

Nepal: Consequences of Migration and Policy Implications

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I. CONSEQUENCES OF MIGRATION

The dominant pattern of highland-lowland migration in Nepal is an indicator of regional imbalance. Increasing population pressure in the highlands and polarisation of development in the lowlands have contributed to larger volumes of this migration trajectory in recent decades. Most of the migrants are moving from resource-poor regions to regions with more land resource and employment opportunities. Inter-regional migration in Nepal has a positive impact on the total economy in both the origin and destination regions. Large-scale out-migration from highlands aids in relieving the pressure of population in depressed areas by providing alternative areas and avenues for livelihood. Transfer of population through migration to resource-rich regions has various advantageous impact on the destination area. Migration of economically active population to low density areas in terms of available resources leads to fuller utilisation of those resources. Expansion of cultivated land in the lowlands has directly contributed to an increase in overall food production. Increment of population in such high potential regions also contributes to increase in economic activity, more production and economic development. The consequences of migration are most apparent at the destination whereby the lowlands are undergoing significant changes in demographic character, social composition, land use and level of development.

a. Demographic Shift

An obvious consequence of large-scale inter-regional migration has been the change in the size of regional population. Since the mid-1950s, population growth rates have been consistently higher in the lowlands. They also had higher rates of net migration. The average annual population growth rate for the country during 1952/54-81 was 2.16 percent. It varied from 1.22 percent in mountain/hill to 3.34 in the tarai to 3.46 in inner tarai. Of the total population increase of 6.5 million during 1952/54-81, inner tarai and the tarai accounted for 66.7 percent. The increase in density in terms of additional persons per square kilometer in the lowlands was four times that in the highlands. Thus, the lowlands share in total population increased from 34.7 percent in 1952/54 to 48.7 percent in 1981.

Migration was an important factor in the increase of the tarai population. During 1961-81, the tarai experienced 2.5 times increase in population and 6.4 times increase in net migration. The last decade (1971-81) recorded largest increases in population in regions of high in-migration. Mountain and hill regions with negative net migration

had a lower population growth. Growth rate and net migration was highest in the far west tarai. In the tarai, net migration volume was 10.5 percent of its 1981 population and 31 percent of its population increase during 1971-81. In the far west tarai, the volume of net migration was 39.7 percent of the regional population increase and 21.3 percent of its total population. Eastern tarai came next with a high percent of net migration volume to its total population and decennial increase.

During 1952/54-81, number of households in the country increased by 69.6 percent as compared to a population increase of 81.9 percent (Table 1). Household increase was 39.9 percent in the highlands and 120.8 percent in the lowlands. The share of the lowlands in total households rose from 36.7 percent in 1952/54 to 48 percent in 1981. In 1952/54, the highlands had a larger average household size (5.8) than the national average (5.6) and that of the lowlands (5.0). Three decades later, average household size of the highlands declined while that of the lowlands increased (Table 1). The lowland average household size (5.9) in 1981 was higher than that of both the national average (5.8) and the highlands (5.7).

In 1981, 51.3 percent of inter-regional migrants were males. Regions with high net migration gained more in male population. The change in sex ratio during 1952/54-81 was 100.4 to 117.8 for the lowlands and 100.7 to 112.5 in the highlands (Table 1). Eastern tarai, eastern inner tarai and eastern mountain/hill regions all changed from female to male preponderance. On the other hand, number of males to females declined in central and western mountain/hill regions. Male predominance was most marked in the tarai. By elevation zones, the percentage of males in 1981 was 51.2 in the mountain, 50.5 in the hill and 52 percent in the tarai.

The increase in male population was more prominent in the tarai, the prime destination of inter-regional migrants and immigrants. The increase of males vis-a-vis females was high in eastern tarai that also had the highest volume of net migration and immigration. Within the hills, Kathmandu Valley with considerable in-migration, had a very high increase in males. The overall rise in sex ratio in favour of males may be also be attributed to decrease in the rate of emigration and increase in immigration which are both male dominated.

The broad age group of inter-regional migrants in 1981 was distributed as 70.2 percent of 15-59 years, 22.6 percent below 14 years and 7.2 percent of over 59 years. Migration seemed to have contributed to the relative youthfulness of population in the destination regions. In 1952/54, the tarai had a higher median age (23.3) than the mountain/hill (19.9). Three decades later, median age for the tarai declined while that of mountain/hill increased. The proportion of youthful population increased markedly in the tarai. The median age for the tarai became lower than that of the mountain/hill, thus reversing the previous situation.

