may become necessary for the household as such to break apart, its members searching for the means of survival in a less solidary fashion. "Children given into service of richer households are at least ensured of some food every day, and a poor woman who moves to a new richer husband suffers little loss of status compared with the possible gain of material security. This breakdown of families, excluding the migration of young men, was found in thirteen households. Among poorer households, no significant dowries were paid and so marital breakdown was rarely complicated by division of assets apart from tiny amounts of jewellery. The high incidence of single parent families is thus probably not a cause but a result of poverty. As a solidary group, even the family thus shows some fragility in the face of socially crippling poverty. In some cases we did observe great mutual support between men and women and parents and children, but such support was by no means so sure as to make the family the obvious unit of any basic needs strategy. In the struggle for

survival no relationship can be treated as sacrosanct and unquestionable" (Blaikie, Cameron and Seddon 1979: 58). In this sense, the struggle for survival may become a matter of struggle for individuals rather than for households; indeed, household breakdown appears to be a common consequence of extreme poverty, and many of the low paid urban workers interviewed in west central Nepal in the mid 1970s were struggling essentially on their own.

Permanent household breakdown as a consequence of extreme poverty must, however, be regarded as the ultimate stage in the downward process of cumulative social deprivation; in Nepal as a whole, this stage is reached by a minority - albeit a growing minority - of households. Prior to this stage, the household tends rather to 'explode' spatially on a temporary basis, as individual members search for additional and new sources of income to the household unit, often leaving home and staying away for many months and even years. It is significant, in this regard, that, in our sample of labouring households in west central Nepal, those with the poorest access profiles (lowest incomes and smallest landholdings) tended to have little in the way of non-agricultural income from remittances and 'small businesses'; those who are able to secure access to such 'outside' sources of income are clearly in a better position than those who cannot. In fact, a very large proportion of poor households in the hill areas of Nepal rely heavily on remittances from employment taken up elsewhere (in the terai, in the towns or abroad). As we have suggested, however, in our analysis of Nepal in Crisis, "the future prospects for all those dependent on non-agricultural ncome are likely to worsen and such outside 'support' certainly has not the capacity to postpone the general crisis in the hills much longer, since it is largely non-productive. The provision of these incomes has enabled the crisis of a declining resource base and population pressure to be staved off, not by productive investment in the resource base itself, but simply using the cash income to meet current consumption needs and therefore to avoid fundamental changes in agricultural production" (Blaikie, Cameron and Seddon 1980: 284). The search for such 'outside' income sources will become more critical and more competitive as they shrink both absolutely in some cases (reduced levels of recruitment to the Gurkhas, for example) and relative to the growing numbers of households seeking employment. The competition for scarce employment will pit poor against poor, and tend to reduce still further the level of wages and the conditions of employment.

All of these efforts to find individual and household security in a deteriorating physical, economic and socal environment, emphasise the 'vertical' structures as the 'solution' to immediate problems of survival; they fail to question unequal relationships and instead seek to manipulate or turn them to individual advantage; they 'take for granted', in a sense, the notion that survival lies in the successful exploitation of existing or potential relationships with the relatively advantaged, the rich and the powerful.

The second strategy is to seek a degree of independence from such binding economic and social relationships; either out of desperation following the loss of crucial assets (such as land), or - sometimes - from a relatively secure foothold temporarily obtained, households may seek to establish themselves away from their original location.

In the Nepalese hills today the possibilities of simply bringing new land into cultivation and thereby establishing the basis for independent agricultural production and self-sufficiency are extremely small. Even the exploitation of the waste land and forest resources as a means of maintaining self-sufficiency is hardly possible. We have suggested that "outside...direct 'patron-client' relationships two major alternatives exist for a poor household to gain sufficient food to subsist. The first is food from the jungle in the form of roots and berries etc. No households (in our survey, JDS) reported significant food gained from this source; even those households which were most chronically malnourished reported low availablity of such food." (Blaikie, Cameron and Seddon 1979: 58). The second alternative cited, for those who remain within their original locality, was household fragmentation. But a third possibility exists: that of emigration to seek the basis for independence elsewhere. Permanent migration from the mountains and the hills has always taken place, but the rate at which this is adopted as a strategy for household survival has accelerated rapidly and the growth of the population of the terai, and of the urban areas, in the last twenty years reflects in part the growing frequency with which households migrate in search of land, employment, or the chance to set up in some small business.

For the vast majority of those who emigrate, the search for land is the primary objective; in general, only those with previous involvement in artisan or craft production or in trade, or those unable to obtain access to land for cultivation, attempt to establish small businesses as the sole basis for subsistence. But the search for land involves a struggle for land; in the hills, as we have seen, the limits to extension have been reached in many parts of Nepal, and access to cultivated land may be obtained only by establishing ownership entitlement through inheritance or purchase or by establishing exchange entitlement by payment of rent or by a contract to sharecrop. All of these means of access have become increasingly subject to competition and conflict. For the past half century or more, those from the mountains and hills seeking land for independent cultivation have tended to emigrate to the terai. Here too, however, access to land for cultivation has become increasingly difficult. The competion for already cultivated land has become almost as acute as in the hills, and given the higher price of land (reflecting its productive potential as well a its increasing scarcity) many are unable to buy, rent or otherwise obtain access to such land. There remains the possibility of clearing the forest on an individual basis and establishing a smallholding. The attempt to clear forest and cultivate the land opened up, however, increasingly is met with resistance by the authorities charged by the state to 'protect' the forest resources against just such individual clearance and settlement.

Attempts by the state to control and limit settlement in the terai have taken two forms, the first (positive) encouragement to join official settlement schemes and the second (negative) discouragement of unofficial settlement. We have already pointed out that land reform of 1964 failed to redistribute land to any significant degree in the terai; it is also the case that relatively little land has been repossessed by the state from landowners with landholdings in excess of the official land ownership ceilings (see Table 35).

TABLE 35 OFFICIAL RESETTLEMENT, 1963-64 TO 1979-80

district	land available ha	land distributed ha	families resettled	start of project year
Nawalpur	3,866	3,155	1,504	1963-64
Banke	4,486	3,676	1,520	1965-66
Bardia	5,668	3,703	2,712	1969-70
Kanchanpur	5,938	3,675	2,548	1969-70
Jhapa	2,584	1,995	1,286	1969-70
Nawalparasi	3,756	3,280	2,876	1975-76
Kailali	2,817	648	1,003	1975-76
Sarlahi	267	247	235	1977-78
Dhankuta	-	-	-	1979-80
Total:	29,382	20,379	13,684	

Source: Basnyet, An Appraisal of Settlement in Regional Rural Planning in Nepal, unpublished Masters degree, Institute of Social Studies, The Hague, 1981, Table 11.

But given the scale of emigration from the hills and mountains into the terai during this same period this figure appears absurdly small; by far the greater proportion of migrants searching for land and employment in the terai have been obliged to search and struggle to gain access to land on their own initiative.

And, in this context, struggle is the correct term. For attempts to control and limit settlement in the terai, and in particular forest clearance by would-be squatters (sukhumbasi), has led over the past fifteen or more years to constant confrontation and conflict between the would-be settlers and the personnel (forest guards and local police) charged by the state to prevent spontaneous clearance and settlement and to protect the forest as a 'national heritage' and

major national resource. Many are the instances of forest guards and local police burning down the primitive huts constructed by squatters in the forest clearings they have made in order to grow enough food to maintain themselves, and destroying the crops in those cases where the squatters have been able to clear the land and plant without harrassment. For these settlers, the struggle for land involves confrontation with the state itself. Even where households attempt to register their newly cleared land officially, so as to establish legal ownership entitlement, their efforts are often met with official resistance and aggression. In one terai panchayat investigated during 1978 as part of a study of the living conditions of these poor labouring households identified in the earlier mid 1970s survey of rural households in west central Nepal, "some thirty household heads of various castes prepared applications for individual registration of land plots of less than 1 bigha (2/3 Ha). These were taken jointly by the heads of the households to the Chief District Officer. The response of the CDO to the joint application was simply to evade the issue; in contrast, the response of the Forestry Department to the cultivation by these households of marginal land at the edge of the forest was to wipe out the standing crops and the temporary houses which the cultivators had built on or near the land in dispute. The cultivators repeated their visit to the CDO on several subsequent occasions to press for the registration of 'their' land, but to no avail" (Blaikie, Cameron and Seddon 1979: 66).

From this example we can see that, even where individual households act responsibly and respectfully in concert, their efforts to achieve access to land - the basis for independence subsistence in rural Nepal - are often thwarted by the exertion of greater effective control over access to land by the state which enjoys all the legitimate means of coercion and will use it in the name of 'national interest' against the individuals in whose immediate interest it is to clear and settle the forest. Sometimes, the confrontation involves a greater degree of violence, and stimulates a higher level of opposition by the squatters. For example, "in years like 1972, when heavy rains made the growing season in the hill regions unusually short and the food scarcity more acute than usual, destitute hill people migrated in very large numbers to the terai forests to clear land and re-establish themselves. Therefore, the confrontations between them and forest rangers, often backed by local police, were numerous, with shootings reported in a number of terai districts. The most serious incident occurred at Ramailo-Jhora in northern Morang district, where more than 4,000 landless hill people resisted police attempts to burn their huts and force them out of the forest. The government admitted that one settler was killed when the police fired into the angry crowd, but press estimates of those killed ran as high as seventy-five" (Gaige 1975: 82).

In general, we would argue, the struggle for basic needs is undertaken on an individual or household basis, either efforts are made to manipulate the existing relationships prevailing in local economy and society - whether these lead to some redistribution between households of roughly equivalent economic and social status and 'shared poverty', or to the reinforcement of ties of patronage and dependency which

ensure a limited 'safety-net of relief' - or attempts are made to establish, in a new locality, the basis for independent subsistence production or other source of livelihood. On occasion, however, forms of collective action are generated on a temporary basis in response to particular threats or pressures, as in the case cited above. In rarer instances, collective action on a more permanent basis, as part of a longer-term strategy and involving commitment to a struggle for the basic needs of its members, may develop.

As we have seen, the struggle for land and for legal recognition of land ownership can take collective forms under particular circumstances; in almost all cases recorded, such collective struggle develops in direct resistance to actions of the local landowners or state officials which threaten what are seen by the mass of the population as their legitimate rights. For most landless labourers, the ability to clear and settle the forest appears a self-evident right to appropriate privately from 'the commons'; for the state, and for those with vested interests in the 'protection' of the forest for logging and other commercial uses, the rights of the squatters do not exist and they are to be prevented from private appropriation in the name of the 'public' or national good. When the two conceptions of legitimate rights clash there is a possibility of violence. One example of such a situation has been given in the previous section; another, in which the organisation and scale of the action by those concerned about their rights to land appears to have been even more substantial, can also be provided: in September 1966, a crowd estimated at around 4,000 people gathered around the administrative headquarters of Nawal Parasi district in the west central terai and, according to official reports, "rioted and threatened the lives of government officials". The demonstration was claimed, by individuals interviewed locally, to have resulted from the threat of non-registration by state officials of the landownership rights of large number of cultivators in the area. Legal action initiated by land owners and local authorities in the context of the land reform threatened the rights of tenants. The response to this demonstration of protest by the police was immediate: according to official reports, nine persons were killed and another twelve wounded in the shooting that followed. The legitimation for this action was provided by the Palace Secretariat in an official report: "a huge mob headed towards the police heaquarters on 7th September and the number of police personnel was insignificant in proportion to it. It is thus evident that the firing was justified". The publicly released version of the reports contained no explanation of the 'riots'; as the Nepal Times observed: "the official report which was released immediately after the firing disclosed that the mob responsible for the unhappy incident was incited by certain undesirable elements. But the enquiry commission report does not make reference to such elements. The report does not give any convincing facts as to how thousands of people could be incited by a handful of undesirable elements". Other explanations, for example that produced by the government's Nepali-language daily Gorkhapatra, suggested that "certain elements had misguided the peasants on the issue of land reform, and they should not be left unpunished". Whatever the facts about the initiation of this collective action (and there is some reason to believe that it

was more than a simple spontaneous protest), large numbers of landless and tenant labourers were prepared to act together when their rights were threatened, even against the local representatives of the state; and the response was a violent one, further encouraging the view widely held among the poor in Nepal that the state represents interests other than their own.

