Chapter - Five

Extent of food insecurity and its explanation

There is no food, no ways to survive
And, sustain the life of the children.‡

– A Deuda song in Karnali

5.1. The trend from food surplus to food deficit, and to food crisis[1]

In this analysis, it should be reckoned that only the foods from major crops were taken into account. A whole range of minor crops and uncultivated crops and food seemed to have a significant contribution in the times of crisis. These minor crops like *chino* and *kaguno* and other uncultivated crops/foods were the only ones available when there were droughts or pest problems, because they are more resistant to these problems than the major crops like paddy,

‡ Pet bharne sadhan chhaina kya gari bachne ho
Bal bachchako banki paran kya gari sanchne ho

[1] Much of the information presented here has been extracted from the district profiles of the five districts of Karnali prepared by SNV/Nepal from the early to mid-1990s.

maize and barley. Considering all these minor crops, Karnali was self-sufficient in food production. Until the late 1960s, it generated food surplus. Moreover, there were other mechanisms that helped in the supply of food at the household level. One of them was the transhumance system of animal-raising combined with trade. There were other types of movement of people and exchanges of products which could be grown in certain niches. This internal—local and regional—movement of people and exchange of commodities in which people were at an advantage (mainly due to climatic and agro-ecological reasons) was also particularly helpful. Moreover, there were also social mechanisms, like social relations (though these can seem exploitative at times), which were useful during times of crisis. The culture of cooperation prevailed, and hence distribution of food was an appreciable social value. Like discussed in previous chapters, they had developed a system of *dharma bhakari* to ensure food security. Such mechanisms had effectively contributed in maintaining food security to the people of that region, through good and hard times.

The analysis has also revealed that there were periods in which people suffered from famines and food shortages. The situation regarding famines and food crisis during the pre-unification era (before 1769) is not known, but historians picture this era as a golden era. The main problem period seems to be from unification until the 1960s. Given that the population was small at this time, food production should have been sufficient for the people. But people were *over-exploited* by the state, whose priority was to maintain law and order and exploit the people of this vassal state. The population actually declined in this period. People were vulnerable in many ways. Therefore, even though if the region may have been self-sufficient in food production, during this period various vulnerabilities (owing to drought, pest problems, animal diseases and human epidemics) had made people extremely vulnerable. And these vulnerable people died of hunger and diseases.

The famine and food shortages continued till the early 1970s. Food deficits then began to grow, and are growing at a fast rate since then. The famine that led to the government's air-lifting of food to Karnali (referred to earlier) struck mainly in Jumla district. Jumla, which had recorded a surplus of 4,168 metric tonnes in 1967/68, faced a deficit of more than 15,300 metric tonnes in 1970/71, which grew to 17,400 metric tonnes in 1975/76. By 1979/80, the deficit had been reduced to 7,000 metric tonnes. Since then the trend in Jumla has been that of a decreasing deficit, even though some fluctuations can also be seen from year to year. Humla is another district which has been deficient in food since the early 1970s. But the deficit in Humla remained relatively small (between 1,000 mt and 2,000 mt) until the mid-1990s. The major impact of famine in Karnali zone in the mid-1990s was felt in Humla, when the deficit rose to 6,300 mt. In 2001 this deficit seems to have increased to reach close to 7,000 mt.

Jumla had traditionally been known as the food-producing district of Karnali. The Hat Sinja valley has fertile and somewhat flat land suitable for rice cultivation. Rice is grown here. In some parts of the land, two crops can be grown per year. In the past, Jumla used to supply foodgrains to other districts. But now Jumla also depends on other sources for its own food supply. This occurred since the famine of 1972. A study conducted in one VDC (Kartikeshwari) revealed that only 10.7 percent of the families had surplus food over the family's requirement, 46.6 percent had just sufficient food and 42.7 percent were not able to meet their food requirements. For the last group, eating less was one of the coping mechanisms. There is a hard life for both humans and beast. The people of Karnali say 'Don't take birth as a sheep of Humlis and a son of Jumlis.'

Humla district is another district which often suffers from food deficits. Here, production is low. People suffer from natural hazards like soil erosion and landslides. The extent of cultivated land (less than 2 percent of the total area) is not sufficient to meet the needs

of the district's population. Besides conversion of forest land into agricultural land, use of forests for fuelwood is an important source of deforestation. A study in 1989 reveals that about 100 small and large landslides affected 47 percent of the people of the district. Landslides are common in north Humla, and soil erosion in south Humla (KaRMa 1989 as quoted in SNV 1997: 7).

The food situation is relatively better among the higher castes. In a study of comparison of Shahi and Kami and similar caste, it was revealed that about 30 percent of Kami households produced sufficient food for less than 2 months, and 71 percent produced enough for 2–6 months. It means that all of them did not produce for more than 6 months. In the case of Shahi families, 1.3 percent produced enough for less than 2 months, 31 percent 2–6 months, 36 percent 6–8 months, 24 percent 8–12 months, and 7.7 percent for more than 12 months.

Of the total area of Humla 24 percent is pastureland. There are about a hundred thousand cattle in the district. In this light, pastureland is an important necessity for the region. But the conflict over pasture facilities in Tibet has led to a severe fall in animal production. Until now, a large number of animals from Tibet used these pastures. But the villages located near the border with Tibet (Halji, Jang and Til of the Limi VDC) take their animals to Tibet from November to March. About 3,000 animals thus go to pasture in Tibet. The Tibetan authorities charge 10 Yuan per yak and 2 Yuan per sheep for grazing and vaccination. But several villages of Tibet send more than 25000 animals to Humla's pastures. Yet, Humla does not charge any fees. Nepal has not been able to make a proper agreement with Tibet. A few years ago Nepal signed an agreement that Nepal should reduce the number of sheep by 16,000 per year and after five years should not take a single sheep to Tibet for grazing.

Production of foodgrains within the household is still the main indicator of wealth in Dolpa district. VDCs in upper Dolpa produce enough for less than four months, while those in lower Dolpa produce for five to eight months. For most households, side activities

are important to enable them to buy additional foods and other commodities. The population in upper Dolpa is involved mainly in trade (livestock, salt, cereals, etc.). In lower Dolpa, farm wage labor, the collection of herbs and mushrooms, construction labor, livestock, manufacture of local carpets, working as porters and jobs in India are the main sources of income. The food deficit is met from collection and sale of the herbs, porter work, labor, sale of livestock, sale of locally produced carpets, agricultural wage labor, migration to India sale of alcohol, and sale of locally made bamboo products.