Table 1: Number of Households, Average Size of Household and Sex Ratio by Geographic Regions, 1952/54 and 1981.

Region	Number of Households		Average Household Size		Sex Ratio		
	Percent Distribution		Percent Increase		1952/54	1981	
	1952/54	1981	1952/54	1952/54	1952/54	1981	
NEPAL	100.0	100.0	69.6	5.6	5.8	100.6	105.0
HIGHLANDS	63.3	52.0	39.9	6.8	5.7	100.7	112.5
<i>Mountain/Hill</i>	58.4	47.5	37.9	5.8	5.7	101.0	101.3
1. West	16.3	13.4	39.0	6.1	5.8	102.5	101.0
2. Central	22.0	18.4	41.4	5.5	5.6	101.0	100.9
3. Kathmandu Valley	4.9	4.8	63.7	5.5	6.2	102.2	113.5
4. East	20.1	15.8	33.0	5.8	5.6	98.5	102.0
LOWLANDS	36.7	48.0	120.8	5.2	5.9	100.4	117.8
<i>Inner Tarai</i>	5.4	8.0	141.7	6.1	6.2	99.6	103.9
5. West	1.3	2.6	229.3	6.5	6.5	100.0	102.8
6. Central	1.9	3.2	181.5	6.1	6.1	102.0	106.0
7. East	2.1	2.2	76.8	5.9	6.0	96.8	102.4
<i>Tarai</i>	31.3	40.0	115.5	5.0	5.9	100.6	108.6
8. West	2.5	4.8	222.9	6.2	6.8	109.7	112.6
9. Central	5.1	6.1	101.2	4.7	6.1	103.1	108.9
10. East	23.7	29.0	107.3	5.0	5.7	99.0	107.8

Sources: Census 1952/54, Pt. I, Section 1, Table 7 and Section 2, Table 1 Census 1981, Vol. I, Pt. I, Table 1, and Table 3.

The increase in population of 0.14 years age group during 1952/54-81 was 52.7 percent in mountain/hill and 202.3 percent in the tarai (Table 2 A). The proportion of this age group in the tarai population rose from 36.3 percent in 1952/54 to 42.5 percent in 1981. Their increase in the mountain/hill was marginal, 39.3 to 40.5 percent. Thus, there was a shift in dependency ratio² at the macro regional level. In 1952/54, the tarai had a lower dependency ratio than that of mountain/hill, 0.62 against 0.74 (Table 2A). By 1981, the tarai had a high dependency ratio of 0.83 compared to 0.79 for mountain/hill. Estimates of total fertility rate, on the other hand,

were higher for the mountain/hill (Table 2 B). The large increase in dependency ratio despite a lower level of TFR in the rurai, therefore, is indicative of sizable volume of households migrating with their dependents.

Table 2: Dependency Ratio and Fertility Rate by Macro Regions

A. Change in Broad Age Groups and Dependency Ratio

Broad Age Group/Years	Nepal			Mountain and Hill			Tarai		
	1952/54	1981	% Change	1952/54	1981	% Change	1952/54	1981	% Change
0-14	38.4	41.4	+96.2	39.3	40.5	+52.7	36.3	42.5	+202.3
15-64	58.9	55.4	+71.6	57.7	56.0	+44.5	61.8	55.4	+128.4
Over 64	2.7	3.2	+121.9	3.0	3.5	+71.2	1.9	2.1	+310.2
Dependency Ratio	0.70	0.81	-	0.74	0.79	-	0.62	0.83	-

Sources: Census 1952/54, Part I, Section 2, Table 2.
Census 1981, Vol. II, Table 5, pp. 61.64 and 67.

B. Estimated Total Fertility Rate

	Mountain	Hill	Rurai
1971a	5.99	6.08	5.34
1981b	5.88	6.45	5.87

Source: a. Karki, 1981 b. Nepal, CBS, 1986a.