The compulsory savings scheme, initiated in 1965, was another aspect of the land reform programme which, in its implementation, caused widespread resentment and opposition among the small producers and labourers of the terai. According to this scheme, which was progressive in its original conception, every farmer was obliged to deposit a small proportion of his crops with the designated local officials each year, and was then able to call on the accumulated fund for an investment loan. As we have already seen, a very substantial proportion of small producers are unable to make any significant savings and are obliged to borrow, not for investment but for current consumption; under these circumstances such a scheme was inevitably seen as an additional burden on small producers - another form of taxation. All the more so when it became clear that many of the larger and more influential landowners and rich peasants managed to avoid making deposits. During 1967 and 1968 the Nepalese press reported frequently that local village panchayat committees were not keeping adequate records of savings collected, that committee members and other locally influential people were misappropriating the savings and that resistance to payment was growing. In April 1969 the protests became violent; in Taulihawa, administrative centre of Kapilvastu district in the west central terai, a crowd of village women reportedly surrounded and attacked officials attempting to collect compulsory savings; violence quickly spread across Kapilvastu district and into neighbouring Rupandehi. Looting and police shootings occurred in a thirty-village area over a three week period. During this time, at least 23 persons lost their lives, hundreds were wounded, and many others arrested. Compulsory-savings depots and private homes (generally of those thought to have been misappropriating the funds) were looted and burned. Official reports following these incidents blamsed squatters nd settlers from India and 'Indian dacoits (or bandits)', while the Kathmandu press claimed that Nepali Congress and Communist organisers had encouraged the opposition and violence. As Gaige observes: "it is not clear whether the 'Indians' were actually bandits, political organisers, or simply villagers of plains origin who had not been able to obtain citizenship certificates. Without dismissing the possibility that bandits or political organisers were involved, it is reasonable to assume that most of the 'Indians' were tenants or landless labourers, perhaps some of them recent settlers in the terai, perhaps some alienated earlier by land-reform measures that resulted in their evictions from tenancy holdings. Many fled from the troubled area to India, and this was used as evidence by some observers in Kathmandu that they were Indians, despite the fact that this appears to have been the sensible thing to do, given the virtual state of anarchy" (Gaige 1975: 176).

Collective struggle over rights to land reveals the crucial importance of access to land as a means of production and subsistence as the key for many to the fulfilment of their basic needs. As we have seen, however, an increasing number of those seeking land are unable to obtain access to it, whether in the hills or in the terai; these are then heavily reliant on income from other sources, notably from wage labour. In this context, the struggle for basic needs inevitably involves a struggle with employers over terms and conditions of work. Those involved in haruwa (permanent labouring arrangements) were least able to act independently, as they were required to attend from sunrise to sunset at the employer's house every day of the year's contract. But movement between employers on completion of contract was common and acknowledged as a means of gaining better working conditions. During the year the ability of the workers to negotiate over working conditions and payment was strictly limited; but at the point of entry to any employment, the labourer was able to negotiate to some small extent over wages, hours of work expected, additional payment in kind, control over tasks to be performed, and so on. Whilst generally the position of labour is weak, the existence of occasional labour shortages in time and space is recognised by both employers and employees; in such circumstances we found groups of labourers bargaining collectively with potential employers or arguing with existing employers about rates of pay and tasks to be done. For instance, in one panchayat in the hills a group of labourers were observed to negotiate a higher rate of pay for portering through a process of collective bargaining, and in another panchayat in the terai teams of men were formed which undertook work on a piece-work basis, sharing wages equally between them. During the time of our fieldwork in west central Nepal in the mid 1970s, we identified a growing tendency for labourers to form gangs which often were prepared to travel considerable distances to find work, in agriculture or outside, so that, rather than waiting as individuals to be recruited by an employer and allowing the employer thus create his own workforce, labourers were forming work-teams of their own and then negotiating with potential employers on a collective basis. However, such organised labour gangs remain relatively uncommon in comparison with the individual labourer seeking employment. For invariably the most highly desirable form of employment for most rural labourers was employment locally on a daily wage basis. The preference for local employment reflects the labourer's concern to play a part in the day-to-day life of the household, including of course agricultural activities where some land is owned;it also reflects the generally sporadic demand for labour. Under exceptionally favourable circumstances - with an expanding local economy and low dependency ratio - some households were able to subsist entirely on local daily-paid labouring; such housheolds regarded their position as relatively fortunate compared with those either tied to particular employers in haruwa arrangements (secure but highly constrained) or working on a casual basis for several different employers outside the village (more insecure and away from home, but relatively unconstrained).

In the urban areas, as in the rural areas, the most common form of negotiation between employer and employee is at an individual level; here too workers are aware of the trade-off between relatively secure

but generally low paid and oppressive employment and the somewhat higher paid day-labouring employment which may afford little security of employment. As in the rural areas, workers generally preferred the more flexible day-labouring employment to the longer-term arrangement, even though they recognised that higher wages for casual labour were often required to 'pay for' days waiting for employment. Turnover is therefore relatively high and few remain long in a particular job, preferring if unsatisfied with some aspect of the work (wages, conditions, etc.) to grumble and leave rather the re-negotiate new terms and conditions. In the towns, as in the rural areas, the demand for labour tends to be low in general and sporadic; the majority of employers are themselves small emterprises of frequently dubious viability and cannot guarantee good wages over a long period.

Thus, generally, "collective action on an extended basis to improve working conditions or to raise wages generally is rare in the rural areas; no organisation exists which defends and promotes the interests of agricultural labourers or other workers in the rural areas. In the urban areas it is also rare, despite the existence until 1976 of an official government-sponsored 'workers' organisation. Given the small size of most enterprises in the urban area, and the high turnover of labour, collective action is limited." (Blaikie, Cameron & Seddon 1979: 70). It is significant that although the earliest recorded industrial action directed against low wages and towards the creation of a trades union took place in 1947, it was not until 1961 that legislation regarding working conditions in the larger industrial establishments was implemented. The Nepal Factory Act of 1961 introduced for the first time the concept of adequate working conditions and covered such subjects as hours of work, hygiene, safety, ventilation, holidays, conditions of appointment and dismissal, minimum wages, the appointment of Labour Welfare Officers, and other facilities including medical care for employees. But the provision of this Act applied only to the tiny minority of large firms employing more than 100 workers. Furthermore, the right to strike was not legally recognised in the Act (and indeed was not recognised until 1974 with the amendment of the Act - even today certain conditions have to be satisfied before a strike may be called), but there are no restrictions on 'lock-outs' by employers; and in the same year, all organisations with objectives that could be regarded as political in any way were officially banned: even trades unions were not allowed. Instead were formed 'class organisations' intended to articulate in a controlled and restrained fashion the interests of different sections of the population. These included, among others a 'workers' association', a 'farmers' association', and a 'women's association'. During the fifteen years or so of its existence the official workers' association was unable to build up a significant degree of popular support and participation, but it did provide recognised channels and vehicles for collective action by groups of workers. Despite limited achievements generally, in some instances the association provided some degree of support for workers in their workplace, at least in larger establishments, and had some small impact in encouraging workers to act collectively in defence of their interests.

For the majority of those working in the urban areas, as labourers or as 'self-employed', there is little effective basis for organised collective action to safeguard the welfare of individuals and their families. In the private sector, where most establishments employ under ten persons, the existing legislation regarding health, safety, minimum wages, and so on, is not operative. Workers are obliged to take care themselves of their own welfare; usually this is undertaken simply on an individual basis by efforts to avoid accident or injury at work and to build up a small savings fund in case of lay-off or unemployment. State provision of social security is limited in the extreme. In some areas, however, workers have been able to establish welfare associations of their own. For example, workers in the transport sector in west central Nepal set up a Transport Workers' Welfare Fund in 1974; owners were not represented and the stated objectives of the association included looking after the economic welfare of transport workers and the promotion of unity among transport workers. The association was granted provisional recognition by the local (zonal) authorities in 1974 but generated considerable hostility among the powerful transport company owners who in effect ran those local branches of the official 'workers' association' concerned with transport workers. One of the major concerns of this association was to ensure that, in cae of accident or ill health, there was a fund which could assist the member concerned and ensure him and his family of their basic subsistence needs. But by excluding the owners, the association clearly committed itself as a genuine workers' welfare organisation with distinctive interests and concerns. It is relevant to note that members of the association were drawn from a wide variety of caste and ethnic groups.

Not only those in regular wage employment, but also the 'self-employed' were able on occasion to form associations in order to safeguard their welfare. In 1974, in the Bhairahawa area, the rickshaw pullers - most of whom either rented their rickshaws from one of the small number of large rickshaw owners, or had purchased their own machine - attempted to form their own association to establish a welfare fund to help those in difficulties as a result of road accidents or other misfortunes; the main concern was again the welfare of its members, but it was set up explicitly to protect its members against the larger rentiers and in the face of increasing competition from motor transport companies. It was suggested at the end of 1974 that some 250 rickshaw pullers had contributed to the fund, but opposition from the larger rickshaw owners and from the owners of taxi and bus companies was putting the new association under pressure; and within a year it had fallen apart. As in the case of the transport workers' welfare fund, the association included representatives of a wide variety of caste and ethnic groups.

Such organisations resemble somewhat the 'friendly societies' established in England prior to the formation of trades unions; in Nepal they face not only considerable resistance from employers and more powerful vested interests in the private sector, but also lack of support and even opposition from the local authorities as well. Given the ban on trades unions, the welfare associations formed by workers in the urban areas and by the 'self-employed' cannot evolve in a

'natural' way into protective and more broadly assertive organisations resembling local trades unions. It is, however, significant that in this context class divisions appear of far greater significance than caste and ethnic divisions; it is also of significance that it would appear that only in the urban areas have such proto-trades union forms of collective action in the struggle for basic needs developed. As in many other countries, urban workers find it less difficult than rural workers to organise for collective action in defence of their interests. Whatever the potentialities of such proto-syndicalist associations, it is striking that none of those investigated showed any sign of a broader or longer-term strategy based on a class analysis of Nepalese economy and society, although the awareness of class divisions and of the significance of these divisions (in terms of exploitation, discrimination and oppression) is not in doubt. The prohibition on trades unions proper certainly plays a part in inhibiting the development of a wider class consciousness and appropriate strategies for the general advancement of working peoples.

By contrast, the organisation on a national basis of an association to protect the interests and welfare of the so-called untouchables - the Nepal Rastriya Dalit Jana Vikash Parishad - has a far broader and longer-term vision of its aims and objectives. Social discrimination on grounds of caste is officially outlawed, but continues to exist; this contradiction disturbs many, but none more than the 'self-employed' artisans and craftsmen of 'untouchable' status in the urban areas - although social discrimination against 'untouchables' is significantly less in the urban areas than in the countryside where the social oppression is often very considerable. Investigations in the west central region during the mid 1970s revealed that the organisation had been formed in Pokhara as early as 1953 (under the name of the Nepal Biswo Sarba Jana Sangha), renamed in 1957 (the Nepal Pariganit Vikash Sangha) and finally in 1961, when the new constitution was promulgated following the banning of all political organisation, given its present name. Within the region, branches had been formed during the 1960s and early 1970s in several towns, including Tansen, Syangja and Bhairahawa; some of these had originated as local associations but were now all linked into the national organisation. Membership of the organisation is almost exclusively of those defined as 'untouchable' by virtue of their occupational caste, although in principle it might be possible for poor, working class individuals from other castes and ethnic groups to join. The membership includes those who might be termed petty bourgeois as well as those of unambiguously working class backgrounds, and the majority of those serving on local committees in the mid 1970s were craftsmen and small businessmen.

The activists within the organisation are clearly drawn predominantly from those residing in or very near to the urban areas, and are themselves overwhelmingly of petty bourgeois rather than working class backgrounds; the difficulties caused by this divison within the organisation was recognised by many of the activists who appeared, in interviews, to be very aware both of the problem of class and caste divisions within the organisation and also of the need to develop a broad 'popular front' kind of association. The secretary of the

Syangja branch pointed out that "up until now, Sarki, Kami, Damai, Pode and others are all divided according to the old system and the Dalit has been unable to really unite the 'lower castes'; while the secretary of the Tansen branch admitted that the organisation consisted almost entirely of 'untouchables' of various categories at present but also emphasised that even Brahmins could join in theory, if they were poor and oppressed and recognised their interests to be those of the lower classes as a whole. Many of the activists interviewed regarded recruitment and 'consciousness raising' as being of major importance for the future; more specific welfare programmes, the development of cooperatives and an emphasis on education were also regarded as objectives in the medium term; and on the basis of evidence from west central Nepal in the mid 197Øs it seems likely that membership will grow and that the broad concern of the organisation with welfare and education to minimise the effects, and also to attack the roots, of social discrimination and casteism will have an increasing impact.

All of these forms of collective action emerging from among the labouring poor and self-employed in rural and in urban areas are, however, seriously constrained and limited by the ban on all associations with political objectives, however defined. For more than 2Ø years, since the king outlawed parties, trades unions and other forms of collective class-based organisations in 1961, the ability of the poor to defend and advance their own interests in the struggle for basic needs has been stifled and restricted. The framework within which political activity is acceptable is that defined by the king and the state as 'panchayat democracy'; the nature of this form of 'democracy' remains to be considered, but if it is accepted that "a basic-needs oriented policy implies the participation of the people in making the decisions which affect them through organisations of their own choice" (article 3 of the declaration of principle and programme of action of the World Employment Conference), then it may be argued that this element of basic needs is absent, simply by virtue of the ban on trades unions and political parties. The so-called 'class organisations' established at the beginning of the 196Øs were official organisations in which very few of those formally eligible to participate did so; one of the reasons for this is that these organisations were established on the premise that class divisions were irrelevant and should not in any case be encouraged, so that the so-called 'farmers class organisation' was to include farmers of all sizes, while the so-called 'workers' organisation' was to include employers and employees in various branches of the private sector. Another reason is simply that the organisations were introduced 'from above' and failed to meet the real needs of their supposed constituency. The 'women's class organisation', for example, although supported by the queen and involving an active minority of women from the more affluent landowning and business communities, failed almost totally to reach and involve poor women in town or country.