Despite somewhat better land for the production of food, Kalikot is also facing food shortages because of increase in population and decline in food production. In the past this district used to provide food to other districts as it has relatively better resources and climate suitable for food production. Now it receives food from the government as well as through private traders. Data for Kalikot was not available until 1975/76 as this district was only created at that time, from part of Jumla. In 1975-76 Kalikot produced a grain surplus of 2,917 mt; but by 1979/80, it faced a deficit of 5,651 mt. When, like Humla, it faced a crisis in 1994/95, the deficit was 7,810 mt. Five years later, in 2000/01, the deficit had grown to 11,157 mt.

Kalikot is also known for the high level of discrimination among the caste groups. The most disadvantaged are the low-caste households. Most of them work as semi-bonded laborers and are functionally landless. In Kalikot, they have a system of keeping *halis* (ploughmen). They belong to the lower castes, and there is widespread discrimination. *Halis* are like servants. Sarki, Kumal, Lohar, Tiruwa, Chadaura, Ode, Kandar are *Kamis* which are Halis by birth. Their food security is comparatively low.

Mugu, in the far north, is a small district compared to the others, both as regards geographical area and population. However it has been facing a cereal deficit since the late 1960s. From a deficit of 411 mt in 1967/68, the shortfall continuously increased over the next two decades to reach 6,200 mt by 1987/88. The deficit seems

then to have declined slightly, but again increased to more than 5,500 mt in 2000/01.

Mugu has been regarded as the most underdeveloped district in Karnali. From its physical characteristics and climate, Mugu is not a very suitable place for grain cultivation. Even though Khatyad is a food-producing belt, other areas (especially the northern Karan belt) are not suitable for food production in large amounts. A study by Mugu DDC found that 75 percent of Mugu people did not produce enough food to feed their families. The level of self-sufficiency in food production is low. According to Dharja Bahadur Bam, vice chairman of Mugu DDC, both he and former state minister Hasta Bahadur Malla are only able to feed their families for four months of each year from the production from their own land. If local elites, who have additional external incomes, are faced with this situation, then the desperate situation of most ordinary villagers can only be imagined (KIRDARC 2002: 23). A study of a village has revealed that, from its own production, only 14 percent households can meet their full requirements of food; 84 percent produce food that is sufficient for less than 10 months only; 27 percent produce food sufficient only for 6-10 months; 34 percent 3 to 6 months; and, 25 percent less than 3 months. The most common form of coping mechanism is out-migration. Whenever income is earned from this, it is used mainly for purchase of food and other necessities within the household. Apart from a source of income, out-migration has direct implications for the food situation in the household. Each person leaving the house temporarily means one hungry mouth less to be filled by the available food.

For the Karnali zone as a whole, cereal deficits started to occur from the 1970s, and they have consistently increased since then. There was a slight decline in deficit in the late 1990s, but it increased again in 2001 and is now equivalent (at 31,000 mt) to the period in the mid-1990s when it faced famine. So we have a situation in which the Karnali zone has been subject to a gradual deterioration as regards food security as a whole—a trend over a period of some 25 years

(from the early 1970s to the mid 1990s), culminating in a major crisis in the mid-1990s, followed by a decade of chronic food shortage, punctuated by periodic famines. The situation today is worse than ever. The chair of the Bhargaun VDC in Humla, Padam Bahadur Lama, said recently: 'Those who until recently could afford to eat two square meals a day nowadays suffer from hunger' (KIRDARC 2002: 23).

The food crisis in the Karnali thus clearly precedes the current conflict, which began in 1996 and only reached the region towards the end of the 1990s. But, in recent years the situation has deteriorated still further. During this time, the ways to fill the deficits in food were also lost due to conflict. Moreover, the internal resiliency to increase or maintain production also declined due to production failures caused by the conflict. Therefore, food crises became a serious concern for Karnali.

5.2. Searching for an explanation of 'lack of food security':

There are many interrelated factors which explain the chronic—and acute—food insecurity of the Karnali zone, many of which require a historical perspective and analysis. Unless the root causes are identified, an effective strategy for food security cannot be developed.

It is generally considered by government policy-makers that it is the combination of the population explosion (as a result of immigration) with the small proportion of land area devoted to agriculture and primitive technology that explains the growing food 'gap' and food insecurity. Barry (1990) after conducting studies in the Karnali zone in the 1970s reported that, even at that period, population growth and the decline of trading and other non-farming opportunities were destroying the delicate ecological balance, leading to the degradation of natural resources and a decline both in food availability and in access to food. But it is debatable whether population growth has been the major factor, although it certainly is significant.

5.2.1. Physical exclusion and difficult terrain

Except for some areas like upper Mugu, Dolpo and Humla (where the soil is not good and climate is too severe), a combination of agriculture and livestock production has provided, and continues to provide, the basis of rural livelihoods, although small-scale handicrafts and barter and trade have also always been an important component of the rural economy. Rice, maize, barley, wheat, buckwheat, potatoes, soybean, beans, mustard, seed amaranth, coriander, and several types of dry rice are grown in Karnali. Oats, cotton, and other vegetables are other general crops.

Though farming was the main occupation of the local inhabitants, it never provided full food security. For one thing, the area under cultivation is a very small proportion of the total land area, and population density (and pressure) on each hectare of arable land extreme. The amount of irrigated land is extremely small. This is a consequence in large part of the altitude and rugged terrain (Table 5.1). Table 5.1 shows that only about 4.6 percent of the total land area of the zone is cultivable. Relatively more area in Kalikot, Dolpa and Jumla is cultivable. Only about 1 percent of the area of Humla and 2.7 percent of Mugu is cultivable. This is far less than the national average, where about a fourth of the area is cultivated.

Irrigation facilities have also been low in Karnali. Except for Jumla, which has relatively more area under irrigation, irrigation facility in other districts is almost negligible.

Available data indicate that holdings are small and the technology used is very basic. Yields are low. Furthermore, the area cultivated on average by each household was very small. In the late 1960s, the average landholding in the Karnali region was only about 0.4 ha (Barry 1970: 13). Data based on the 1991 census reveal that average land under crops per household in Dolpa was 0.76 ha, in Jumla 0.6 ha, in Kalikot (a relatively recently created district) 0.35 ha, in Mugu 0.42 ha, and in Humla 0.49 ha (CBS 2003; computed from Table 2.3, p. 84).

Table 5.1: Land availability in Karnali zone in 1998

District	Altitude (m)	Area (ha)	Agricultural land		Irrigated land	
			Area (ha)	%	Area (ha)	%
Jumla	1915-4679	254,365	14,743	5.80	3,000	20.35
Humla	1624-7768	583,827	5,930	1.02	310	5.23
Dolpa	1500-5100	793,200	53,000	6.68	700	1.32
Mugu	1524-7000	358,242	9,800	2.74	745	7.60
Kalikot	1500-4990	174,927	15,828	9.05	NA	NA
Karnali	1500-7768	2,164,561	99,301	4.59	NA	NA

Source: Khadka 1999: 261.
Percentages have been calculated by the author.