Other demographic variables that signify greater change in the lowlands are occupational pattern and urbanisation. The increase in economically active population during 1952/54-81 was 30.6 percent in the highlands and 94.3 percent in the lowlands (Table 3). In 1952/54, the proportion of labour force in agricultural occupation out of the regional population was 96 percent in mountain/hill (excluding Kathmandu Valley), 65.2 in Kathmandu Valley, 94.9 in inner tarai and 92 percent in the tarai. Three decades later, the proportion of mountain/hill labour force engaged in agriculture declined only marginally: by 0.8 percent. It increased to 72.4 percent in Kathmandu Valley and declined to 89.3 percent in inner tarai and to 85.6 percent in the tarai. The proportion of non-agricultural labour force in the tarai increased from 8 percent in 1952/54 to 14.4 percent in 1981. The tarai accounted for 68.9 percent of the total labour force increase in non-agricultural occupation.

Table 3: Change in Occupation of Population Above 14 Years of Age and Economically Active, 1952/54-81

	1952/54	%	1981	%	Change	%
HIGHLANDS	2,585,323		- 3,376,483		- 791,160	30.6
<i>Mountain/Hill</i> (excluding Kathmandu valley)	2,410,653	100.0	3,087,848	100.0	677,195	28.1
Agriculture	2,313,823	96.0	2,938,223	95.2	624,450	27.0
Non-Agriculture	96,830	4.0	149,575	4.8	52,745	54.5
<i>Kathmandu Valley</i>	174,670	100.0	288,635	100.0	113,965	65.2
Agriculture	113,929	65.2	208,970	72.4	95,041	83.4
Non-Agriculture	60,741	34.7	79,665	27.6	18,924	31.2
LOWLAND	1,287,716		- 2,501,705		- 1,213,989	94.3
<i>Inner Tarai</i>	245,925	100.0	386,349	100.0	140,424	57.1
Agriculture	233,383	94.9	345,166	89.3	111,783	47.9
Non-Agriculture	12,542	5.1	41,183	10.7	28,641	228.4
<i>Tarai</i>	1,041,791	100.0	2,115,356	100.0	1,073,565	103.0
Agriculture	958,268	92.0	1,809,724	85.6	851,456	88.9
Non-Agriculture	83,523	8.0	305,632	14.4	222,109	765.9
Total	3,873,039	100.0	5,878,188	100.0	2,005,149	51.8
Agriculture	3,619,403	93.5	5,302,133	90.2	1,682,730	46.5
Non-Agriculture	253,636	6.5	576,055	9.8	322,419	127.1

Sources: Census 1952/54, Part One, Section 2, Table 12a
Census 1981, Vol. I, Part V, Table 24.

The increase in non-agricultural labour force is related with availability of non-farm employment. During the period under review, 1952/54-1981, the lowlands had a sizable growth in urban population. The share of lowlands in urban population increased from 17.4 percent to 53.3 percent while the proportion of population living in urban areas rose from 1.4 percent to 7 percent. Urban population grew both due to increase in number of urban localities and migration to urban areas. Of the 61,748 migrants to urban areas in 1971, 58 percent were directed to lowland urban localities (Nepal CBS, 1974, Vol. V, Table 40). The 1981

census does not provide data on migration for urban localities except categorizing the population as native or foreign born. However, a survey in 1983 of ten tarai districts indicated that 41.5 percent of internal migrants and 55 percent of immigrants were living in urbanized localities (Nepal, TFM, 1983, Tables 11.7 and 11.25). Thus, migration seemed to have contributed to the growth of urban population and increase in nonfarm labour force in the lowlands.

b. Socio-Cultural Dispersal

Migration has brought about significant changes in socio-cultural composition of the regional population. This change is most apparent in destination regions, the lowlands. There are also variations in extent of dispersal from native area among the socio-cultural groups. Census data on religion and mother tongue available since 1952/54 can be used as indicators of such dispersal. It is to be noted that a high proportion of total population claim adherence to Hinduism (State religion) and Nepali (national language) as their religion and mother tongue respectively. The large increase in number of such claimants, therefore, include natural increase as well as those who have noted for these State patronised cultural norms. Adoption of Hindu religion and Nepali language is quite propounded among hill tribals and more so at migration destinations outside their native area. Thus, changes in population of minority religious and linguistic groups provide a better measure of socio-cultural dispersal than the spread of Hindu religion and Nepali language, both pan-Nepalese aspects.