But, if trades unions and political parties were outlawed at the beginning of the 196Øs, this certainly does not mean that they ceased to exist. Opposition to the present system of 'panchayat democracy',

initiated by the king with the support of the conservative forces in the country, continues. In addition to the Nepali Congress Party, there are several parties of the left, the largest and best organised being the Communist Party of Nepal. This was founded in 1949 and came during the 1950s to exert considerable influence among workers, students and lower-level civil servants; it was banned, however, for almost half of the decade at a time when other political parties were active. In the parliamentary elections of 1959, however, the Communist Party ran candidates in 46 out of 109 constituencies and won 4 seats, two in Rautahat district in the eastern terai, one in Palpa district in the hills of west central Nepal, and one in the Kathmandu Valley; it also received strong support in other constituencies of the eastern terai, where a concentration of industry has given rise to a concentration of non-agricultural wage workers, and in the Kathmandu Vally. The royal coup of 1960 precipitated a split between the so-called 'extreme' and 'moderate' factions within the CPN; the leader of the former, Pushpa Lal, fled to India to organise opposition to the new regime, while the leader of the latter, Rayamajhi remained in Kathmandu. During 1961-62, Nepali Congress Party rebels and the supporters of Pushpa Lal initiated operations along the border directed against government officials and state installations, but this activity ceased in 1962 when the Nepali Congress Party was obliged to terminate its rebel activities by the Indian government in view of the dangers of the India-China conflict. Meanwhile, the so-called 'moderate' faction of the CPN was able to increase its support, so that in the 1963 panchat elections it was able to put 18 party members into the national assembly. In the system of panchayat democracy instituted by the king, no candidate could run on a party ticket, but, as Gaige observes, "in the rather intimate small-town political atmosphere of Kathmandu, the informal party affiliations of politically important people are usually known" (Gaige 1975: 182). The CPN was clearly able to take some advantage from the fact that until 1968 many of the Nepali Congress leaders were in jail and unable to organise their party. Thus, "there is no doubt tht the communists gained popular support in Nepali Congress strongholds during the years since King Mahendra imprisoned most of the Nepali Congress leaders and particularly after the Indian government called a halt to the armed activities of Nepali Congress rebels in late 1962. Since then, party workers have maintained a series of posts in Indian border towns and have distributed party propaganda in the terai, but the party has lost its organisational momentum" (Gaige 1975: 186).

It is significant that most of the political activity of opposition parties is concentrated in the Kathmandu Valley and in the terai; it is in these areas, generally, that workers, tenants and sharecroppers, the 'self-employed', lower level state employees and students are prepared to take active part in supporting the banned political parties. Early in the 1960s the Terai Liberation Front was formed to defend the interests of terai people, and in August 1967 one of the leaders of the TLF wrote in one of the Indian newspapers that "thousands of persons in the terai had fallen victim to oppression" and were being driven off the land so that it could be resettled by hill people (quoted in Gaige 1975: 183). It may well be that the TLF was active in organising the demonstration in September 1966 that

assembled 4,000 people in Nawal Parasi district to protest against non-registration of tenants' land. In April 1969, when violence broke out in the west central terai, in Kapilvastu district first and then in Rupendehi district, over the compulsory savings scheme, the New Herald stated that "The Pushpa Lal group of the banned Nepal Communist Party is reported to be very active in Gorakhpur...It is being given unrestricted freedom to make propaganda against the panchayat system and engage in other subversive activities against Nepal from Gorakhpur". The relationship between the open opposition to the compulsory savings scheme by local people and the activities of the Pushpa Lal faction of the CPN is not proven, but highly probable.

Although the two major political parties, the Nepali Congress Party and the Communist Party of Nepal, make their presence felt in both the Kathmandu Valley and the terai, they tend to operate more openly in the terai, partly because the sense of disaffection among the local population is greatest there and the willingness to act collectively more evident, and partly because of the proximity of India across the open frontier and the possibility of sanctuary and political support from the Indian left. There is no doubt that both parties continue to vie for support in the rural and urban areas of the terai, despite the official ban on political activity and the renewed commitment of the government and the king to the system of panchayat democracy following the referendum in 1980 when the parties were unable to produce a majority vote in favour of a return to party politics.

In Nepal today, the legal restrictions on political activity ensure that forms of collective action in the struggle for basic needs remain strictly confined within a framework established 'from above' by the state; even trades unions and welfare associations are discouraged. What remains, apart from informal, spontaneous and illegal action in defence of the rights and 'basic needs' of the mass of the population, are the institutions approved by the state and the specific forms of intervention initiated by and implemented by the state.

Since 1961 political parties have been officially banned, although as we have seen they continue to operate and to have an influence on political life in Nepal; some, like the Nepali Congress Party and the Communist Party, have continued to speak and act 'in the name of' and 'on behalf of' the mass of the Nepalese people in opposition to the more conservative interests so powerfully represented in the government, state bureaucracy and other less formal groupings and institutions. But the possibility of an open debate and struggle between competing ideologies, programmes and policies through a multi-party system, as might have developed during the 1960s had not the king stepped in, has been precluded for the past twenty years, and is likely not to reappear for the immediate future. In the absence of legal political parties, able to articulate distinctive programmes and policies and to represent the broad interests of various different sections of Nepalese society, the system known as 'panchayat democracy' - introduced at the beginning of the 1960s by the king in order to "restore to Nepal a more suitable form of democracy based on 'the traditional practices of the Nepalese people'" (Blaikie, Cameron and Seddon 1980: 90) - provides the only way in which the majority of

the Nepalese people may legitimately involve themselves in political activity and in efforts to change the economic and social structures that characterise contemporary Nepal. However, real access to positions of power and influence in the panchayat democracy is effectively limited to those already having power and influence through the informal relations that permeate village society and beyond that the entire structure of Nepalese society.

In the system of panchayat democracy, it is only at the village level that the ordinary people may vote to express their views; higher level councils (at the district and national levels) are elected or appointed without a mass popular vote. Furthermore, even at the level of the village panchayat many people remain unclear regarding the panchayat system and politically marginal to it. A survey of village panchayats carried out in the late 1960s, after nearly a decade of panchayat democracy, revealed that roughly 50 per cent of those interviewed were 'deeply confused' regarding the system, while a further 40 per cent had only a 'rudimentary knowledge' or expressed 'incomprehension' (Shrestha and Mohsin 1970: 80). Despite the rhetoric of the panchayat system, with its 'back to the village' slogans superficially reminiscent of China or Tanzania, there was little evidence during the 1960s or 1970s of genuine popular involvement in politics at the village panchayat level. However, when at the beginning of the 1980s, growing unrest among students and the intelligentsia and increasing pressure from the leadership of the banned political parties pushed the government to hold a national referendum on the question of a possible return to multi-party democracy, the majority vote in favour of a continuation of panchayat democracy was conclusive. The official view, that social and political differences were not to be emphasised and that panchayat democracy allowed and encouraged the development of a non-partisan, classless form of politics more suitable to the Nepalese culture and condition, appears to have been endorsed - perhaps not surprisingly given the low level of political consciousness shown by the rural population in particular, the overwhelming concentration of economic and political power within the local communities that constitute the electoral base of the panchayat system, and the constant official propaganda in favour of such a system. Thus, for the time being, panchayat democracy provides the framework within which Nepalese politics officially are contained. On the other hand, the continued existence of political parties, however weakened by twenty years of formal proscription and by widespread political apathy, is undoubted; the fact that some 45% of the electorate voted in the referendum for the reintroduction of political parties will ensure that leaders of the recognised parties will undoubtedly find their way into the higher levels of decision and policy making over the next few years and there is a strong possibility that many from the outlawed political parties will begin to involve themselves more actively in panchayat politics at the local level in the years to come.

Since the announcement of the 1962 Constitution, the membership of the national assembly has included a majority elected by the district panchayat councils (themselves constituted of individuals elected by the village panchayat councils to the district assemblies), and a

minority drawn in other ways from different constituencies. During the 1960s and first part of the 1970s, roughly 16 members of the assembly were directly appointed by the king, while nearly 20 were drawn from the various so-called 'class organisations'. These last were created by official fiat at the same time as the panchayat system was promulgated, in order to provide some limited basis for the expression of distinct sectional interests; they included the Youth Organisation, the Women's Organisation, the Labour Organisation, the Farmers' Organisation and the ex-Servicemen's Organisation; there was also a Graduate Association. Each of these provided between two and four individuals to sit in the national assembly. But the so-called 'class organisations' remained in effect largely vehicles for the personal ambition of a small number of individuals, usually drawn from the urban bourgeoisie or landed classes, and had little real political significance for the broad mass of their official constituents. In a few instances, organisations like the Women's Organisation or the Labour Organisation were able to encourage and promote a certain amount of activity within the local branches that were officially established in most districts, but the ability of the majority of those formally eligible to participate to do so was strictly limited by the prevailing local power structures. In any case, these official organisations had virtually ceased to have any degree even of official support by the second half of the 1970s; they were in fact moribund.

We have already attempted to indicate the nature of economic and social inequality in the rural areas of Nepal and to show how such inequalities derived from a structure of class relations combined with other forms of social inequality to ensure the systematic deprivation and disadvantage of particular sections of the rural population, notably the poor peasants and landless labourers, and particularly those regarded as 'untouchables'. In the late 1960s a study of district and village panchayats revealed just how strongly the local 'panchayat democracy' had worked to consolidate economic and social power in the form of political office. A survey of the economic and social background of village panchayat chairmen with special reference to Mechi, Kosi and Sagarmatha zones (in eastern Nepal), for example, showed that well over half of these individuals were landowners (57 per cent) while a significant minority were 'owner-cultivators' (40 per cent) and a tiny minority were employed in the state bureaucracy (eg as teachers) or had been in the army (3 er cent in all). Nearly 60 per cent of the panchayat chairmen were owners of landholding exceeding 50 ropani (c. 2.5 Ha.) while a further 12 per cent owned land of between 30 and 50 ropani (1.5 Ha. - 2.5 Ha.), at a time when the average landholding size in Nepal was estimated to be 5 ropanis (0.25 Ha.). Just over half of those interviewed had annual incomes over 5,000 rupees (well over 400 rupees a month), but none had annual incomes of less than 1,000 rupees; and nearly half of the village panchayat chairmen were Brahmins or Chetris - there was no example of an 'untouchable' chairman. These data suggest a strong predominance at the level of the village panchayat or particular caste groups and of rich peasants and landowners; at the district level, the bias towards wealthy landowners, with a minority drawn from commercial and related occupations, is more evident (cf Rana & Mohsin 1967). Another survey, carried out in 1967-68 in the terai, suggested that over the

four to five years between the establishment of the village panchayats under the system of panchayat democracy and the time the data were collected, perhaps as many as half of the largest landowners actually living in the villages were elected to the panchayats (cf Gaige 1975: 142). There is little to suggest that this picture of the dominance in local panchayat councils of the landowners and rich peasants has changed significantly over the past fifteen years.

At the district level also, the local power structures condition the orientation and effective intervention of the state in local affairs as well as the composition of the district panchayat and the direction of its policies and programmes. It was argued, in the mid 1970s, that "since 1951, politics in the terai districts have continued to be dominated by the largest landowners and district administrators. Many district-level officials, especially those with a high degree of education and a spirit of nationalism, have been striving for the past several decades to implement development plans and to reform local administrative procedures. In this they have often been opposed by the traditional elite, who prefer to retain the status quo. On the other hand, there are frequent reports of government officials less than dedicated to the welfare of the total community. The relationship between district administrators and large landowners is often less one of antagonism than cooperation to the mutual advantage of both" (Gaige 1975: 145). It can be reasonably assumed that, in the hills also, the pressures on district level administrators to compromise with the interests of powerful local landowners and merchants are considerable. This is all the more so when those interests are directly and formally represented on the district panchayat; and what little data there is on the composition of district panchayat councils suggests that the overwhelming majority of members are wealthy high caste landowners and businessmen (cf Rana & Mohsin 1967). In a few instances, individuals from so-called 'untouchable' groups have been able to reach the district panchayat level as council members, but these are indeed exceptional and usually involve individuals from particular 'untouchable' groups who have been able to move into areas of commercial activity where they have managed to accumulate considerable wealth.

Direct elections to the district panchayat do not take place; instead, the village panchayats elect representatives to the district assembly which then elects its representatives to the district panchayat. Village level elections for the panchayat council were suspended for a time during the mid 1970s, when officials appointed directly by the Palace to the district level of the 'Back to the Village Campaign' nominated members for the village panchayat council. But the policy of the 'Back to the Village Campaign' - which was to nominate members for the village panchayat in order to ensure representation for the most disadvantaged groups - had little success in its programme of 'positive discrimination', and elections were resumed in 1978. It remains the case that ordinary villagers may only express their views in the election of village level panchayat councils, and even here the

oppressive weight of local structures of inequality and discrimination serve to reduce drastically the ability of the most severely disadvantaged and deprived to express effectively their formal democratic rights.