Table 5.2: Number of households by size of landholdings in Karnali in 1989

Category	Mugu	Humla	Kalikot	Dolpa	Jumla
Landless	143	268	54	164	352
	(2.2)	(4.9)	(1.5)	(3.6)	(2.7)
0.1-5 *ropani*	919	2164	900	452	972
	(14.1)	(39.1)	(27.5)	(9.8)	(7.4)
5.1-10 *ropani*	1549	1945	1881	1342	4977
	(23.8)	(35.1)	(51.7)	(29.1)	(38.2)
10.1-20 *ropani*	2537	852	572	1581	4549
	(39.0)	(15.4)	(15.7)	(34.3)	(34.9)
Over 20 *ropani*	1364	306	132	1068	2158
	(20.9)	(5.5)	(3.6)	(23.1)	(16.6)
Total	1364	5535	3639	4607	13008
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Source: Various reports (district profiles) prepared by SNV 1996, 1997.
Figures in parentheses are percentages.

Land fragmentation and primitive technology are among the main reasons for low productivity and output. The climate and soils are also a crucially limiting factor. A report in the *Kathmandu Post* (1 November 1998, p. 1) indicates that farmers use a wooden-bladed plough, which does not help increase production. But iron-bladed ploughshares are expensive and difficult to obtain. There are also few agricultural technicians in the government services and these fail to reach most of the farmers in remote areas: the Agricultural Input Corporation (AIC) meets only 3 percent of the seed demand.

Historically agriculture was always combined with a range of other economic activities which entailed movement of people and animals at certain periods to fit with the variability of the environment.

Table 5.3: Availability of cultivable land in different districts in Karnali in 2001

Districts	Households	Wet land (ha)		Dry land (ha)		Total land (ha)	
		Total	Per household	Total	Per household	Total	Per household
Dolpa	5,812	226.10	0.04	2,285.20	0.39	2,511.30	0.43
Jumla	15,850	967.10	0.06	7,216.50	0.46	8,183.60	0.52
Kalikot	18,487	6,379.00	0.34	8,931.60	0.48	15,310.60	0.83
Mugu	8,261	1,267.70	0.15	5,185.70	0.63	6,453.50	0.78
Humla	6,953	1,050.10	0.15	5,328.30	0.77	6,378.50	0.92
Total	55,363	9890.00	0.18	28,947.30	0.52	38,837.50	0.70

Source: CBS 2005.

Table 5.4: Extent of land fragmentation (number of parcels) in various districts in Karnali in 2001

Districts	Number of parcels	Average parcels per household	Number of holdings consisting of parcels				
			1	2 to 3	4 to 5	6 to 9	10 and over
Dolpa	25,399	4.7	229	1,801	1,801	1,204	341
Jumla	103,690	7	109	1,403	4,160	6,264	2,939
Kalikot	85,172	5.5	439	3,602	4,495	4,949	1,771
Mugu	76,439	10	16	342	808	3,094	3,373
Humla	50,116	7.4	11	381	1,498	3,355	1,537
Karnali	340,816	6.79	-	-	-	-	-

Source: CBS 2005.

Difficult terrain might have posed some constraints on food security, especially in terms of production entitlement. But there are other types of entitlements which affect food security. Exchange entitlement is now the main one. Karnali seems endowed with other resources that can help in improving the people's entitlement to food through exchange. In the past, this was also helping the people. But because of changes in the political and economic conditions and infrastructural development in India, and the middle hills within Nepal and Tibet, the traditional exchange entitlements are not available now. Physical exclusion because of lack of roads is also acting as barrier for promoting the capacity of people to gain access to exchange entitlement. It is also creating an obstacle for the physical availability of food.

One of the reasons for the terrain to play a role in underdevelopment (in this case food insecurity) is because of the low level of technology prevalent in Karnali. The simple technology prevalent in Karnali has not been able to get over the obstacles created by geography. On the other hand, the traditional practice adopted so far is to internalize all the constraints posed by such geography. Therefore, even though traditional practices have been suited to local ecological conditions, they do not seem to provide sufficient production opportunities for the people.

There have been attempts at improving the technological aspects of farming and in other areas of life. Jumla has been a centre for training in technology. The government has been supporting agricultural and livestock research here since a long time. Introduction of apples and vegetables, is one result of this effort. It is also said that if the practices adopted by agricultural centres are followed in private farms, it is likely that production of crops would double. But these technologies have not been adopted because farmers do not have capacity to adopt them and to bear the associated risks. The physical exclusion has also been a barrier to adopt such practices. On the other hand, ad hoc and incomplete support from the government has in some cases destroyed the locally existing traditional

know-how and social mechanisms. One clear example is seen in irrigation. The government has not been fully able to support the irrigation facilities, but has on the other hand destroyed irrigation systems developed by people in the name. Shahi (2056/57 v.s.) has experienced this in his district of Kalikot. The neglect of the government has also been one of the reasons for this.

5.2.2. Population pressure

Even though Karnali has difficult terrain and very small cultivable areas, its population is now about 309,000 (in 2001), which was 165,000 in 1971. The population growth over the last 30 years, according to the censuses, is shown in Table 5.5. This shows that population has been growing at about 1.67 percent per annum in the last 30 years. This is significantly lower than the national level. But despite this, it is capable of doubling the population in every 37 years. The population growth rate within the districts is difficult to estimate owing to creation of a new district in the early 1970s. But despite this, an attempt has been made, which is presented in Table 5.5. The table also shows that the population growth rate has been extremely high in Dolpa for some unexplained reasons. This district has attracted a large number of outsiders for business and other purposes, including collection of herbs, hotel business and the like. But in other districts, the population growth rate has been significantly lower than the national average.

Table 5.5: Population in various districts of Karnali

Districts	1971	1981	1991	2001	Annual growth rate (%)
Dolpa	10017	22043	25013	29545	3.70
Jumla	122753	68797	75964	89427	1.35 (last 20 years)
Kalikot	-	87638	88805	105580	0.95 (last 20 years)
Mugu	25718	43705	36364	43937	1.75
Humla	29524	20303	34383	40595	1.05
Total	188012	242486	260529	309084	1.67

Source: CBS 1973, 1983, 1993, 2003.