The 1981 census reported nearly ninety percent of the total population as Hindus. The remaining were categorized as 5.3 percent Buddhist, 2.6 percent Muslim and 2.5 percent as others and unstated (Table 4 A). The Hindu population increased from 7.3 million in 1952/54 to 13.4 million in 1981. The large increase in Hindus in all regions was due to natural increase, claim and adoption of Hindu religion by the tribals and immigration of Hindu caste groups. The increase of Hindu population in the lowlands was more than three times than that in the highlands.

The minority religions, Buddhism and Islam, are more location-specific. Thus, in 1952/54, 78.9 percent of Buddhists were in the highlands and 97.1 percent of Muslims were concentrated in the lowlands (Table 4 B). In 1981 also, 72 percent Buddhists were in the highlands and 96.9 percent of Muslims were in the lowlands. Unlike Hinduism that incorporates diverse claimants, these two religious groups represent separate ethnic entities. Nepalese Buddhists are drawn basically from Mongoloid groups from the highlands while the Muslims are Caucasoid people from the plains.

Of the main three religious groups in Nepal, the Buddhist population showed the least increase (Table 4 B). The low growth of Buddhist

Table 4: Distribution and Change in Population by Religion, 1952/54 - 1981

A. Percent Distribution of Population by Religion

Region	Hindu		Buddhist		Muslim		Other/ Unstated		Total
	1952/54	1981	1952/54	1981	1952/54	1981	1952/54	1981	
NEPAL	88.9	89.5	8.9	5.3	2.5	2.6	0.0	2.5	100.0
Mountain/Hill (Kathmandu Valley)	90.5	90.0	9.3	7.1	0.1	0.1	0.0	2.8	100.0
Inner Tarai	75.7	87.4	23.9	10.0	0.3	0.5	0.1	2.1	100.0
Tarai	74.1	89.4	25.7	8.9	0.2	0.4	0.0	1.3	100.0
	90.8	89.4	0.8	1.8	8.4	6.3	0.0	2.5	100.0

B. Change in Buddhist and Muslim Population

	Buddhist				Muslim			
	1952/54	1981	Change	%	1952/54	1981	Change	%
NEPAL	707,104	799,081	91,977	13.0	208,899	399,197	190,298	91.1
Highlands	558,122	575,072	16,950	3.0	2,137	12,457	6,320	103.0
Mountain/ Hill (excluding Kathmandu Valley)	459,731	498,129	38,398	8.4	5,103	8,416	3,313	64.9
Kathmandu Valley	98,391	76,943	-21,448	21.8	1,034	4,041	3,007	290.8
Lowlands	148,982	224,009	75,027	50.4	202,762	386,740	183,978	90.7
Inner Tarai	128,829	113,405	-15,424	12.0	964	4,798	3,864	400.8
Tarai	20,153	110,604	90,451	448.8	201,798	381,942	180,144	89.3

Sources: Census, 1952/54, Part I, Section 2, Table 5.
Census, 1981, Vol. I, Part III, Table 13.

population as a whole may be attributed to attrition through Hinduisation. Buddhists declined in absolute numbers in Kathmandu Valley and inner tarai. Their increase in the mountain/hill (excluding Kathmandu Valley) was only 8.4 percent. Even in 1952/54, 18.2 percent of Buddhists were recorded in inner tarai. In subsequent decades, many of them seemed to have moved to the tarai. By 1981, their number grew substantially in the lowlands.

The increase of Muslim population during 1952/54-81 was 91.1 percent (Table 4 B). Part of this increase was due to immigration from India as well as Bangladesh. The tarai remains their area of concentration: 96.6 percent in 1952/54 and 95.7 percent in 1981. There was also some regional dispersal. Their number in inner tarai increased five-fold and in Kathmandu Valley nearly four-fold. The increase in Muslim population was 103 percent in the highlands compared to 90.7 percent in the lowlands.

The census of 1952/54 provides the earliest data on linguistic composition of the population (Nepal, Statistics Department, 1957; Part I, Section 2, Table 9). The various languages and dialects can be classified as 18 of Tibeto-Burman, 15 of Indo-Aryan, 3 of Dravidian and 2 of the Munda family. The distribution of total population by linguistic families as mother tongue was 77.3 percent Indo-Aryan, 22.1 percent Tibeto-Burman, 0.2 percent Munda, 0.1 percent Dravidian and 0.3 percent others unstated. By geographic category, 70.6 percent of total population had mountain/hill languages, 28.9 percent had tarai languages and 0.5 percent had inner tarai languages as their mother tongue. Of the total population, 48.7 percent had Indo-Aryan Nepali (hill language) as their mother tongue.