In such a situation, the dangers of the recent decentralisation bill are clear. In the new plan, authority for mobilising resources is delegated to the panchayats, and village and district panchayats will be able, officially, to spend half the land revenue collected in their respective areas (with the other half going on upwards to Kathmandu); they have also been assigned quasi-judicial powers to settle minor property disputes. Thus, the ability of the local village panchayat to control tax collection, to determine at least to some extent the pattern of resource allocation and expenditure, and exert a degree of law and order in regard to local conflicts over land, is to be significantly strengthened. The ability of the economically and socially disadvantaged to influence their new village local government will depend crucially on their own ability to mobilise in order to ensure that their collective interests are adequately represented and considered in 'policy making and implementation' at this level. In Gaige's words, "to establish the groundwork for any kind of fundamental change, the panchayat system must provide those who have not heretofore shared in the decision-making process an opportunity to share authority with those who have maintained exclusive control over that process" (Gaige 1975: 143).

Historically, the most clearly disadvantaged groups - landless and 'untouchable' classes and castes - have been effectively excluded for the most part from exerting any real influence on panchayat affairs. Nevertheless, it must be acknowledged that they have had some formal representation at least. Even in the late 196Øs, in the terai - where generally the social disadvantage of 'untouchable' caste status is greater than in the hill areas (where the caste ideology is slightly less pervasive and extreme) - a small minority of panchayat members were from so-called 'untouchable' groups: in Kapilvastu district, where 'untouchables' account for roughly 17 per cent of the village populaton, 5 per cent of all village panchayat members were 'untouchables'; in Bara district, where 28 per cent of the population were 'untouchables', they constituted 1Ø per cent of village panchayat members; and in Mahottari-Dhanusha, where 21 per cent of the population fell into this category, 14 per cent of the panchayat members were 'untouchables' (cf Gaige 1975: 144). But most of these individuals were elected from wards where only so-called 'untouchables' lived, and were unable once elected to exert any significant degree of influence on panchayat deliberations. Even so, but the potential for further advances should not be dismissed out of hand.

Certainly the rhetoric is favourable to greater participation in the system of panchayat democracy by the relatively disadvantaged and deprived. In the draft for the Sixth Five Year Plan the general framework was that of a "broad-based and people-oriented development strategy enlisting people's participation and mobilising local resources and skill" (National Planning Commission 1978: 6) and in the

most recent decentralisation bill it is envisaged that popular participation will be encouraged, not only through the strengthening of the powers of the district and village panchayat, but also through the simultaneous introduction of integrated rural development programmes (IRDPs) and the creation of development centres at the district and even village panchayat level covering health, population control, education, soil conservation and forest protection. The state has allocated 400 million rupees towards this ambitious programme, and there have been significant aid allocations from the USA, Canada, West Germany, Britain and Switzerland. To what extent this broad policy initiative will be effectively implemented at the zonal, district and village level, given the prevailing structures of power and influence remains to be seen. Up until now, however, the indications are that 'the new conventional wisdom' (of broad-based strategy involving the mobilisation and popular participation of the rural masses to bring about the changes required if they are to be able to fulfil their basic needs) will remain rhetoric rather than reality unless there is a progressive shift in the balance of forces, both within the state bureaucracy and outside it, at all levels.

8. THE ROLE OF THE STATE

The Sixth Five Year Plan for 1980-85 emphasises the remarkable progress that has taken place in the provision of social services, notably in education and health over the past thirty years: "literacy percentage now stands at 19 per cent as against 4 per cent previously. About 70 per cent of the children of primary school going age now go to school (compared to 1 per cent of the total previously). Drinking water is supplied to the tune of 27,000,000 gallons a day as against 2.9 million gallons. From 670 the number of hospital beds have attained the respectable figure of 2,484" (National Planning Commission 1979: 2).

As regards education, if it is agreed - as some suggest (eg Islam et al 1982: 35) - that literacy for everyone and primary education for children are basic human needs, then despite the significant improvements of the past twenty years the situation in Nepal is one in which a substantial proportion of the population is clearly unable to fulfil these basic needs. In 1950 there were fewer than 10,000 children attending school in Nepal, and the literacy rate was around 2 per cent of the population. Twenty-five years later the adult literacy rate had increased to nearly 20 per cent and the official enrolment rate in primary schools had reached 95 per cent for boys and 25 per cent for girls; enrolment at secondary school level involved 12 per cent of the relevant age population in 1976, according to the World Bank's World Development Report for 1979 (IBRD 1979). Even with these dramatic improvements, however, Nepal compared poorly in several respects with other South Asian countries (see Table 36).

TABLE 36 EDUCATION IN SOUTH ASIA

country	enrolment as a % of age group			adult literacy	public expenditure on education as % of GDP
	primary boys	primary girls	secondary total		
India	94	63	28	36	3.2
Sri Lanka	80	73	55	78	3.1
Pakistan	68	31	17	21	2.1
Bangladesh	86	60	23	22	1.8
Burma	83	78	22	67	1.7
Nepal	95	25	12	19	1.5

Source: World Development Report, 1979, IBRD (IBRD 1979)

The high enrolment for boys is not matched by the enrolment for girls; the percentage of those continuing to secondary education is very low, as is adult literacy. These data reflect the overwhelming concern

with primary education in Nepalese government efforts, and this in turn shows the strong influence of US aid policy towards Nepal during the late 196Øs and early 197Øs when primary education was considered a high priority. Public expenditure on education as a proportion of the country's GDP, however, remained lower at the end of the 197Øs than in any other South Asian country. The adult literacy rate, apparently around 2 per cent in 195Ø, had risen to 9 per cent by 1968 and increased over the next ten years to 24.3 per cent in 1979-8Ø (National Planning Commission 1981: 15); but this is still one of the lowest rates in the world - the average literacy rate for all the 38 'least developed' countries in 1975 was 38 per cent (Islam et al 1982: 35). Improvements in primary school enrolment were clearly even more dramatic; a mere 1.54 per cent of the population aged six and over had primary education in 1971, but by the mid 197Øs the percentage of children enrolled at the primary level was around 43 per cent, and by 1978-79 had reached 77 per cent (figures quoted in Islam et al 1982: 35). But even these statistics obscure the fact that access to education remains highly unequal within the country. Figures relating to the three major ecological zones - mountains, hills and terai - show clearly that the population in the mountain areas is relatively deprived in terms of education; while data for the 'development regions' reveal the extent of educational disadvantage in the far west. These statistics also underline the very substantial inequality in all parts of the country between males and females with regard to access to education (see Table 37).

As regards health and preventive medicine, although there has been clear progress in the provision of safe drinking water the vast majority of the population must rely on 'natural' and unprotected water sources. In 1976-77 less than 6 per cent of the rural population had access to piped water and toilet facilities, and the overwhelming majority of this privileged section of the population was concentrated in the Kathmandu Valley. Electricity was available to only 1 per cent of the total population (Ghai & Rahman 1979: 2). A large proportion of the population is vulnerable to waterborne diseases and in particular to gastro-intestinal and parasitic infections commonly associated with poor sanitation and water supplies. In the late 196Øs, most villages were characterised by unprotected and contaminated water supplies, lack of sanitary latrines, indiscriminate defecation in public areas, unsanitary food storage, food preparation and refuse disposal; accommodation with poor ventilation and severe crowding ; serious infestation by rats and flies (Worth & Shah 1969). There is a close link between the low level of provision of protected drinking water and the poor quality of sanitation in both urban and rural areas, on the one hand, and the grim health situation on the other.

In the fight against endemic diseases through preventive measures the government with assistance from foreign aid donors and international agencies has been relatively successful. In the 195Øs, a USAID sponsored malaria control programme was initiated in the terai and the lower valleys of the hills; by the time of the Nepal Health Survey in the mid-196Øs there were strong indications of success in this field and detectable cases were found only in the western terai (although

TABLE 37 LITERACY, ACCESS TO SCHOOLING AND PRIMARY EDUCATION IN NEPAL BY REGIONS AND SEXES, 1971

Regions	Population Six Years and Over			Per cent literate			Per cent Having No Schooling			Per cent Having Primary Education			Per cent Enrolled in Primary School		
	F	M	T	F	M	T	F	M	T	F	M	T	F	M	T
Ecologcial regions															
Mountains	468,522	478,506	947,028	2.06	17.57	9.90	98.76	90.13	94.40	0.16	1.78	0.98	0.84	5.50	3.20
Hills	2,515,551	2,481,265	4,996,816	3.94	25.83	14.81	97.09	83.20	90.10	0.24	2.96	1.59	1.56	7.63	4.57
Terai	1,678,415	1,831,587	3,510,002	4.40	22.13	13.65	96.62	83.91	89.99	0.42	2.69	1.62	1.40	6.23	3.92
Development regions															
Eastern	1,119,955	1,161,607	2,281,562	4.66	25.47	15.25	96.43	83.12	89.65	0.35	2.55	1.47	2.07	7.65	4.91
Central	1,540,115	1,618,271	3,158,386	4.83	23.11	14.19	96.59	85.66	90.99	0.20	1.67	0.97	1.57	5.33	3.50
Western	1,029,666	1,009,344	2,039,010	3.93	29.47	16.57	96.91	78.42	87.76	0.48	4.89	2.66	1.85	9.85	5.81
Far-Western	972,752	1,002,136	1,974,888	1.62	16.28	9.06	98.83	88.73	93.70	0.18	2.53	1.38	0.68	5.51	3.13
Nepal	4,662,488	4,791,358	9,453,846	3.92	23.59	13.89	97.09	84.16	90.54	0.30	2.74	1.54	1.43	6.88	4.19

Note: F,M and T stand for female, male and total, respectively.
Source: Calculated from Central Bureau of Statistics, Population Census 1971, Abstracts (Kathmandu, 1975). Tables 2, 3, and 4.

there were indications of recent malarial infection in some eastern terai villages). For the next decade it seems that malaria remained under control, but by the mid 1970s there was evidence to suggest an increase in the number of cases once again; a 1975 government report suggested that reported cases, which had reached a low of 361 in 1971, had risen to 2,064 in 1972 and 4,146 in 1973. During the 1970s, a tuberculosis control project attempted to screen the entire population for active TB and to provide BCG immunisation for all children under 15. As of 1978, 55 of the 75 districts had been covered by mobile teams; and while implementation is far from complete, the programme has proved relatively successful. Equally effective has been the programme to control cholera. The smallpox vaccination campaign continued throughout the 1960s and 1970s, and in 1977 the World Health Organisation declared the country free of smallpox.

There has been no comprehensive health survey on a national basis since the Nepal Health Survey of 1965-66, but despite some improvements - notably the control of such diseases as smallpox, cholera, TB and malaria through large scale preventive programmes of vaccination - the general health of the population remains poor, while a very substantial minority suffers seriously from disease and from inadequate access to what health facilities exist. In 1977 a government report suggested that, although "Nepal has made steady progress during the last three economic plans (1961-1975) in raising the health standard of the population", nevertheless, "malnutrition, measles, tuberculosis and to a major extent intestinal infections and water pollution are still forming a great hazard to the general health of the population" (quoted in Banister & Thapa 1981: 34).

Distribution of health care facilities remains inadequate, although there have been significant improvements over the past thirty years. At the end of the Rana period, medical facilities were few and far between:low level of health care provision, concentration of what facilities did exist in the urban centres - largely inaccessible to the majority of the rural population - and virtual absence of facilities in the northern mountain areas.

This general pattern continues today. State-provided facilities remain unequally distributed throughout the country - concentrated heavily in the urban areas and in the areas most physically accessible; this ensures that provision in the mountain areas and in the far west is significantly less good than elsewhere in Nepal. The information available for 1971 shows both the general level of state health facilities and the spatial inequality in their provision (see Table 38).

TABLE 38 NUMBER AND DISTRIBUTION OF HOSPITALS AND HOSPITAL BEDS, JUNE 1971

Hospitals and Beds	All Nepal	Zones			Regions			
		Terai	Hills	Mountains	Far-west	West	Central	East
No. hospitals with more than 25 beds	16	6	10	-	1	4	9	4
No. hospitals with fewer than 25 beds	37	18	17	2	6	10	13	8
No. hospital beds	1,910	530	1,340	40	133	347	1,230	200
Population per bed	6,050	7,986	4,638	27,709	18,250	7,100	3,208	13,208

Source: Banister & Thapa, The Population Dynamics of Nepal, 1981: 35.

The distribution of health care facilities remains almost as unequal today as it was ten years ago. In 1978 only 21 per cent of panchayats had any kind of permanent health facility. Furthermore, the majority of those health posts that do exist function inadequately owing to low levels of funding, lack of transport and severe shortages of equipment, drugs, medicines and vaccines, cronically late salary payments to health personnel, weak or non-existent supervision, general lack of trained staff and high levels of absenteeism among those who are officially available (Vaidya 1979: 3.1 - 4.5).

In addition, access to what health facilities are available is grossly unequal; the cost of travel, medicines, professional services, and subsistence if internment is required all serve as real barriers for those with low incomes and few resources. If the unequal access as a consequence of economic and social inequality is combined with the inequalities in spatial distribution of the health facilities provided by the state (and by private enterprise), then it becomes clear that the poor - particularly the poor in the terai and in the mountain areas, and the poor in the remoter far west and eastern regions - have significantly lower chances of obtaining adequate health care. In so far as there is evidence to suggest that this section of the population is, in addition, more prone to disease as a result of malnutrition and other factors, then the gross inequality with regard to health care is striking.