5.2.3. Social inequality

Karnali is known in Nepal not only as a most underdeveloped and difficult place, but also as a region where discriminations based on caste, gender and class are extremely high. As a result, it has been called in Nepali a *kala-pani* (literally, black water) place, where it is difficult to maintain one's livelihood. Local economic and social structures and dynamics, particularly the oppressive caste hierarchy and the extreme patriarchy of the dominant Hindu social system, ensure that the situation of the poor and socially marginalised is extremely precarious. In addition to intense caste discrimination and extreme oppression of women, other social features include polygamy, child marriage and *jari* marriage (taking money from the new husband of the wife). Polyandry is also prevalent among the Jads—i.e., mainly the Bhotias and Tibetans. Tagadharis (wearers of the holy thread) are said to be exploiting Matawalis (alcohol drinkers) and Chhetris (Khas). Bista considers these Khas as a different group, distinct from the Chhetris in Nepali caste society (Bista 1996). He argues that the Khas were promoted to Chhetris by the Brahmins, and considers this caste contradiction to be a major cause of underdevelopment of Karnali region. Shah (2000) argues that this contradiction alone is not the cause of underdevelopment in Karnali, but agrees that 'the culture of poverty' of Karnali zone is not conducive for the creation of social and economic capital required for development.

Like most hill and mountain regions in Nepal, the population of the region is divided into a number of different ethnic and caste groups. But, unlike other mountain regions, Karnali is peculiar in the sense that it is dominated by Chhetris (including Thakuris), while about 90 percent of the population belongs to Hindu groups. Janajatis (ethnic groups) constitute only 7.5 percent of the population. In other mountainous regions of Nepal, the Janajatis are dominant. Another peculiar characteristic of Karnali is that it contains a large proportion of lower castes in its population. About 18 percent of the population in Karnali is low-caste; in the hill and mountain region of Nepal as a whole, only 13 percent of the population is low-caste.

Table 5.6: Ethnic composition of Karnali in 1991

Caste/Ethnic group	Population in 1991	Percentage of population in 2001*
Caste Hindu	235869 (90.5)	87.4
Chhetri	116334 (44.7)	70.2
Thakuri	41075 (15.8)	
Brahmin	31816 (12.2)	9.3
Low caste	46643 (17.9)	17.8
Others	-	2.6
Ethnic Group	19552 (7.5)	12.6
Himali (Jad)	5035 (1.9)	48.5
Pahade (ethnic group)	14517 (5.6)	46.9
Others	2922 (1.1)	4.5
Total	260529 (100.0)	100.0

Source: Khadka 1999: 244

* The total population data were presented after adjustment in 2001, and data on population of ethnic groups were not adjusted. Therefore, only proportionate data are presented here. See Table 5.5 for the population data.

Table 5.7: Ethnic composition of various districts in Karnali in 2001

Caste/Ethnic Groups	Dolpa	Jumla	Kalikot	Mugu	Humla	Karnali
Caste Hindu	59.80	98.03	95.07	86.08	83.32	87.44
Chettri	47.61	68.79	36.86	61.30	63.40	61.42
Bahuns	2.65	9.54	27.49	4.36	6.28	8.16
Dalits	8.49	15.31	29.24	19.46	12.92	15.56
Others	1.05	4.39	1.48	0.97	0.73	2.31
Ethnic groups	40.20	1.97	4.93	13.92	16.68	12.56
Magar	13.15	0.15	3.10	0.18	0.24	2.01
Tamang	1.07	0.68	0.23	2.86	0.81	1.12
Gurung	22.62	0.18	0.13	0.07	0.06	2.96
Sherpa/Bhote	2.17	0.56	0.00	10.16	15.37	5.89
Others	1.18	0.39	1.48	0.65	0.20	0.57
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: CBS 2003.

Caste differences: Access to land and food self-sufficiency

Throughout Karnali, Brahmins and Chhetris have controlled much of the *khet* (wet land). The Brahmin and Thakuri elite, while in a numerical minority (14 percent and 18 percent of the zone's

population), hold 31.5 percent of the total arable land, and 51.4 percent of all *khet*. At district and regional levels, they always rank first or second in *khet* holdings, if not in *pakho* (dry land) holdings.

Khet land is considered a very important resource in Karnali. It is also unevenly distributed. Almost all of the Karnali *khet* (96.9 percent) is unevenly distributed in economic regions A and B (trans-Karnali, southwest Jumla, Palanta Dara, Lower Humla and Mugu, and Sinja Dara, Pansaya Dara, Asi Dara-Khalanga). 85 percent of the zone's population lives In these regions, an indication of the close correlation that exists between population density and farmland quality. In other areas in Karnali, *khet* land is scarce owing to its highland nature.

The importance of *khet* land comes from the fact that the income from *khet* is higher than from *pakho*.[2] Paddy is considered an important crop, and its exchange value is also high. Having good quality of *khet* means that one can grow rice as well as another crop of barley. This is especially so in Jumla. The yield of paddy in good quality *khet* is 4 standard *muri,* whereas in a poor *khet* it is only 2 *muri*. The yield of barley in *khet* and *lekali bhuwa* (uplands near forest) is 3 *muri* and in *ghaderi bhuwa* (close to home) is 2.5 *muri*. The yield of wheat and millet in *ghaderi bhuwa* ranges from 2.5 to 3 *muri*s. Buckwheat is cultivated in both *kudillo* and *lekali bhuwa* and the yield is 1.5 *muri* and 0.5 *muri*, respectively. The yield of *kaguno* is only about 0.33 *muri*.

The access to land, particularly *khet*, has long been determined by caste status. The data collected by Barry (1990: 172-6) demonstrate this. The Dum (low caste) workers, who make up 19.5 percent of

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[2] There are different types of land. A study in Hat Sinja reveals four types of land: khet (paddy land), ijar (bushy land which is cultivated after cleaning the bushes), kudillo (land under shifting cultivation), and bhuwa (pakho or dry land, cultivated annually). Khet land is also of two types – normal khet and chud khet, which is further divided into sim chud (waterlogged), siyal chud (land with shadow), and rukho chud (less fertile khet). Similarly, pakho land is divided into lekali bhuwa and ghaderi bhuwa. The former is located far from the village near the forest and the latter is located close to settlements (Singh 2028 v.s.: 85).

Karnali's population, are an important labor force. Therefore their regional distribution and density are directly proportional to the availability of *khet* land. They hold 9.1 percent of the zone's arable land and 8.3 percent of its *khet*. Brahmin family have an average of 0.34 ha, but this is primarily *khet*. Thakuri and Chhetri households (also known as Khas) have an average of 0.56 ha, indicating a greater amount of *pakho* land. Bhotia families own 1.02 ha, a reflection of their total reliance on *pakho*. Dum families command an average of 0.24 ha. There is wide variation in land holding within the castes.