During 1952/54-81, those with mountain/hill mother tongue increased by 82.1 percent mainly through doubling of those reporting Nepali as their mother tongue. The large growth in Nepali speakers was both due to natural increase and adoption of Nepali as the first language mainly by Tibeto-Burman speakers. Thus, four hill tribal languages recorded absolute decline during 1952/54-81 (Map 1). Speakers of Tibeto-Burman languages increased only by 0.6 percent. Increase of population of those having tarai languages as mother tongue was 64 percent. All tarai languages, except Awadhi, had large gains in the number of speakers. Annual growth rate for Bhojpuri was 4.98 percent and that of Maithili, 2.24 percent (Table 5). It is obvious that such high growth rates were less due to differential natural increase but immigration from India, the source area of these languages.

There have been significant changes in number and proportion of population by mother tongue and geographic region. In 1952/54, the tarai had 138,237 persons or 6.1 percent of its total population with mountain/hill languages as mother tongue. By 1981, the mountain/hill language group in the tarai increased to 2,154,139 and constituted

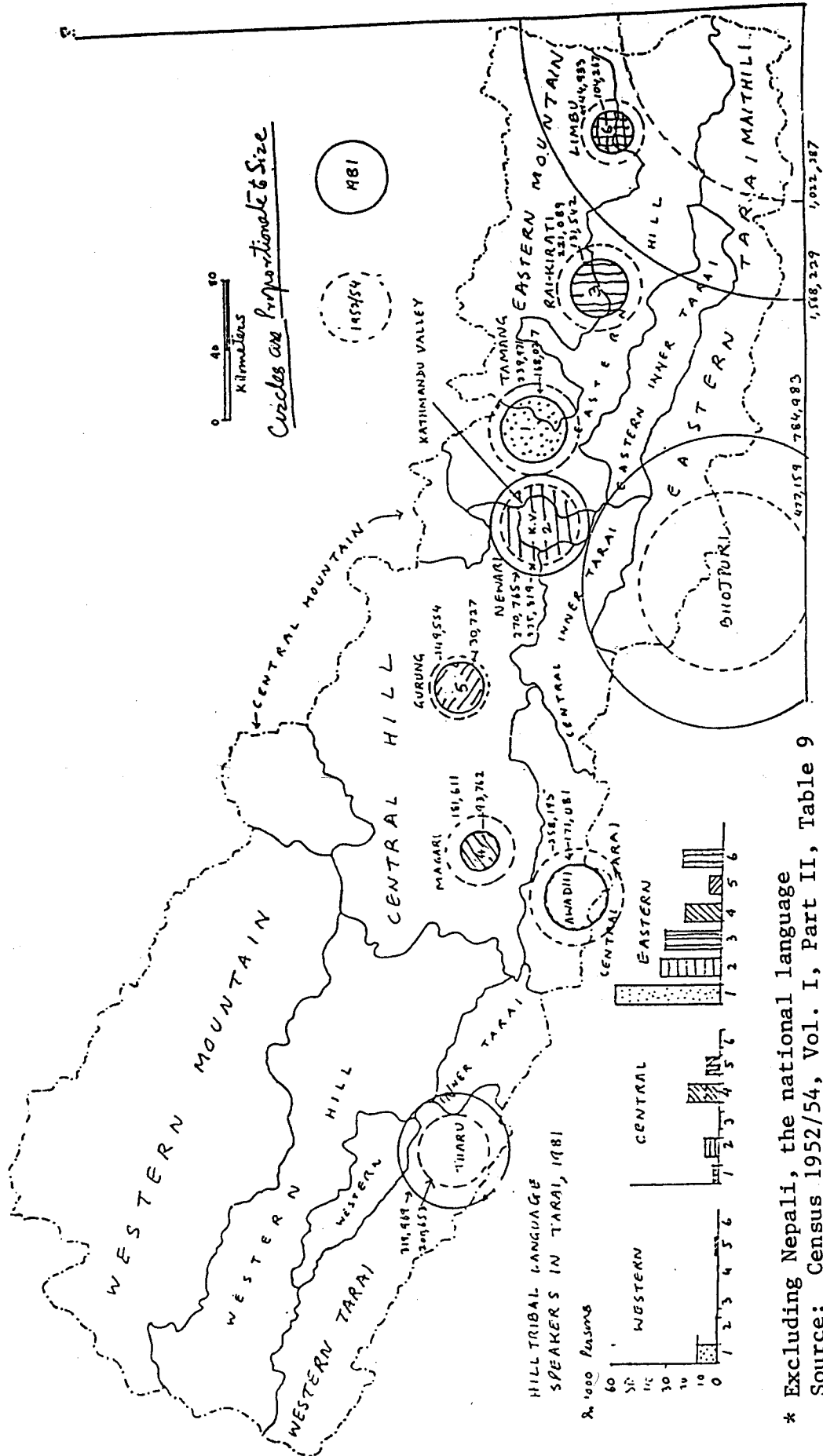
38.5 percent of the tarai population. On the other hand, the proportion of tarai language speaker in the highland population increased from 0.5 percent in 1952/54 to 1.1 percent in 1981. The largest increase in the tarai was among Nepali speakers. The percentage of Nepali speakers in the tarai rose from 2.3 in 1952/54 to 21.6 percent in 1981 (Table 5). The increase of Tibeto-Burman speakers (mountain/hill origin) was from 2.5 percent to 14.4 percent. All mountain/hill languages had proportionately higher increases in the lowlands than in their native area. The increase in the number and proportion of those with mountain/hill mother tongue in the lowlands was mainly due to migration.