Detailed information on access to, and use made of, health care facilities is scarce. But there are some revealing indications from the few studies that have been carried out. Firstly, studies show that, despite the demonstrably high level of ill-health among the rural population as a whole, and perhaps particularly among the less

well nourished and low income sections of the population, expenditure on health (and education) as a proportion of total consumption expenditure is generally extremely low. Banister and Thapa suggest that, on the basis of the national economic survey in 1977 carried out to ascertain the structure of employment, income distribution and consumption patterns, "on average, 72 per cent of total consumption in rural households was for food; only 2 per cent went for health and education" (Banister and Thapa 1981: 38). Our own investigations in the west central region in the mid 197Øs also reveal that expenditure on health care and medicines accounted for a very small proportion of total household expenditure. Among the poor peasants, for example, in our sample, only Ø.6 rupees were spent on average for each day of illness experienced, while even among the better-off peasants, expenditure on health care and medicines of all kinds amounted to no more than 1.1 rupees for each day of illness.

In the late 197Øs, the Rapti Baseline Survey attempted to discover to what extent the population surveyed made use of existing health facilities - health post, health centre or hospital - and concluded that the majority of households had not made any visits to a health facility of any kind during the previous year. It is significant that the incidence of visits was lowest in the physically remotest district (Rolpa and Rukum) where the facilties were sparsest (see Table 39).

TABLE 39 PERCENTAGE OF HOUSEHOLDS REPORTING AT LEAST ONE VISIT TO HEALTH FACILITIES (RAPTI ZONE)

	Dang	Rolpa	Sallyan	Pyuthan	Rukum	Rapti Zone
at least i visit	44%	14.5%	3Ø.5%	16.4%	13.7%	25.4%
no visits	56%	85.5%	69.5%	83.6%	86.3%	74.6%

Source: Report on Rapti Baseline Survey, APROSC, Kathmandu, 198Ø: 138.

The Report observed, "it is noteworthy that the more remote districts of Rolpa and Rukum which do not have as many health facilities available report considerably reduced numbers of visits although there is no reason to assume better health conditions" (APROSC 198Ø: 138). In fact, on the contrary, the health condition of the population in those two districts was possibly worse, according to the Prefeasibility study forthe Integrated Rural Development Project in Rapti zone (APROSC 1977: A 114-118), than in some of the other districts (see Table 4Ø).

TABLE 40 INCIDENCE OF DISEASE AMONG CHILDREN IN RAPTI

Disease	Percentage of children (0-15) suffering (by district) Rukum	Rolpa	Sallyan	Dang-Deukhuri
Anaemia	30.0	50.0	7.1	47.6
Parasitic infection	19.5	31.5	17.8	31.0
Skin infection	19.5	30.0	14.2	18.6
Conjunctivitis	9.2	20.0	3.5	11.7
PE.M	11.2	2.9	7.1	15.8
Bitot's spot	0.5	2.9	-	0.7
V.D.	1.0	2.9	7.1	-
Goitre	2.4	-	7.1	2.7
Urinary tract infect.	1.9	-	3.5	-

Source: APROSC Prefeasibility Study for Integrated Rural Development Project, Rapti Zone, APROSC, Kathmandu, 1977: A 114-118.

This study also observed that in Rapti Zone as a whole, the Magars in the hills (Rolpa and Rukum) and the Tharus in the terai (Dang-Deukhuri), together with the 'occupational castes' in all districts, "were found to live at a much lower standard of health and nutrition than other groups in the area. They have extremely high rate of disease, maternal and infant mortality, and malnutrition rate in comparison with the rest of the population" (APROSC 1977: 126). Regarding the situation in the terai districts - where Tharus constitute the majority of the population (50 per cent in Dang and 80 per cent in Deukhuri) and are predominantly landless labourers - the study concluded that " though Dang-Deukhuri is food surplus, the people of the area, particularly Tharus communities, are severely malnourished, primarily because of their low purchasing capacity" (APROSC 1977: 130). Given their higher rate of malnutrition and disease, access to what health facilities exist is crucial for the predominantly landless Tharus. "Within the non-Tharu group many people use the existing medical facilities for both minor and major ailments. Tharus, however, have little understanding of modern medicine due to the limits of health education and a general suspicion of behaviour patterns of the health workers create (sic) natural barriers with Tharus, and they are reluctant to use their services" (APROSC 1977: 128:129). In the northern districts of the zone health facilities are poor and scarce; the ratio of health posts to population was 1:31,096 in Rolpa and 1:52,335 in Rukum. "The nearest hospital is in Ghorani (Dang), a five days' walk from the periphery of the zone. There are no midwives and no pre- or post-natal care. Health posts are consulted only in the case of severe illnesses and injuries outside of the district seats. The traditional practitioner is the preferred specialist in the case of illness and belief in witchcraft is strong. People are interested in medicines, but few

severely ill patients can afford the trip to a hospital, nor can they physically make the trip. Because health posts seldom have supplies for these cases and supplies are short for more routine ailments, people are reluctant to go there for treatment" (APROSC 1977: 128). Although it would appear that Rapati Zone suffers more seriously than many other zones of Nepal from high levels of morbidity and from poor health facilties, the situation described above could probably be generalised to Nepal as a whole.

High mortality rates and relatively poor life expectancy, and the generally low level of personal security from death and disease in the absence of any general social security coverage provided by the state, all encourage high fertility and the attempt to ensure security through large families. The objective conditions in which the large majority of the Nepalese population live, together with the very limited scope of the state programmes to promote family planning and birth control, ensure that use of contraception is very low in Nepal. Indeed, as it was pointed out in 1980, "Nepal has one of the world's lowest levels of contraceptive usage - only 4 per cent of married women have tried to limit fertility. This reflects, in part, the extreme remoteness of mountain villages and difficulty of access to services, as well as attitudes favouring larger family size. The government is working with foreign donors, but the administrative problems and logistical obstacles are formidable. Meanwhile, the population grows at 2.4-2.5 per cent annually and the land is being over-cultivated, eroded and deforested at an alarming rate" (quoted in USAID 1981). Data provided by the World Fertility Survey suggest that, at the end of the 1970s, Nepal ranked lowest of all in nine Asian countries compared on the basis of the percentage of ever-married women knowing about and pracising contraception (see Table 41).

TABLE 41 CONTRACEPTIVE KNOWLEDGE AND PRACTICE IN NINE ASIAN COUNTRIES

	% of ever-married women with knowledge	% of ever-married women having used
Fiji	100	68
Rep. of Korea	97	57
Thailand	96	45
Malaysia	92	46
Sri Lanka	91	43
Bangladesh	82	14
Indonesia	77	34
Pakistan	75	10
Nepal	22	4

Source: Kendall 1979

While the low level of practice can be explained in part by the objective conditions which favour attitudes encouraging large families it must be also in part a consequence of the very limited nature of the state programme for family planning; this is likely to be even more relevant when knowledge of contraception is concerned. At the end of the 1970s efforts remained heavily concentrated in a few areas, usually in the vicinity of larger towns and particularly in the Kathmandu Valley.

In a document outlining the 'fundamentals of the Sixth Plan' the importance of family planning and birth control is emphasised: "in the last analysis, all our efforts at multiplying job opportunities and increasing income levels will be simply wasted, no matter how well conceived the programmes of that nature are and how brilliantly executed, if effective steps are not taken to rein in the runaway population growth... Failure in this direction will create an economic and social situation fearful to contemplate... It follows, therefore, that the populatioan control programme should be pursued with greater intensity and wider effect than now" (National Planning Commission n.d.)

But the importance of population control was being stressed over a decade ago; in September 1972, King Birendra observed that "in the context of economic development, if we fail to maintain some equilibrium between population growth and production, especially in the agricultural sector, it is certain that all our efforts at development will be nullified. At the same time, it will also bring about ever deepening problems of poverty, destitution, denudation of forests, forced occupation of forest land, soil erosion, in brief the problem of environmental pollution. It is in the light of such a realisation that we should make a consistent effort, while we still have the time, to expand the family planning programme both in the city and in the villages" (quoted in the Workshop Conference on Population, Family Planning and Development in Nepal, Berkeley, California, August 1975). Despite this call for greater emphasis on family planning, it has been estimated that Nepal spent only around Ø.11 dollars per person on this are of social services in the late 1970s, compared with Ø.16 in Indonesia, Ø.18 in Bangladesh, Ø.28 in India and Ø.34 in Pakistan (Nortman & Hofstater 1978).

Despite the rhetoric, the commitment was not to be found. But, it can be argued, the fact that population growth is outstripping production does not mean that population growth should be seen as the crucial variable, or that the priority for state action should be to develop population control programmes. If it can be shown that the provision of social welfare and social services is grossly inadequate, it can also be demonstrated that the capacity of the state to provide dramatically improved levels of welfare is limited by the structure and contradictions of the state itself and also by its inability to transform the economy.

Despite some attention given, particularly during the late 1950s and the 1960s, to the development of the infrastructure - with a heavy concentration on improving transport and communications through road

construction - and some efforts to encourage manufacturing and processing industries, the main thrust of state intervention has been and remains directed towards agriculture and the rural environment. Agriculture still provides approximately three-quarters of Nepal's GDP. Despite the indication (demonstrated in the Five Year Plans) of a growing commitment to state intervention in the rural economy, and particularly in agriculture, the effect on agricultural output and productivity was limited during the first two decades after the overthrow of the Ranas in 1951; some degree of success with regard to the output of industrial crops was counter-balanced by the continuing stagnation of the foodgrain sector. Even during the last decade, with an undoubtedly greater level of intervention and investment in agricultural development, the results were relatively meagre, and in any case outpaced by population growth.

It became increasingly evident during the 1970s that policies which concentrated on improving production and productivity among a privileged stratum of wealthier farmers (thought better able to take advantage of the facilities provided by the state) while certainly benefitting this stratum were unable to generate sufficient dynamic to transform and modernise agriculture on any significant scale; at the same time, the condition of the large majority of smaller farmers and landless was not in any appreciable fashion improved. As was observed by two Nepalese researchers in the mid 1970s, "the process of development, in general (has) bypassed the people - the small farmers and the agricultural labourers. Thus the need for a change in the objectives of and approaches towards agricultural development is imperative. This, however, has only been recognised recently by the people at the policy and planning levels" (Dhital & Yadav 1976: 4-5).

But already, in the mid 1970s there were voices raised, predominantly within the aid agencies and among researchers both Nepalese and foreign, to draw attention to the need for new strategies for the rural economy, both on the grounds of efficiency and on grounds of equity. In 1976, for example, one Nepalese contributor to an international conference in Bangkok argued the need for 'integrated agricultural development', pointing out that "since there is little scope for bringing new land under cultivation in the hills and mountains and also the hill agriculture is already over-burdened it will practically be a difficult task to sustain even the existing people in the hill agriculture at a present level of population growth, until and unless livestock programme is integrated into crop development programmes. In the absence of such integrated programmes the poor would remain still poorer and our whole effort to provide a minimum level of food, clothes and shelter for the rural poor will be of little impact" (Pant 1976: 3).

In the second half of the 1970s, attention turned increasingly towards the question of appropriate strategies for the rural economy to promote agricultural development while at the same time ensuring that the condition of the majority of the rural population did not deteriorate still further. Not only the aid agencies, academics and researchers were involved in the process, but also higher levels of the state bureaucracy; one consequence of this re-consideration of

economic development policies for the rural areas was the establishment in 1977 of the Small Farmers' Development Programme, on a pilot basis, to draw small farmers and - very importantly - landless peasants directly into programmes for increasing their productive potential. The programme encouraged systematically cooperative and collective action by small groups of farmers and of landless peasants to obtain credit and other inputs, to work together in farm production, and to market their output. It was considered essential for the success of the scheme that the groups involved act collectively; for "after long experience of 'trial and error' in our development efforts, we have come to the conclusion that raising the standards of the small farmers is possible only by 'development through institutions or group actions'. The basic idea behind this principle is that unless we mobilise and regenerate locally available capital and other resources, in which human resources occupy an eminent place, a development programme - no matter what it looks like - cannot lead to a breakthrough in the rural areas" (Pant 1976: 7-8). These ideas, which were developed essentially by researchers with long experience of rural development in an institution considered in the mid 1970s to be essentially marginal to the major policy-making centres of the Ministry of Agriculture and other departments in the state structure - the Agricultural Projects Services Centre (APROSC), came to be put into effect, initially in two locations and then subsequently in many more throughout the country, with official support. By 1978, Bhasin and Malik were able to write the FAO paper 'Bulletin 122', "expansion of the project in many more areas of Nepal is what everyone is talking about now. In fact, the ADB (Agricultural Development Bank) has already decided to extend it to fifteen more districts. Successful projects should indeed be multiplied, especially by SDFP (Small Farmers' Development Programme) as it is neither expensive nor does it require too many additional personnel or structures" (Bhasin and Malik 1978: 20). Since that time, the Small Farmers' Development Programme has continued to expand, and APROSC has also come to be recognised as a leading authority on problems of rural development in Nepal, not only by aid agencies and foreign scientists, but also by leading policy makers in the various ministries.