Table 5.8: Landholding by caste/ethnic group in Karnali in 1969/70

Caste/ethnic group	Households	Average *khet* (ha)	Average *pakho* (ha)	Total land (ha)
Brahmin	4625	0.13	0.21	0.34
Thakuri	5672	0.08	0.47	0.55
Chettri	12643	0.06	0.50	0.56
Bhotia	1392	-	1.01	1.01
Dum	5711	0.03	0.21	0.24
Misc.	1036	0.07	0.25	0.32
Total	31079	0.06	0.41	0.47

Source: Barry 1990: 172.

Today, as was the case thirty years ago, the inequalities within the local population remain extremely marked. Inequality in land ownership, for example, particularly of irrigated (*khet*) land, is very much linked to the caste position of households. This reflection of unequal access to land has also been seen in food self-sufficiency of households of different castes. Here it should be noted that food self-sufficiency is one aspect of food security, but given that food self-sufficiency also determines other aspects of food self-security (like income, ability to earn more in non-farm jobs and the like), this can also be taken as a proxy for food security. In a region like Karnali, where non-farm opportunities are not available and exchange entitlements also depend on the capacity to produce more, food

self-sufficiency is also important. A study conducted in a VDC in Kalikot in the mid-1990s shows that only about one-fourth of the households were able to secure food supply for more than 10 months from their own production. About 37 percent of Chhetri and higher-caste households were in this category. But among the Kami households, 14 percent were in this category. A large group of Kami households (43 percent) were not able to produce food sufficient for more than 6 months. Only 21 percent households from other castes (mainly Chhetris) were in this category. This is illustrated in Table 5.9.

Table 5.9: Economic stratification of households by ethnic groups in Dhandi Vigma in 1995

Category	Food from own production	Chhetris and others Households	Kami households	Total
1	Less than 4 months	-	4 (19.1%)	4 (10.0%)
2	4 to 6 months	4 (21.1%)	5 (23.8%)	9 (22.5%)
3	6 to 8 months	1 (5.3 %)	7 (33.3%)	8 (20.0%)
4	8 to 10 months	7 (36.8%)	2 (9.5%)	9 (22.5%)
5	More than 10 months	7 (36.8%)	3 (14.3%)	10 (25.0%)
Total		19 (100.0%)	21 (100.0%)	40(100.0%)

Source: SNV 1997.

This village is located in Phoi Mahadev VDC of Kalikot.

Exploitative inter-caste relations

Karnali is known for its rigid caste structure and discriminations based on it. This is especially in the Khasan. The Jadan area is free from these caste-based discriminations. It is also relatively less discriminatory in other aspects too. In general, the Bhotia[3] population (like Mugali and Humlis) is wealthy as compared to the Hindu population. The Bhotias call the Hindu people of the lower Karnali

[3] These were pastoralists and traders in the past. Some of them were also converted to '*ghartis*' during the mid-14th century under the Hindu hegemony. The process of conversion continued until the mid-1970s.

as *'topi-tal'* to indicate their poverty. This literally means that they are so poor that they are not able to buy a new cap, and, instead, wear patched-up caps.

The burden of caste discriminations falls mainly on low-caste households. There are different ways of classifying the people. The common two-group classification is *chokha* and *kamsal*. All people except the lower castes are *chokha*. *Kamsal* are also called Dums. Kami (ironsmiths), Sarki (leather-workers), Damai (tailors) and Badi (entertainers) are further divisions of *kamsal* or Dum, which are considered as 'untouchable'. Under the *choka* (clean) group there are two major groups: *tagadhari* and *matwali*. Brahmins and some Thakuris and Chhetris belong to the *tagadhari* group. Matwali Chhetris, Newars, Ghartis and Bhotias belong to non-*tagadharis* but are from the *chokha* group. But there is vertical social mobility from *matwali* group to *tagadhari* group, even though this was more common in the past than it is now.

Because of historical reasons, Chhetris, especially Thakuris, who ruled the Jumla (or Karnali Pradesh) in the past, had total ownership of land. They had obtained land grants (*birtas*). On the other hand, Brahmins had also obtained some land. After the unification, a group of Thakuris who despised farming continued their luxurious life of hunting and entertainment and eventually lost control of some of their inherited land. But, in general, Thakuri and Brahmins continue to control more good quality land compared to *kamsal* or low-caste households. Bhotias continued their tradition of pastoralists and traders and maintained a good standard of living as compared to other groups. The political power of Khas declined after the subdivision of Jumla into Baisi micro-states. Then the control of Thakuris increased, and they were helped by Brahmins. Barry writes (1990: 116) 'in order to legitimize their privileged status and strengthen their exploitative command of all resources, both environmental and human, this new Brahmin-Thakuri consortium intensified and entrenched all facets of Hinduism. The position of Khas people thus took a downward spiral.'

The impact of this political change and historical reality is still evident in Karnali. The impact in terms of access to land and other resources has already been discussed. The poor people, especially the Dum, depend on *chokha* for their survival. The caste discrimination is such that a Dum has to obey various norms, e.g., he/she should not ride a horse in a way that a *chokha* would see; a Dum should go down the slope or the lower side of the trail if a *chokha* is also passing through the same trail; and a Dum should not touch a *chokha* and cooked food items and water and some raw foods too.

Dums generally enter into a kind of relation with *chokhas* that is locally called *lagi-lagitya* relationship (Shrestha 1993: 24), under which a Dum (also called *lagitya*) provides caste or *dharmic* (as defined by religion) services to *chokhas* (called *lagi*). This is like a patron-client relationship. The *lagi* too has some obligations towards *lagitya*. Accordingly a Kami, Damai and Sarki would provide caste services to a group of *chokha* families and receive some grains and other support on an annual (or in some cases bi-annual) basis. Some of the able bodied *kamsal*, especially the Kamis, are also employed by *chokha* households, individually or in a collaboration of two or more households, as *halis* (ploughmen). The relationship of the Kami so employed and the employer is called a *haligado* relationship. Under this relationship, a *hali* is given a plot or two of land to cultivate for himself, in return for a commitment to undertake all the ploughing work. On working days, the *hali* gets only meals but no wages. *Halis* are in general considered members of an employer household and are also entitled to some extra benefits, including shelter during times of crisis. Despite these benefits, *kamsal*s or Dums are exploited. Shrestha (1993: 24-25) writes:

> But most *kamsal*, however, are exploited by the rich *chokha*. While a few *kamsal* households have some unirrigated land in the village, most have a little more land at higher elevations. But these are meager holdings and, therefore, substantial supplements from the *chokha* in the form of land or wages remain an indispensable necessity. Interests on loans are

> uncontrolled and are over 60% a year. The three *kamsal* groups, although more numerous than *chokha*, are endowed with mutually different socioeconomic attributes locking them into a situation of competition against each other that undermines the possibility of *kamsal* solidarity.