Each language or mother tongue can be ascribed with a native area where the majority of speakers reside. The proportion of those living outside the native area may be taken as a measure of dispersal. In 1952/54, 9 out of 16 classified languages had over 90 percent speakers within their native area (Table 5). Five out of seven tarai languages had the least dispersal. No Rajbansi, Satar and Santhal speakers were recorded outside eastern tarai. Conversely no Bhote-Sherpa and Sunuwar were recorded in inner tarai and the tarai. Tharu and Tamang were the only groups that had a majority of their speakers outside their native area. The next linguistic group with high dispersal was Newari. A third of Nepali and Magari speakers were also outside their native area. Dispersal of Nepali was both due to migration and adoption of Nepali by Tibeto-Burman tribal groups. Of the nine hill languages, 4 had more than ninety percent speakers in their native area.

By 1981, only three tarai languages had more than 90 percent speakers in their native area (Table 5). Four language groups had more people outside the native area. Dispersal among Tamang speakers increased from 51.5 to 60.7 percent while for Nepali, it increased from 33.9 to 53.1 percent. Despite high dispersal, Newari and Tharu were the only groups that increased their proportion in their native area. Dispersal of Magari speakers was also quite high. Hill languages had a higher degree of dispersal in the lowlands than those of tarai languages in the highlands, an evidence of predominant highland-lowland migration.

Thus, the two macro regions show divergent patterns in the change of speakers by native area. Of the ten languages (other than Nepali) with more than one percent speakers out of the total population, six are of the hill group and four of tarai group (Map 1). During 1952/54-81, all such hill languages, except Newari, recorded absolute declines in their native area. The decline was both due to increasing adoption of Nepali language and dispersal by migration to other regions. In the tarai, on the other hand, all but Awadhi recorded increase in native area. The increase for Maithali and Bhojpuri was significantly high and this increase can be attributed to a high rate of immigration.

MAP 1: Change in number of speakers of main languages* in native area, 1952/54-81



* Excluding Nepali, the national language
 Source: Census 1952/54, Vol. I, Part II, Table 9
 Census 1981, Vol. I, Part III, Table 12

Table 5: Linguistic Dispersal by Geographic Regions, 1952/54 and 1981 and Growth Rate 1952/54-81 In Percent