The rhetoric of popular participation and collective action by small farmers and landless peasants in such programmes for rural development became widely adopted in the late 1970s, not only in those branches of the state bureaucracy most directly concerned - such as the Ministry of Agriculture - but elsewhere also. Thus the Ministry of Finance officially stated in 1978, in a report on a seminar on rural development held to discuss the experience in Nuwakot (one of the pilot SFDP projects), that, "since rural development projects depend for their success on the cooperation of numerous small farmers, involvement of the beneficiaries is essential in both project planning and execution" (Ministry of Finance, 1978); while the National Planning Commission, in its draft outline for the Sixth Five Year Plan, mentions the SFDP as a possible model for the extension of similar programmes outside agriculture: "the ongoing Small Farmers' Development Programme (SFDP) will be implemented in (a) more extensive

and more effective manner and special programmes for improving employment and income opportunities of persons like rickshaw-pullers, cart drivers and others engaged in small business will likewise be launched in urban areas (National Planning Commission 1978: 10).

It was suggested by many that such initiatives would receive further encouragement and support from the newly established national 'Back to the Village Campaign' and from the 'cooperative movement' (Sajha). Thus, Pant argued that "all rural development efforts will be channelled through Sajha, a common cooperative venture, in each village panchayat. Human resources in this system will be mobilised by local institutions. The 'Back to the Village Campaign' at national level will supervise closely, through its district organisations, the development efforts of the local leaders and evaluate their performance in rural development" (Pant 1976: 7-8). This theme was taken up by the high level officials who drafted the Sixth Five Year Plan; in the draft version it was suggested that "institutional development in the rural sector will also be sought by encouraging industries along cooperative lines (sajha) and channelling agricultural credits and other inputs, marketing of agricultural products as well as other daily necessities through sajha" (National Planning Commission 1978: chapter 2, p.11).

Our own investigations in the west central region of Nepal, however, provide clear evidence that, at least by 1978, the role of sajha and indeed of the 'Back to the Village Campaign' in effectively encouraging and supporting the mobilisation and popular participation of the rural poor (small farmers and landless peasants) had not become evident. In 1979, we wrote; " the Sajha movement as presently constituted has only a very limited role to play in contributing to the provision of 'basic needs' of the most vulnerable groups. Credit and agricultural inputs are seldom taken up by the smaller farmers. Though the cooperative acts as a supply depot for a variety of goods... to the general public, the very poor cannot purchase small quantities of goods, since the cooperative sells without credit in standard units which exceed the cash limits of the poor family. The socio-economic heterogenity of the membership and the directing influence of a central Ministry limit cooperatives in Nepal, much as they may have in other parts of the world, so contributing little to a 'basic needs' strategy... In Nepal a fundamental doubt (regarding) the long term outcome must arise. First of all, the section of the population at whom the schemes are directed itself is under serious threat - the small farmer of today is becoming the landless of tomorrow - when present trends within households are extrapolated. As landless, they are no longer within the purview of the cooperative movement. Secondly, under existing circumstances in Nepal, 'cooperatives' linking households of unequal assets and associated unequal political power tend simply to exacerbate the loss of control over productive resources by the disadvantaged..." (Blaikie, Cameron & Seddon 1979: 88). In very many villages, the majority of small farmers and landless peasants made little or no use of the sajha; in even more, the 'Back to the Village Campaign' was unknown.

It can be argued that the Small Farmers' Development programme, by virtue of its more systematic intervention in favour of the small farmers and landless peasants - the organisation of those with similar levels of assets (or lack of them) in small collective groups is a crucial feature of the SFDP - may be able to avoid the problems of these more general programmes and institutional structures. But without very heavy official commitment in practice at the village level, the SFDP will suffer from the countervailing forces inherent in fundamentally inegalitarian local village economy and society.

Some ten years ago, the FAO agreed, in a major policy document - The Perspective Study of Agricultural Development for Nepal - with regard to the problem of environmental deterioration, that "fundamental solutions to this problem require among other things land reform and institutional change. Since the mountain slopes and forests belong to the state (which obviously cannot police every remote hill in dispersed and inaccessible areas), and since self interest encourages the individual to get at need forest resources (fuel and fodder) before another does, the tendency towards despoliation of existing resources becomes accelerating and self-perpetuating. Given the present ownership and institutional structure, this trend is irreversible and the damage irreparable. The deterioration will be marginally mitigated by reducing the pressure of population in the hills... But any basic solution requires the reconciliation of individual and group interests by some form of communal control over this resource in order to promote both communal and self-interest in its conservation and regeneration. This latter would seem to call firstly for vesting the ownership of village forests in the village itself, and secondly for handing over its management to the panchayat, cooperative or other appropriate local institution. Such an institution must, on the one hand, have means of enforcing its commonly agreed management rules, whilst on the other, some financial assistance from the state or local authority for conservation measures..." (FAO 1974 : 38-:39). They argue powerfully for a land reform, the institutionalisation of common ownership by the panchayat and allocation of resources to the panchayat to enforce democratically approved measures. In the last ten years, no such measures have been adopted; land reform has not been implemented, and what forms of cooperative and collective control over 'common' resources have been systematically eroded rather than supported and encouraged.

In the pre-modern period, the forests and the so-called waste land - all that was not brought under cultivation - were formally owned by the state, except where grants of land were made usually for services rendered to the state but often also with a view to clearance, settlement and cultivation. In practice, however, in many parts of the hill and mountain areas in particular, the forest and uncultivated land was regarded by the local inhabitants as 'the commons' and used accordingly. As the pressure on the physical environment increased during the last fifty years, local practice regarding 'the commons' has changed, and the state has intervened more strongly (yet many would argue not strongly enough) against such local uses to maintain the existing forest as a national, not a local, resource.

Thus it would appear (cf Haimendorf 1964, 1975) that historically the Sherpas of Solu Khumbu managed their forest resources with the help of a local institution: that of the forest guardian (naua), a rotating office within each village, the annual holder of which, after due but fairly casual consultation, laid down the permissible extraction rates for fuelwood and constructional timber and exacted traditional fines on those villagers who did not comply. But following the overthrow of the Ranas in 1951, all the forests in Nepal were nationalised and control over these crucial local and national resources vested in regionally-based officials. A Sherpa who wished to cut a new roofpost officially now had to walk four days to Paphlu to obtain permission from an official who knew little about local forest resources. However, the continuing importance of local resource management is underlined by several other accounts. At Dahbaley in the Arun Valley, for example, "by mutual agreement everyone in the village shared the right to use the forest as they needed, but no one was allowed to clear the land. To promote a sustained yield, the headmen of the village assign certain rights to gather firewood in certain areas of each woodlot, and households jealously guard their territories; many territories represent traditional claims that date back several generations. Trivial uses of wood are discouraged, and when a household needs a particularly large tree for a construction project, they must pay a sizeable sum to the village headman. The fundamental concept of a renewable resource is also recognised, and the headman will sometimes declare a moratorium on cutting if a certain plot shows signs of really excessive use that will soon lead to complete exhaustion" (Cronin 1979: 75-6).

If it appears to be the case that, despite the official control over the forest resources of mountain and hill areas, local forms of resource management are still operative, the growing pressure of population on local resources has substantially altered the strategies adopted with regard to the commons in some areas. Hitchcock describes, for example, how the 'adaptive strategy' (as he calles it) of the Magars of the Upper Bhuji changed in the 1920s "when the southerly forest ridges traditionally used for winter herding became the legal corporate property of the lower slope communities and were closed to the Bhujels" (Hitchcock 1977: 446). He observes that the new strategy was very costly in labour and not efficient when labour inputs were compared to caloric outputs, but the conservation and management of the forest resources continued to be at the heart of their strategy. "In the high altitude zone three factors were operating to preserve some forest for woodlot use. The Government decreed that no more forest could be burned for swidden. More effective was the recognition by descent groups holding the forests as corporate property that without wood for fuel, life at high altitude in the monsoon pastures would be extremely uncomfortable if not impossible. Most effective was the increasing acceptability of the potato, whose high yields are obtained at a relatively modest labour cost. This has helped greatly in reducing the unacceptably destructive practice of swiddening." (Hitchcock 1977: 446). Of the three factors affecting use of forests - the government decree which prohibited burning of trees for swidden, the local resource management, and the increasing cultivation of a relatively high

yielding crop which reduced the need for swidden agriculture - the last was the most significant. This underlines the crucial point that simply preventing local producers from making use of the forest may preserve the forest at the expense of the capacity of the local population to survive, unless alternative farming systems can be developed. In the high altitude areas, the shift from swidden agriculture to more intensive cultivation was made possible by the introduction of new crops; it could be argued that a similar shift, from cereal cultivation to the farming of new crops, might reduce pressure on forest resources in the hills and even the plains. But, as Hitchcock also observes, "by 1967, the Bhujels' most recent adaptive strategy - despite constraints and voluntary conservation measures - was in danger of breaking down... The problem was the rapid rise in population... in 1975... despite conservation practices, it seems certain that fuel, building material, and fodder sources above old settlements such as Monal will soon disappear. The pressures due to numbers of people, each claiming the right to provide fully for his family and livestock, is too great for conservation measures to contain completely" (Hitchcock 1977: 449) He notes the 'individualism' of households, the growing economic and social inequality and remarks that "any marked increase in stratification seems likely to exacerbate environmental pressures by a rapidly growing population" (Hitchcock 1977: 449). When a few individuals became significantly wealthier and more powerful that others, "these individuals are less susceptible to social sanctions, even by members of their own descent group. The result is a weakening of conservation measures aimed at preservation of the good of the community. Both pastures and woodlots are vulnerable to this kind of development" (Hitchcock 1977: 450).

The strength of local institutions as the basis for local resource management and conservation appears to depend heavily on the continuation of a degree of egalitarianism - far from the 'tradegy of the commons' that Garrett Hardin identifies, where individuals over-exploit the common resource by virtue of their relatively equal access to the commons, it would seem that conservation declines as inequality increases and the few who are able to throw off the constraints of community sanctions. But the conception of 'the local community' epitomised in the 'partyless panchayat system', where the panchayat constitutes the appropriate local institution for the perpetuation or reconstruction of local resource management practices, has failed to be effective. The 'people's participation', so much talked about by the higher levels of the state bureaucracy, that was supposed to ensure the viability of the panchayat as the political and economic base for development in Nepal, has not materialised. For some, this is related crucially to the fact that the panchayat is generally not an egalitarian social unit, but an administrative construction containing many different social elements (different caste and ethnic groups, different social classes, with different and often conflicting interests). Thus P C Lohani observes, "inability to initiate people's participation in the economic development of the country is most obvious in the case of forest management. During the last two decades or so large areas under forest cover in the hilly and terai region of the country have been destroyed without any consideration for

ecological balance. The damage has been done mostly by the people themselves. In order to support an increasing population, they have converted forest land and pasture land into grain fields with the result that erosion has increased and energy for domestic purposes is now decreasing rapidly. Based on this experience are we to suppose that the people are responsible for their own destruction? The temptation is to answer in the affirmative, but some factors must be considered. Fundamentally, it was a massive failure evolving institutional forms that are based on people's participation in promoting the preservation and expansion of collective wealth as a basis for individual prosperity" (Lohani 1978: 145). That is, the conception of peoples participation in developing collective forms to ensure collective well-being (and thus individual well-being) has not been realised.

Lohani argues that "the first step in intensifying the destruction of forest was to declare that even forest managed locally is now nationalised. Since the forest now belonged to the state, villagers felt that the responsibility for its protection no longer lies with them. In the meantime, the evolving political culture, which showed a remarkable capacity to accept violations of its ideological boundary-lines as long as the violations are by high-placed elites, eroded the local level inhibitions against destroying forest for individual gain. Thus, forest resources became nobody's property and their indiscriminate utilisation for personal gain became an accepted norm. The establishment of new political village level institutions, on the other hand, did not help much since the lack of social discipline that was becoming a part of the new political culture, had also infiltrated their domain. The destruction of the forest thus increased rapidly with very little local effort towards afforestation and preservation. The experience in forest management has led to the realisation that for the preservation and addition to local resources, the responsibility must squarely fall on the people themselves. But in a village society where there are economic as well as cultural contradictions the word 'people' becomes meaningless unless local institutions are able to resolve the prevailing class and cultural stratification in a politically conscious manner" (Lohani 1978: 146).

The conception of the panchayat as village 'community' ignores economic, social and cultural divisions, while 'panchayat democracy' allows them no overt political expression. The panchayat or village is now officially regarded as an appropriate basis for various forms of community development. But as long as economic and social differences and inequality at the local level cannot be formally recognised and legitimately expressed, then it is doubtful whether 'the people' will be able to participate effectively in their own economic and social development.

Given the effective concentration of power and in the absence of organisations capable of expressing directly the views and interests of particular sections of the population - and particularly the views and interests of the poorer and less powerful sections of Nepalese society whose access to even the lowest level of the panchayat democracy structure is strictly limited - the government and the

bureaucracy have had until recently a virtual monopoly of decision-making over all areas of economic and social policy in Nepal. The fact that the national assembly is in effect essentially a collection of individuals representing personal (and perhaps to some extent regional) interests rather than members of political organisations representing the interests of particular sections of the population is in itself significant; furthermore, the ability of the king to dominate the assembly through his appointed members and by virtue of his own supreme constitutional powers ensures that the national assembly has relatively little autonomous power to construct policy. Nevertheless, it is the official legislative body - for policies to become official government policy the assembly has to agree them; consequently, there is some scope here for constructive debate and for the endorsement or criticism of policies and programmes conceived and developed elsewhere.