He further writes:

> The Damai (the smallest of the three *kamsal* groups) have the most difficult times. While their occupation involves tailoring and playing music at religious and social ceremonies, because of change in the taste of their clients, they have lost much of their former business to the tailors and readymade stores in the urban areas of Nepalgunj and Kathmandu. Occasionally they have even threatened the high caste villagers that they will move to other villages, resulting in, by implication, the possible loss of music for their rituals – only to be told that the services of a tape recorder would be used instead.

Because of food shortages and poverty, most *kamsal* go to the Nepal Tarai or to India in early December in search of food and work, and come back in April for agricultural work to be done in the villages.

Kamsal are also blamed for not being frugal. The following saying is common: *kartik muina duma khopa khopa bhat, chaita muina pampuda hat* (There is rice in every place in Dum's house in November, while in April, they have a hand on the forehead.)

There are also wide differences among the Khas or Brahmins and the Chhetris and Bhotias. Even though the latter were socially discriminated, they seem to have been better off economically. This is still seen in recent times, even though they were displaced from their place due to decline in transhumance trade and trade barriers with Tibet after 1959. Furer-Haimendorf (1975: 234) writes:

> Socially too they [Bhotias] are looked down upon by their Hindu neighbours. As eaters of beef and drinkers of alcoholic beverages they share the low status of most of the Bhotia populations in Nepal's Hindu-dominated caste-system. However, their response to this situation is different from that of either the Sherpas or the Bhotias of Baragaon.

> While the former are proud to identify themselves as Sherpas and the Baragaonlis now claim to be Gurungs, the Mugu people describe themselves as Chhetris and even call themselves by such genuine Chettri clan-names as Rokha and Burathoki.…The situation has been even more confused by the practice of government officials classifying the Bhotias of Mugu and Karan as Tamang, even though there is no apparent connection with the Tamang tribe of Central and Eastern Nepal.[4]

The 1972 famine, which was mainly caused by weather imbalances like early snowfall and then a drought, caused severe food shortages in Karnali. It was the event that led to the food aid in the region. Regarding the disproportionate impact of this event can be found in the writing of Furer-Haimendorf (1975: 246):

> In 1972 I was told in Kermi that of the thirty households thirteen had to borrow garin from neighbours in April or May, and that such loans were usually repaid after the harvest of summer crops in October. My informant stated that when he was a child only two households were in that position. Though the number of houses had not increased, living standard had declined. Yet the people of Kermi believed that they were still better off than the Thakuris of Humla, who during recent food shortages had to borrow grain from some of the Bhotia villages. They explained their more fortunate position by saying that they enjoyed the protection of the Buddhist divinities, whose favour they gained by the performance of ritual and the burning of butter-lamps. The Thakuris who had neither lamas nor the *gomba* lacked that supernatural support.

Gender-based discrimination

Women work harder than men. 70 percent of the household work is done by women and 30 percent by men. Women wake up at 4 in the morning and work until 10 or 11 in the night. Women look aged even at the age of 25 because of heavy workload, and lack of food. Women have to stay in the *goth* (animal shed) when they have their periods for 4 to 5 days, and for 22 to 23 days around the time

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[4] Prime Minister Jang Bahadur Rana had advised not to use term Bhotia for any community living within Nepal.

of child delivery. There is a belief that if they stay in house during those periods, the gods will be angry. Women are not given foods like meat, curd, milk and vegetables when they are giving birth and for some time afterwards. Again there is a perception that if they eat such food, the gods will be angry and health will be adversely affected. The sons get a special purification rite *(nwaran)* on the 11th day, but this is not done for girls. The literacy rate of the women is less than 5 percent. At the time of childbirth, they are given only rice and oil-water (oil and water boiled to which salt is added). They should not be touched by the main person of the family (Shahi 2058 v.s.).

Jari (bringing in other's wife/wives) is another tradition existing in the region. There is a perception that if a man can bring a woman under *jari*, there will be other women who can work in the field. Similarly, getting a wife through a *jari* is cheaper than organizing a marriage ceremony. Moreover, this is also linked with manhood; a man is considered macho if he can bring many wives by snatching other's wives. As a result, this practice has been flourishing in Karnali. A husband will ask for compensation from a new husband of his wife, and the amount is decided by the village council, depending upon the frequency of women's elopement. In a sense, women are treated as commodities.

Child marriage is another problem here. The parents make an agreement to marry their children before they are born. If they are of the same sex, then they promise marriages of other children to be born in future. This is called *Garbe-Chinha* (birth-sign).

5.2.4. Conflict and out-migration

Karnali was the region most adversely affected by the political conflict which started from 1996. The conflict also led to various impacts resulting in the decline in production and productivity. For example, people left the villages as IDPs, leading to unavailability of labor. The landlords left villages and there was no effort to efficiently utilize lands belonging to absentee landlords. The details

have been discussed in Seddon and Adhikari (2003). The whole production system was damaged by the conflict. As a result, production and productivity declined. Agriculture became more feminized than before.

The other impact of conflict was seen in the form of decline in the availability of food itself. As there were regular blockades by both sides (the army and rebels) in the transportation, it was difficult to bring food into the region. The problem of looting the food supplied by the government and donor agencies by the rebels also means that they were hesitant about supplying the food. The same problem prevented the private sector in supplying food through mules, sheep or porters. The government army also restricted the amount of food a businessperson could carry to the region. Food prices increased tremendously because of the conflict.

Income opportunities declined because of the conflict. Development works were restricted and opportunities for employment declined. The investment in the farm and non-farm sectors was reduced as investors left the place and there was simply no conducive environment for investment. This reduced the people's exchange entitlement, which had been the main mechanism to obtain food security. People were not able to sell the things they had produced. As a result, they stopped producing such things. This again adversely impacted upon their income level. Control of other income opportunities (like herb collection) by the rebels also reduced the people's ability to earn income from their resources and convert this income into food. Confiscation of food stored at home, the compulsion to feed the rebels and army personnel coming to the village and to donate taxes to the rebels also reduced the food security of people. The food situation had been so much affected by the conflict that accrording to some newspapers have estimated that the food supply in Karnali declined by 40 percent because of the conflict.

There was also an adverse impact on production of food. The out-migration of able-bodied persons and landowners, lack of

inputs, lack of marketing opportunities and the like were the causes for the decline in production in the context of the conflict.

5.2.5. Decline in internal exchange and new food customs:

Given that there is wide diversity in crop production patterns, types of crops grown and other attributes like weather, a complex network of relations among the people has been developed for exchange and mutual support. Moreover the food culture has also developed in that way (Devkota 2027 v.s.).