Mother Tongue	Native Area	In Native Area				Outside Native Area				Average Annual Growth Rate 1952/54-81		
		1952/54	1981	Moun- tain Hill 1952/54	1981	Kath- mandu Valley 1952/54	1981	Inner Tarai 1952/54	1981		Tarai 1952/54	1981
MOUNTAIN/HILL												
<i>Indo-Aryan</i>												
1.Nepali	West/Central Hill	66.1	46.9	21.8	18.6	4.7	4.7	8.2	8.2	2.3	21.6	2.93
<i>Tibeto-Burman</i>												
2.Tamang	Eastern Hill	48.5	39.3	22.7	20.1	3.9	6.6	21.6	19.9	3.3	14.1	0.20
3.Newari	Kathmandu Valley	58.9	60.3	34.1	22.5	58.9	60.6	4.2	5.8	2.8	11.4	0.61
4.Rai- Kiranti	Eastern Hill	93.7	59.4	0.0	12.7	0.0	1.8	5.1	10.5	1.2	16.4	-0.28
5.Magari	Central Hill	66.3	50.4	18.6	12.3	0.3	0.5	9.8	14.6	5.0	22.4	-0.80
6.Gurung	Central Hill	92.2	76.4	5.6	4.7	0.3	1.9	1.6	5.7	0.3	11.3	0.27
7.Limbu	Eastern Hill	99.6	80.7	0.0	0.2	0.0	0.2	0.0	0.4	0.3	18.5	-0.40
8.Bhote- Sherpa	Eastern Mountain	74.5	46.9	25.1	35.4	0.4	2.6	-	1.7	-	7.8	0.18
9.Sunuwar	Eastern Hill	94.0	70.8	-	4.8	0.0	0.5	-	1.7	-	7.4	-1.37
TARAI												
<i>Indo-Aryan</i>												
10.Maithali	Eastern Tarai	99.8	94.0	0.0	4.2	0.0	0.5	0.2	1.3	0.0	1.1	2.24
11.Bhojpuri	Eastern Tarai	99.9	68.7	0.0	0.8	0.0	0.1	0.0	0.1	-	30.3	4.98
12.Tharu	Western Tarai	41.7	42.9	7.7	0.7	0.0	0.0	24.8	23.2	25.8	33.1	1.85
13.Awadhi	Central Tarai	78.6	73.0	0.1	0.4	-	0.1	1.5	0.2	19.9	26.3	-1.02
14.Rajbansi	Eastern Tarai	99.9	93.6	-	3.0	-	1.4	-	0.4	0.0	1.5	2.40
<i>Munda</i>												
15.Satar	Eastern Tarai	99.9	96.8	-	2.1	-	0.7	0.0	0.3	-	0.4	1.21
16.Santhal	Eastern Tarai	100.0	77.9	-	17.5	-	0.5	-	3.1	-	1.0	37.03

Source: Census 1952/54, Vol. I, Part II, Table 9
 Census 1981, Vol I, Part III, Table 12
 See Map 1.

C. Land Use Change in the Lowlands

One of the visible consequences of migration in the lowlands has been the change in land use. Since, most movement is rural-to-rural, it has involved large-scale forest encroachment for agricultural settlement. Estimates of deforestation in the lowlands diverge widely. For the period 1964-72, the figures for deforestation range from 120,000 hectares (Nepal, Forest Ministry, 1976:5) to 340,000 hectares (World Bank, 1974: Annex 1). Another source states that during 1964-74, land cleared from forest for official settlement was 77,700 hectares but an additional 237,600 hectares of forest area were lost by encroachment (Nepal, National Planning Commission, 1974:10). One source using these diverse estimates concluded that up to 10,000 families (50-60,000 people) were migrating each year and encroaching on an average of 20,000 hectares of forest land (Dixon, 1977:103).

The first inventory of forest resources made in 1963/64 for the tarai and adjacent regions covering 3 million hectares indicated that 51.1 percent of the area was under forest (Table 6). The eleven tarai forest divisions, excluding inner tarai divisions of Dang and Chitawan, had 1.5 million hectares under forest and of this 23,728 hectares were encroached (Nepal, Forest Resources Survey, 1967). The area under forest was distributed as 42.9 percent in the east, 41.4 percent in the west and 15.7 percent in central tarai. Forest land covered 72 percent of the west, 48.8 percent of the central and 40.5 percent of the east in terms of their respective regional areas. In 1974/75, the tarai forest divisions had 1.4 million hectares of forest land (Table 7 A). This indicates a depletion of 156,198 hectares or 10.2 percent since 1963/64. Of the total forest land cleared, 54.4 percent was in the east, 29.4 percent in the west and 16.2 percent in the central tarai.