What becomes official policy is strongly conditioned by the views emanating from the Palace, for the king remains the head of state in practice as well as in theory and has very considerable influence on the direction and character of government policy. The crucial role of the king and his Palace secretariat in determining policy at all levels was recognised widely within Nepal during the 1960s. Some ten years after the official declaration of the new panchayat democracy as the basis for Nepalese politics in the future, one foreign observer remarked that "during the past decade, the Crown has become the pivot around which the traditional interest groups, the sacred elite, the military and the landowning aristocracy still revolve. These groups gain access to the Royal Palace through their supporters and representatives on the staff of the Palace Secretariat. The Palace Secretariat has become the nerve-centre of administration and political structure in Nepal, even though its dominant policy and decision making role is not defined via the law or within the Constitution of this country. The function of the Palace Secretariat can be closely compared with the previous, all-powerful function of the hereditary Rana Prime Minister's Office. That is, the Palace Secretariat today functions not only as a relay station between the King and the Government, but also as a decision-making component, frequently using the Central Government's Secretariat as an instrument for the implementation of decisions. This situation has led to a 'dual government' structure" (Beenhakker 1973: 23). We noted, in the mid 1970s, that "the independence of the government is limited, not only by the overwhelming power of the Palace Secretariat, which dominates in many respects that of the central government, but also by the fact that all ministers are directly nominated by the king from among the members of the national panchayat and retain their positions only so long as they retain the confidence and approval of the king" (Blaikie, Cameron and Seddon 1980: 92). The constitution permits the national assembly (today with 140 members, of whom 28 are nominated by the king) to elect or remove the prime minister, but in fact the survival of any minister, including the prime minister, depends crucially on the king's approval.

When in the early 1960s the king intervened in Nepalese politics to suspend the constitution and ban political parties, there can be little doubt that he was strongly supported in this by the more conservative elements in government and in the bureaucracy who feared the commitment of the Nepali Congress Party to major social reforms, including changes in the laws regarding land tenure. But, despite the predominance of what Beenhakker calls 'the traditional interest groups' (the sacred elite, the military and the landowning aristocracy) in the Palace Secretariat and the undoubted influence of the more conservative forces in Nepalese society on the Palace generally, it would be wrong to conceive of the Palace Secretariat, and still less the king himself, as clearly committed only to policies designed to defend and promote the interests of these particular sections of Nepalese society. The role of the Palace and of the Palace Secretariat remains of major importance a decade after Beenhakker wrote of it as 'the pivot', 'the nerve centre of administration and political structure' and a crucial 'decision-making component', but it would seem that, for a variety of reasons - not least perhaps the deepening crisis of the Nepalese economy and the political response to this among the new middle classes - this strategic 'core' of Nepalese politics and policy making has become more open to other influences, and is now evidently prepared to consider a range of new, and even radical, proposals for economic and social policies. Certainly for the time being it would appear that the king is unwilling to consider any major direct move on the political front, but growing concern about the state of the economy and the potential for social unrest is likely to ensure that arguments for a major reorientation of economic and social policy will at least have a hearing from the Palace; and such reorientation would itself have political repercussions.

Indeed there is ample evidence, from the official documents relating to policies and programmes for the 1980s, that a new cast of thinking about Nepal's economic and social problems has come, during the past ten years, to have a significant and increasing influence at least on official policy. This is reflected clearly in the documents associated with the Sixth Five Year Plan for 1980-1985, in which what has come to be referred to as 'the basic needs strategy' appears as a prominent concern, and in reports such as that produced by the World Health Organisation in collaboration with HM Nepal on Planning for Meeting the Basic Minimum Needs of the People (HMG/WHO 1981). It is also reflected in the 'decentralisation' bill recently passed by an overwhelming majority in the national assembly, which "aims at obtaining a balanced regional development by giving all parts of the country equal opportunities, generating mutual trust and responsibility among panchayat cadres and conserving and developing national resources... Popular participation in the development process is being sought through simultaneous introduction of an integrated rural development programme and by creating development centres at panchayat level covering health, population control, education, soil conservation and forest protection..." (Singh 1983: 30). It would seem, from this, that "the authorities are trying to effect a strategy of development at the grass roots level through the decentralisation of administrative power to the panchayats - more than 4,000 village

and municipal bodies, 75 district organisations and six organisations grouping women, workers, young people, peasants and ex-servicemen" (Singh 1983: 30).

The orginal source for this 'new conventional wisdom' regarding the appropriate direction for economic and social policy in Nepal in the 1980s is undoubtedly the international aid community - including both individual donor countries and, more particularly, the international aid agencies - whose ability to influence official policy is closely related to their substantial financial contribution to Nepal's economy. In the past, although the financial support provided by the major donor countries was usually accomplished by a rhetoric of change, in general they were unprepared to push very hard for the implementation of significant economic and social reforms and it can be argued that "in the short run at any rate, foreign assistance... enhanced the monarchy's chances of survival and... inhibited the growth of pressures for fundamental change" (Gaige 1975: 200). Some would still argue that, on the whole, "foreign aid has served to provide alternative sources of income for an ailing landed aristocracy and for the maintenance and proliferation of the state apparatus... (while) it has failed largely to provide a political opposition to the status quo. The inexorable and painful upheavals which would have occurred sooner without this source of economic support are thereby postponed and will take a different form than otherwise would have been the case without foreign aid" (Blaikie 1983: 30). However, it is now clear that the pressures for change are growing, and that this has been recognised not only by the aid agencies but also by significant elements within the Nepalese state bureaucracy who have wholeheartedly adopted the 'new conventional wisdom' as holding out more hope for the future than the previous policies advocated by foreign agencies and adopted in principle at least by the Nepalese state bureaucracy. Increasingly alarmed at the deepening crisis in Nepal throughout the last ten years, the UN agencies in particular have provided the impetus for a reconsideration of the major direction of economic and social policy; arguably also the increasingly critical analyses of the inadequate responses by the state to the deepening crisis provided by both indigenous and foreign academics has contributed to a changed climate of opinion within the institutions most centrally concerned with policy making in Nepal.

In the published documents of the great majority of the more important departments, commissions and ministries of the state bureaucracy, the 'new conventional wisdom' has, over the past ten years - but particularly in the last five years - come increasingly to the forefront. There can be no doubt that, at the level of official policy statements and of published policy documents and even more detailed project proposals, the language is broadly consistent with the new general emphasis on a 'basic needs strategy', in which popular participation, as well as the food and other 'basic needs' requirements of the mass of the population are regarded as of prime importance. The question remains, however, given the overall structure of the political economy of Nepal and in particular the nature of the state itself, whether this undoubted change in the general direction of official policy can be and will be translated

into effective action and implementation; whether, in other words, the change is only a change in rhetoric. As has been observed recently, with regard to the situation in Nepal at the beginning of the 1980s, "there is an unusually fertile environment for the production of rhetoric... On the one hand, there is rhetoric in Nepali for domestic and general public consumption embodied in the tightly controlled Nepali language newspapers and journals, and in the frequent royal pronouncements... On the other, there is rhetoric in English, produced both by the Nepalese intelligentsia and foreign nationals" (Blaikie 1983: 26). And certainly there is ample evidence from detailed field research over the past ten years to show that very little of the official policy outlined in planning documents actually translated itself during this period into effective implementation at the grass roots; our own extensive investigations in the west central region in the mid 1970s, when admittedly the language of the 'basic needs strategy' was only just beginning to become common in official literature, showed conclusively that little if any of that rhetoric was converted into real policies to advance significantly the fulfilment of basic needs for the mass of the population (cf. Blaike, Cameron and Seddon 1979). More recently, however, other studies by both international agencies (eg FAO 1978, IBRD 1980) and Nepalese agencies (eg APROSC 1978, 1980) have provided detailed evidence of the very limited impact of aid projects - including the integrated rural development projects (IRDPs) conceived very much within the framework of the 'new conventional wisdom'. It is also perhaps significant that the Sixth Plan contains proposals directed towards attracting private capital; as the king himself pointed out in a recent interview (reported in the Far Eastern Economic Review, March 24th 1983: 33): "the Foreign Investment and Technology Act and the Industrial Act have made provisions to attract foreign capital and assure security of investment. Bearing in mind our constraints, these conditions seem favourable for the development of the free-market economy". The inherent contradictions between such a strategy and the 'basic needs strategy' are manifold.

However, the translation of official policy statements into detailed programmes and projects, and then into effective forms of intervention at all levels down to the grass roots of village panchayat, depends very largely on the commitment and capacity of the state bureaucracy, from the highest echelons down to the local agents.

Throughout the last three decades the number of state employees has increased to an extraordinary extent; at the same time there has been an amazing proliferation of ministries, departments, units, task forces, commissions, centres, standing committees, councils, boards and offices. The expansion of the bureaucracy has enabled very large numbers of those with higher levels of education to find employment during a period when growth in the economy as a whole has been largely overtaken by the growth in population and employment opportunities in the private sector have failed entirely to keep pace with the increasing demand at all levels. Among other things, therefore, it has served to an appreciable extent to reduce the level of discontent regarding the state of Nepalese economy and society among those sections of Nepalese society which might otherwise have been more

vocal and more persistent in their objections - notably the middle classes. It has also meant that an increasing proportion of aid funds and the national development budget has been absorbed by current expenditure, particularly on salaries. Even in the mid 1970s it was clear that in many parts of the country, the expansion of the bureaucracy and proliferation of local branches of national ministries, departments etc. meant that expenditure was significantly exceeding income, with the deficit being made up out of national revenues and externally aided budgets officially earmarked for particular development projects (cf Caplan 1975: 50). At the same time, however, an increasing number of graduates from secondary school and from university has been involved in the process of decision making and implementation within the public sector, and thus has the opportunity of developing a growing influence on the direction, both general and particular, of policy and practice. In 1972 the Civil Records Office listed 3,870 gazetted officers in 10 different departments of whom nearly half were university graduates; since that time the numbers both of gazetted officers and of university graduates has increased substantially, as have the number of non-gazetted officers and school graduates.

However, despite the rapid growth in the number of state employees and significant expansion in the number of graduates among the higher level gazetted officers, the proportion of those who are suitably trained in practical and relevant subjects remains relatively small at all levels. One recent study suggests, for example, that "key personnel in the Planning Commission, the Palace Secretariat and in the Ministries of Finance, Agriculture and Local Development and Panchayat Affairs amount to no more than thirty people" (Blaikie 1983: 22); and even if this is perhaps a rather extreme view, there can be no doubt that the capacity of the state bureaucracy to intervene efficiently in the economy through policy formulation, planning and project implementation remains severely limited at the higher levels, where too many positions are still filled by the more conservative and less well qualified. It is also the case that the crucial 'middle levels' of manpower in the public sector are substantially understaffed in terms of qualified personnel (see Blaikie, Cameron and Seddon 1980: 120-122). Furthermore, the new meritocracy has yet to permeate the bureaucracy as a whole; many appointments still represent the successful cultivation of relations of patronage and clientship, and many more are regarded as sinecures for the incumbent. In the early 1970s it was emphasized by many that "the higher echelon of the bureaucracy is composed of the influential members of Nepalese society. It is composed of the elite groups who enjoy a monopoly over educational opportunity in a country where the literacy rate is very low and there are not many job opportunities available to the people outside the government. The education that a man achieves is also determined by the class in which he was brought up. Higher education which is considered as one of the requirements to be in the higher echelons of the administration is not available to all. The bureaucratic elite tends to have different values, norms and outlook compared to the rest of the bureaucracy, and particularly in relation to the common people" (Pradhan 1973: 162). Such a view suggests a high degree of homogenity in terms of social background and general

ideology among the higher level bureaucrats who are responsible for the strategic policy making and planning for economic and social development, and implies that in Nepal today the policy makers are drawn from a distinctive 'social elite'

It can certainly be demonstrated that the higher levels of the state bureaucracy are dominated numerically by individuals of a broadly similar social background. Firstly, there is an overwhelming tendency for high level officials in the state bureaucracy to be drawn from three main ethnic and caste groups: Brahmins, Chetris and Newars. This applies both in the case of the civil and in that of the military bureaucracy, although it is particularly evident in the former (Beenhakker 1973: 25, Gaige 1975: 167).

It can also be shown that senior officials are drawn very largely from families residing in the Kathmandu Valley. As we observed in the mid 197Øs, "those in the higher echelons of the bureaucracy tend to have in common their connections with the capital; indeed, more than half the civil service is drawn from households originating in the Kathmandu Valley, although that area contains only some 5 per cent of the total population. The concentration of high officials in the Kathmandu Valley is one side of the coin; the concentration among higher posts of individuals originating from the Kathmandu Valley is the other side. The domination of Kathmandu over the rest of Nepal is seen particularly clearly in the production and subsequent careers of graduates, many of whom find employment in the bureaucracy, or in teaching. Graduates make up only Ø.96 per cent of the total population, but over 6Ø per cent of them are from Kathmandu..." (Blaikie, Cameron and Seddon 198Ø: 96). As Gurung demonstrated in the early 197Øs, Kathmandu not only produces more graduates and thus more senior officials than elsewhere in the country - largely as a result of the concentration of wealth, power, and educational facilities in the capital - but also drains other regions of their graduates; thus, while around one third of the graduates employed in Kathmandu originated from other regions, less than 1Ø per cent of graduates from Kathmandu were employed outside the Valley (Gurung 1972: 8). The continuing presence in the higher level of the civil service of substantial numbers of Ranas (included in the figure for 'Chetris') together with a significant proportion of Newars (who for the most part originate from the Kathmandu Valley), and other high caste groups, emphasizes the overwhelming control of policy making in the capital by a very select minority.