In the past, Karnali's food system was based mainly on millet in the lower belt and barley and buckwheat in the upper belt. Rice was common mainly in Jumla, particularly in Hat Sinja. Even here, it was common only among the wealthier and higher caste households. They had a custom of eating rice only in the evening. This is especially so in Jumla region where rice is available. Only those who are elites and have sufficient rice, and the weak, children and the aged eat rice twice a day. Most others who work hard eat bread in the morning. They have a saying that if one eats bread in the evening, one will not sleep well. Eating bread of millet and maize is also considered to be good. They do not like to eat porridge. Millet is quite popular here. Even the elites like to eat millet bread. It is considered equivalent to wheat.

Millet is also said to give a lot of energy for long durations. There is a saying: *koda le parani rakhyo, chatla bhat le* (*ke napi dela bhat le*)*?* (Kodo has maintained our lives, what has rice done?). This is in praise of millet, ridiculing rice for its lower value in terms of giving energy. Millet is used mainly to make bread. They make thick bread from it, which is called *lagar*. This is eaten with chilli powder and salt. People carry this thick bread even when they travel. As it is not eaten with soup and other ingredients, nowadays it is not considered nutritious. This food habit is also considered to reduce the nutritional status of the population, especially in the lower hills in Karnali, which are dominated by Hindus. In the upper belt, where

the Bhotia population dominates, the food culture is different. Their staple diet is based on barley and buckwheat. Bread, *tsampa,* and noodles made from barley and wheat flour are eaten with large and regular quantities of meat. *Tsampa* is a mixture of barley and buckwheat flour. First these grains are roasted and then ground to make *tsmapa*. It is eaten with vegetable or meat soup or local butter tea. This food culture is considered to give more nutrition to the body. In general it is said that the economic and health conditions are better among the Bhotias than among the Hindu population living in the lower hills of Karnali.

Internal exchange has also been important in Karnali. People of different districts and ecological belts know the importance of this culture. For example, there is a saying that Humlis and Jumlis argue, saying, 'Your rice did not get *tihun,* and our *tihun* did not get rice.' Jumla produces more rice and Humla more beans and exchange is therefore important. People from upper Humla and Mugu do come to Jumla for the collection of rice, and in exchange they offer beans, herbs, salt and other necessities. Jumlis also travel to Humla and sell their grains and buy clothes and other necessities. They also have different types of social relations facilitating this trade.

Frugal habits are emphasized in Karnali. This was so at least in the past. People used to say, *sanai dekhiko man ani kartik dekhiko tan* (cultivate the habit of respect from childhood, and be frugal in foodgrains from Kartik or November). This proverb suggests that one should not spend lavishly even if resources are there in large amounts. It was considered shameful to beg even for seeds. In fact this proverb was targeted at the lower castes (Dum or *kamsal*), who are considered to generally spend a lot when they have resources, and beg when they do not.

While following the oxen during *dai* (harvesting of crops), farmers say, 'Please bring us production like in Dang and Deukhuri (Tarai) and it should be plentiful enough for a cart to be carried by you at a cheaper rate like in Madhesh and India.'

5.2.6. Decline in village co-operation

People do not need money in the village as they exchange things with each other. In each bit of work in the village, one person is helped by another. No individual could work by himself without taking help from others. They need village consultations. This has been a tradition. If one attempts to build a house, all villagers should help him until the house is built. If one slaughters a goat, he/she has to distribute the meat to all. Villages used to have all the schedule of the work for the whole year. It was because of this co-operation that many things were possible. Big and long canals were dug in huge cliffs, and wooden bridges (*panelis*) were made for the flow of water. The canals were 8 to 10 *kosh* (or 32 to 40 km) long. All were made by the hands of the people, using simple equipment. These were made about five or six hundered years ago, and they were still functioning well. Well-built bridges were also made from stones and timber in wide and big rivers. They are still helping the people and animals to cross these rivers.

A study of a village in Hat Sinja inferred that there were well-defined norms for co-operation in irrigation development and maintenance of irrigation channels. There was a practice of damming bigger and smaller creeks and rivers, and everyone benefiting from irrigation used to donate labor. There were two types of irrigation channels: *gadkulo* and *khola-kulo*. The former is constructed from a bigger and perennial river and is short, and the latter is smaller and longer. Those linked with *gadkulo* had to donate a person from each house until the maintenance was complete. For the *khola-kulo*, a person had to be sent for every 7 *muri* paddy production. If this labor donation was not done, the villagers used to levy a fine. The fine was Rs 0.50 before 1943, and Rs 1 in 1944–1949, increasing to Rs 5 in 1965. The field had to be watered according to agreed norms. Those not following the norm had to pay the fine. The fine in the late 1960s ranged between Rs 1 and Rs 5. The fine was invested in the irrigation development itself (Singh 2028 v.s.: 84–85).

5.2.7. Roadlessness

Karnali is a roadless world even today although a track has recently been opened. Transportation is still very difficult. A kilogram of rice which costs Rs 20 in the plains requires Rs 50 to 60 for transportation, especially when transported by air. A bag of cement worth Rs 300 in the plains costs up to Rs 5000 when it reaches to the construction site. Moreover, it is difficult to transport locally produced commodities like apples, livestock and livestock products. The potential to utilize these products has not been realized in the absence of roads. As a result a road had been proposed to link Surket with Jumla (210 km). It is expected that this road will end the crisis and the plight of the residents of Karnali, and will take the economy of this region to the mainstream of the national economy. Accessibility is the main problem in Karnali, and this road will end this problem. But as of now, the food crisis is growing, and people are migrating to other places for secure lives.

In mid-2007, a dirt road has been constructed and a few vehicles plied on it. This led to reduction in the price of general goods and commodities. But technically the road is not complete yet. It is also extremely risky to travel on this road and there are only a few small vehicles that run on this road.

The road is also expected to bring many other social changes. The land near the road has been going for sale like a hot cake. Its price has increased by about 10 times. Outsiders have been buying these lands. This is especially so in Jumla. The road has also reduced the cost of transportation by almost half. As a result, when this road becomes fully operational, the locals expect that the food-aid politics will be over. In about 2 years time, the track up to Gamgadi, Mugu will be opened.

5.2.8. Government neglect and discrimination

The main explanation provided by Shah (2000) for the underdevelopment of Karnali is that it has been discriminated against by the central government since unification. After unification, the

central government regarded the Jumlis (in the past Jumla covered almost all of today's Karnali) with disfavor as they had resisted unification, and the rulers of Jumla did not surrender as easily as other states like Bajhang in the far-west. This gave an excuse for the state to control the people of Jumla very tightly. The local functionaries like the *Mukhiyas* and *Jimmawals* were the conduits for the exploitation and extraction of resources from people by the state (Shrestha 2028 v.s.). Even now in Jumla Khalanga (the headquarters of Karnali), there are about 400 *Mukhiyas* who were very powerful as recent as 15 years ago.