Having said this, however, it is also essential to recognise that 'the administrative elite', although homogeneous in certain respects in being drawn overwhelmingly from a very limited number of ethnic/caste groups and from the Kathmandu Valley, has changed in a number of important respects over the past thirty years. Educational facilities, although still extremely limited for the mass of the population beyond primary level (as we shall see later in this chapter), have expanded significantly and have been able to produce an increasing number of secondary school and university graduates, a proportion of whom are recruited into the state bureaucracy. These graduates tend, certainly, to come from relatively affluent families,

mainly from the Kathmandu Valley or from the eastern terai; but the class structure of Nepal has evolved somewhat over the past thirty years and many of these affluent families might be regarded as bourgeois and middle class, rather than simply landed aristocracy or gentry as would have been the case previously. Those young men who, on graduating from school or university (and a minority go on to further education beyond the BA, in India, Britain, the USA or elsewhere), enter the civil service in Nepal increasingly have an outlook on life which is significantly different from that of the more 'traditional' and generally older civil servants who remained in public office despite the political changes of the early 1950s and early 1960s. On the basis of our investigations during the mid 1970s, we argued that "despite their relatively small numbers and uncertain position in the power structure, there are also what could best be termed 'modern bureaucrats' in high positions in the administration. These are recruited from somewhat more diverse social backgrounds than other high officials and have in common their relatively advanced education and technical expertise... In general, they are committed to a greater extent than any other element within the ruling class and machinery of state to the idea of economic - and hence inevitably to a certain extent of political - development in Nepal... This group of bureaucrats will hold an increasingly influential position in government as the crisis in Nepal approaches and deepens, for their technical and organisational attributes give them powerful qualifications for attempting new initiatives to meet many of the economic, and even the political, problems that will inevitably develop over the next decade" (Blaikie, Cameron & Seddon 1980:86).

It seems evident that an increasing number of those in positions of influence within the higher echelons of the state bureaucracy now belong to this 'modern bureaucrat' category, and this gradually changing orientation of key decision and policy makers is likely to become increasingly important in determining the general direction of economic and social policy in Nepal. The gradual shift within the highest levels of the state bureaucracy reflects a significant development within the Nepalese class structure: the emergence of the middle class, from out of the ranks of the landed aristocracy and commercial bourgeosie. The significance of this for the future development of official policy must not be underestimated.

But official policy must be translated into effective implementation if it is to have any relevance beyond that of indicating a gradual shift in the orientation of higher level civil servants. We have already seen how little effect the first three Five Year Plans (1956-61, 1961-65 and 1966-1970) had on the performance of the Nepalese economy; and we have indicated in the previous section the limited impact more recently of local and regional projects - whether funded directly by the Nepalese state or by foreign aid agencies. One reason for this is undoubtedly the lack of coordination and coherence that exists on the one hand between the aid agencies and the Nepalese state bureaucracy regarding the allocation of resources and hierarchy of priorities and on the other between the different ministries and departments within the Nepalese bureaucracy itself. Early in the 1970s, one Nepalese critic of the policies and planning for economic

development embodied in the Third Five Year Plan (for 1966-70) suggested that there were several reasons for its failure to achieve targets: "one is that the targets set were extremely ambitious when compared to available resources, both physical and human. Another reason is the lack of organised implementing machinery which created problems in proper coordination among the various projects" (Rana 1973: 197). Nearly a decade later it has been argued that much of what appears at first sight to be planning and programme design turns out to be rhetoric - window dressing to attract foreign aid or utopian visions for domestic consumption, that there is little sign - even at the beginning of the 1980s - of coherent and systematic planning that involves all the relevant ministries and departments - let alone all of the many aid donors - within a single framework, and that the personnel required for comprehensive and longer-term planning still does not exist in anything like sufficient numbers (cf Blaikie 1983: 21-29). It is concluded, from this analysis, that the Nepalese state bureaucracy remains incapable of adequately drawing up and implementing its own stated policies, even when these are themselves apparently conceived within a broadly coherent vision of popular participation, decentralisation and 'grass roots' development.

Improved coordination and 'rationalisation' of the state bureaucracy at the highest level, involving perhaps a greater role for the National Planning Commission (which has, in any case, substantially strengthened its role vis a vis other sections of the state bureaucracy over the last decade), might be possible; as might improved facilities for training at home and abroad. But there can be little doubt that one of the major weaknesses within the state bureaucracy is in the quantity and quality of 'middle level' manpower, and in its relatively low level of commitment to policy implementation. All three elements of weakness at this level can be explained largely by low wages, poor promotion prospects, inadequate training and educational facilities, and insufficient supervision and back-up both in terms of technical and of material support (for detailed discussion see New Era 1973: 12-48; Blaikie, Cameron & Seddon 1980: 111-122). As early as the 1950s, there was an attempt to improve conditions for the middle and lower levels of those employed in the public sector and the Low Paid Civil Servants' Union was formed (cf Shaha 1975: 40), but since 1961 all such organisations have been banned, and dissatisfaction is expressed in other ways - notably a high drop-out rate and in significant levels of petty corruption.

The internal divisions within the state bureaucracy - both vertical between ministries, departments, branches and so on, and horizontal between higher level administrators and executives, 'middle level' technical personnel, and the majority of poorly qualified and menial employees - are of considerable importance in creating difficulties of implementation, particularly in the context of an overall scarcity of adequately trained and educated personnel at all levels. The ability of senior state officials to construct coherent policy and to control its overall implementation down to the district and local level through tightly organised 'chains of command' and a clear division of labour is evidently seriously constrained. As we remarked, of the situation in west central Nepal in the mid 1970s,

"competition between offices for funds and materials from central government is often considerable, and although the zonal commissioner or governor and the chief district officer are formally responsible between them for the supervision and coordination of all administrative offices in each district, every office is also responsible to its own central department or ministry in Kathmandu, where policy formulation and ultimate control reside" (Blaikie, Cameron & Seddon 198Ø: 112). And it has been recently observed that "partly as a result of the lack of autonomy and control exercised by senior policy makers in Nepal, the actual bureaucratic procedures and structures have become extraordinarily complex - so complex that many otherwise well-informed members of those structures admit partial or major confusion. Indeed, many parts of these structures are contradictory or overlapping. For example, foreign-manned parallel administrations of Integrated Rural Development projects often exist under the guise of the counterpart system. At the local level, an annual plan for a district may involve up to twenty different projects, each with their accounting periods and procedures" (Blaikie 1983: 23).

At the same time, over the past decade, awareness of the rapid expansion and increasing complexity of the state bureaucracy, and of its correspondingly growing problems of coordination and control, has itself been growing; the passing of the decentralisation bill early in 1983 may be explained in part by this recognition of the incapacity of the over-enlarged state machinery to act effectively in implementing stated policies.

However, the failure of the state bureaucracy to implement policies conceived and developed at the highest level by the slowly expanding stratum of 'modern bureaucrats' in an effective fashion can not, it must be recognised, be explicable entirely in terms of administrative capacity and organisational structure. The strength of the conservative interests which many observers have remarked at all levels, continues to be a very significant factor in inhibiting the comprehensive implementation of the 'new conventional wisdom', and in encouraging only those forms of state intervention whose effect is to further strengthen the more conservative vested interests in the wider Nepalese economy and society.

The state machinery and state bureaucracy have a relative autonomy, but in the last resort are strongly conditioned by the balance of social forces in the wider political economy; this is as true at the local level as it is for the national state. While zonal and district level administrators and senior civil servants generally come from broadly the same social background as do the higher echelons of the state bureaucracy, and are formally subject to their administrative nd political superiors in Kathmandu, they are obliged to act within a regional and local context; often their ability to act in a certain fashion, or indeed sometimes to act at all, is importantly conditioned by the local power structures.

At the district level in particular, the local bureaucrats and civil servants are obliged to work in close cooperation with the elected

district council or panchayat, the majority of whose members are local notables from wealthy landowning or bourgeois families. In the original conception of the process of decentralisation - as envisaged in the early 1970s, according to some observers - "during the... preliminary phase, the aim is to establish the Chief District Officer as a strong administrator, responsible for those activities which fall within the jurisdiction of the District Panchayat. For matters related to customs, law and order, and national projects, the Chief District Officer will remain responsible to the Center. During the second phase of decentralisation, all efforts will be concentrated on laying the foundation for a permanent decentralisation; all communications from the Center to the district, and vice versa, will be channelled through the office of the Chief District Officer. The permanent phase of decentralisation implies that all powers with respect to district panchayat matters, except for law and order, will be entrusted to these panchayats" (eg Beenhakker 1973: 14). In the recent decentralisation bill, far more power than hitherto will be formally devolved onto the panchayats - "more than 4,000 village and municipal bodies, 75 district organisations grouping women, workers, young people, peasants and ex-servicemen" (Singh 1983: 30). Nevertheless, this law also allows that the government may remove or suspend any elected panchayat member and even dissolve any village or town panchayat - although it has been suggested that these powers would not be invoked unless factional disputes threaten to impede the 'development process' in any district or village.

While it may be argued that the process of decentralisation (which allows the progressive devolution of powers from zonal and district administrators, responsible to their superiors in the state bureaucracy in Kathmandu and not elected persons in any sense to local and elected bodies), is a systematic move in the direction of greater democracy and local autonomy in policy making and implementation, it can also be pointed out that, given the nature of local power structures, such an apparent democratisation may, in effect, further consolidate inequalities and ensure that whatever planning takes place serves the interests of the local notability above all. A recent report suggests, with regard to the decentralisation bill, that "despite the good intentions behind the plan, most observers doubt whether it can be successfully implemented. There are valid grounds for such scepticism: 1) the plan's economic objectives seem too vast considering the resources available; 2) during the past 23 years, the panchayats have become so notorious for corruption that it is doubtful that they can inspire public confidence; 3) factional struggles in the panchayats can neither be wished away nor controlled by threats of suspension or dismissal; and 4) the panchayat cadre system harbours a number of right-wingers who see decentralisation as a harbinger of anarchy and, for that reason, oppose every liberal move. Even food distribution undertaken recently in drought-affected areas was hampered by this factor" (Singh 1983: 31). One might also wish to suggest that, given the fact that most of the general objectives laid out in the decentralisation bill, would, if taken seriously, threaten the material interests of many of those in power in district, municipal and village panchayats, there are strong grounds for supposing that any efforts by local level administrators and

bureaucrats to implement these objectives and promote a genuine popular participation in local democracy for the fulfilment of basic needs would run into considerable opposition, both overt and covert.

The efforts of those who would reform the state, therefore, should be directed not only towards rationalisation and organisation under the assumption that lack of coordination is the fundamental explanation for lack of effective implementation of policies, programmes and projects, but also towards encouraging and literally promoting those whose own social background and general orientation would lead them to work effectively and with full commitment to the general goals of economic and social development in Nepal. Efforts should also be directed towards attempting to alter the overwhelming control over local affairs by powerful minorities, who are able to exert a considerable and often crucial influence over the way in which the state intervenes - or, sometimes equally significantly, does <u>not</u> intervene - at the 'grass roots'.

CONCLUSION

In the present situation, where, despite the deepening crisis and the emergence of new progressive forces, the conservative vested interests within the state bureaucracy and in the wider political economy remain extremely powerful, the role of outsiders - whether academics or aid agencies - must be to provide sharper and more critical analysis of the complex and changing situation, and to provide effective support and encouragement for those most evidently committed to devise and implement measures - at all levels - that are both realistic and yet progressive in terms of their capacity to defend and promote the well-being of the rural and urban masses whose social and material deprivation remains so considerable. In this context, the need to press for social and political reforms is great; in particular for reforms which permit the open recognition of differing and conflicting interests in landownership, in employment and in political representation - that is, for land reform (including the possibility of collective forms of landownership), for reforms in the law which outlaws trades unions, and for reforms in the structure of political representation which would allow a greater direct representation, for example, of the interests of women, the so-called 'untouchables', landless labourers and other particularly vulnerable groups, at all levels. Paradoxically, the crisis itself, which so threatens the lives of the mass of the Nepalese people in an immediate and tangible sense, also threatens the old structures of power and indeed strikes at the very roots of the economy and society as it exists at present; in the face of this crisis, fundamental contradictions emerge more clearly, and the possibility of rapid change - whether directed or undirected - increases. For this reason, there is hope in the midst of despair; it may well be that as the forces of conservatism are increasingly shown to be incapable of resolving the crisis, so the emergence of new forces better able to draw upon the very considerable but as yet unrealised resources of the hitherto poor and powerless will be encouraged.

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