Karnali has also suffered because, although numerically dominated by Brahmins and Chhetris, which are supposed to be the ethnic (or caste) groups taking maximum state resources and benefits, these groups too are disadvantaged in Karnali (Shah 2000). Shah further says that it is a leadership rooted in Karnali that is essential for development. But until now there is no such person in the bureaucracy or the army or the police or in the Planning Commission who has a feeling for Karnali. Unless such a leadership is developed through a bottom-up approach, there are poor prospects for Karnali, according to Shah (2000).

Even in recent times, government neglect is seen. There is total lack of political will in Kathmandu to develop Karnali. This may relate in part to the marginal status of the region politically, which is in turn related to the low population and political representation from the region. Despite the establishment of various commissions and boards, the region has been appallingly neglected. Similarly, the sparse population and perceived lack of development potential in part explains the reluctance of government—and indeed of INGOs and national NGOs—to allocate resources to the region.

The budget allocated to the five districts of Karnali is only 1 percent of the total budget of the country. Most of this budget is used to pay the salary of the staff coming from other places. After the construction of the airport, outsiders have gone there to establish businesses. The locals now feel that they are cheated in every respect.

They have established the Karnali Mukti Morcha for the autonomy of the Karnali, but the is not active.

The region also suffers from the lack of some basic services like education and health services. There is one campus in Jumla, which is the only one in the Karnali zone as a whole. There are only a few higher secondary schools, but they are useless. Only about 0.01 percent of the government budget is spent on education in Karnali region. The health budget is the same as that of education. In 1997/98 government allocated only 1.16 percent (0.20 percent in Dolpa, 0.22 percent in Mugu, 0.2 percent in Jumla, 0.21 percent in Kalikot, 0.21 percent in Humla) of its total budget in Karnali zone. On the other hand, the cost of development is very high. Similarly, health and sanitation standards are not satisfactory either. They do not have pure drinking water or toilet facilities. The villages are filthy, and therefore they are prone to any endemics anytime especially in the monsoon. This is especially so in the monsoon season when the rain water washes away all the dirt from the seepage area, which is dirty because of human faeces and animal waste, and dump it in drinking water sources like rivers, springs, wells and the like. A study conducted in Hat Sinja, which is relatively better than the rest of Karnali, also revealed that drinking water was dirty even in 1971. The research conducted at that time reveals that people do not use any kind of purification process. The only purification process followed was that women bring the water in earthen or metal pots and keep it standing for about 1-20 minutes. This helps in the sedimentation of dirt, but other things are not removed (Shrestha 2028).

In short, despite growing problems of food shortage and food insecurity—manifesting periodically as local famines—which are the consequence of a complex nexus of political, economic and social changes in the region and its relationship to the wider world, development intervention has remained extremely limited, with a low level of resources, effort and imagination being devoted to the region and its difficulties. The government—and, for the most part,

foreign development agencies—interventions have been directed towards the mitigation rather than the resolution of the underlying problems and could even be said to have contributed to the difficulties of the region. Like an incomplete course of drugs can strengthen bacterium or virus responsible for illness, inadequate intervention has tends to worsen the situation in medium and long run, and even arguably in the short run. An example is the distribution of subsidized food.

The government's continued neglect of the region has also led to some rebellious feeling among the young people of Karnali. They have established a local organization—the Karnali Mukti Morcha—to struggle for the autonomy of the Karnali, but it is not active. They argue that by having autonomy Karnali could be developed, as the decision-makers would then be the local people. If this happens, there will be responsible leaders because their future depends on development of Karnali. Karnali has, more recently, become a place where there is significant support for the Maoist insurgency. There is undoubtedly at least an indirect link between poverty in Karnali and support for the Maoist insurgency.

5.2.9. External intervention

External intervention is also blamed for the effective 'destruction' of indigenous knowledge and technology previously applied to the farming and natural resource management systems and eminently appropriate for the distinctive circumstances and the distinctive environment of Karnali. While complaining about 'primitive' local technology, little assistance is provided to develop appropriate alternatives. For example, locally suitable minor crops like *ragi* and buckwheat were marginalized or ignored in government programmes. As a result, their role in the local farming economy has declined.

Similarly, external forces have been responsible for the erosion of pre-existing social regulating mechanisms regarding consumption and family relations. Polyandry for example, practiced by several

local indigenous groups, is considered by some to have played a positive role in controlling population. A recent study by Om Gurung (2001) reveals that in households and communities in which polyandry is still existing, there is economic affluence (in a relative sense). Even in the past, ethnic groups which practiced polyandry were wealthier, and this custom was common among local Tibeto-Burman groups. By contrast, the Indo-Aryan groups, including the increasingly predominant Brahmins and Chhetris, suffered as a result of their practice of polygamous marriage which entails dividing their land among their siblings and their sons.

Government efforts to 'solve' the problem of food insecurity in this region (mainly by food aid, which will be discussed in detail later) have failed to examine the significance of all of these factors, or indeed to take at all seriously, the complex changes that have taken place both in the farming and livelihood systems of the Karnali Zone and in the wider political, economic and social relations between this region and other regions including Tibet, the rest of Nepal, and India. Government intervention has been for the most part confined to providing food-aid where and when there is an acute crisis. Because of the failure to consider the chronic food insecurity of the region strategically, and to explore the underlying causes and address these systematically, the problems have, not surprisingly, persisted.

Moreover, what government aid has been provided has not been sufficient. The periodic and irregular distribution of subsidized food has contributed to a vicious circle of underdevelopment in Karnali region. As a large part of the limited resources devoted to the region is spent in transporting food into the region—and this accrues largely to outsiders—the region never receives adequate support for the development of infrastructure which might promote more effective production of food or of other commodities which could be exchanged for food. Lack of basic infrastructure has also hindered and constrained the supply of goods and services required for economic and social development and basic welfare. It has also

made it extremely expensive to provide emergency assistance when acute food shortages have emerged.

Another hypothesis regarding lack of food security in Karnali zone is that there is growing dependency of people on external food sources. More generally, the import of the vast majority of goods, including food, from outside means that the local population is obliged to spend a good deal of money simply on obtaining basic staples. Local limitations on food self-sufficiency and the high cost of transport in and out of the region explain this syndrome, but it is also based on a 'famine relief' approach to developing food security, which appears misguided. Mugu DDC president Mohan Bahadur Baniya argues that 'the availability of subsidized grain stops local people from working to produce more. The subsidy money would be better spent on programmes to increase local production to help the Karnali to meet its food needs' (cited in KIRDARC 2002: 15). The District Development Committee president, VDC chairman and committee members generally put pressure to distribute food to their supporters. In any case, the subsidized transport of food grains has been subject to mismanagement, corruption and fraud, with the targeted beneficiaries often failing to receive adequate supplies.