The 1963/64 forest data based on aerial photographs (scale 1:21,120) were by forest divisions. The Land Resources Mapping Project data based on aerial photographs (scale:50,000) provide another set of estimate on tarai forest by administrative districts (Kenting Earth Sciences, 1986b). Although the aerial extent of the two data sources vary by 3.7 percent, comparison of land use proportions by group of districts within each forest division indicates further depletion in forest area. As compared to 51.1 percent of the tarai area under forest in 1963/64, forest area declined to 43.7 percent in 1978/79 (Table 6). During the 15 years interval, forest area declined from 40.5 percent to 28.1 percent in the east and from 72 percent to 67.5 percent in the west. In central tarai, it declined from 48.8 to 44.7 percent. In 1963/64 the east led with 42.9 percent of the tarai forest. By 1978/79, its share had fallen to 32 percent. Nearly half of all tarai forest area left in 1978/79 was in the west.

Table 6: Change in Proportion of Land Use in the Tarai, 1963/64 and 1978/79

Region/Land Use	1963/64 (a)		1978/79 (b)	
	Hectare	%	Hectare	%
<i>West</i>	878,016	100.0	928,004	100.0
1. Forest land	631,800	72.0	626,037	67.5
2. Cropland/Agricultural	112,845	12.8	249,062	26.8
3. Other	133,371	15.2	52,905	5.7
<i>Central</i>	492,006	100.0	518,631	100.0
1. Forest land	240,293	48.8	232,070	44.7
2. Cropland/Agricultural	211,323	43.0	261,903	50.4
3. Other	40,390	8.2	24,658	4.8
<i>East</i>	1,617,452	100.0	1,443,349	100.0
1. Forest land	654,298	40.5	404,883	28.1
2. Cropland	826,028	51.1	927,392	64.3
3. Other	137,126	8.5	111,074	7.7
<i>Total</i>	2,987,474	100.0	2,889,984	100.0
1. Forest land	1,526,391	51.1	1,262,990	43.7
2. Cropland	1,150,196	38.5	1,438,357	49.8
3. Other	310,887	10.4	188,637	6.5

Source: a. Forest Resources Survey, 1967, p. 17

b. Kenting Earth Sciences, 1986, *Economics Report*, Appendix Five

Change in forest area (1963/64-74/75) and their regional proportion (1963/64-1978/79) both show larger extent of deforestation from the west to east. Eastern tarai had the largest magnitude of population increase and greatest loss in forest land. Additional persons per hectare of forest land lost was 8.6 in the east, 8.4 in the central and 2.5 in the west. On the other hand, additional migrants per hectare of forest cleared was the same in all regions. The tarai experienced 38.2 percent increase in population and 275.2 percent increase in net migration during 1961-71 (Table 7 B) as compared to

Table 7: Depletion in Forest Land and Population Increase in the Tarai*A. Depletion in Forest Land, 1963/64-1974/75*

Region	1963/64(a)		1974/75(b)		Decrease	
	Hectare	%	Hectare	%	Hectare	%
West	631,800	41.4	585,923	42.8	45,877	7.3
Central	240,293	15.7	214,936	15.7	25,357	10.6
East	654,298	42.9	569,334	41.5	84,964	13.0
Total	1,526,391	100.0	1,370,193	100.0	156,198	10.2

Source: a. Forest Resources Survey, 1967, p. 17
 b. Forest Dept. Land Use Survey, 1974/75. Cited in ADB HMGN, 1982, Vol. II, Appendix 2.26.

B. Population Increase, 1961-71

	1961		1971		Change	
	Number	%	Number	%	Number	%
Population	2,903,014	100.0	4,012,385	100.0	1,109,371	38.2
West	271,551	9.4	438,041	10.9	116,490	61.3
Central	418,181	14.4	632,401	15.8	214,220	51.2
East	2,213,282	76.2	2,941,943	73.3	728,661	32.9
Net Migration	106,587	100.0	399,925	100.0	293,338	275.2
West	7,317	6.9	69,146	17.3	61,829	845.0
Central	31,088	29.2	155,247	38.8	124,159	399.4
East	68,182	63.9	175,532	43.9	107,350	157.4

10.2 percent decrease in forest land during 1963/64-74/75. Roughly speaking, depletion of one hectare of forest land meant an increase of 1.9 persons in net migration. Assuming the ratio between forest depletion and migration increase to be constant, an increase of 293,338 in net migration during 1971-81 would mean deforestation of 154,388 hectares during the same period.

The depletion in forest area was associated with expansion of cultivated area. During 1963/64-1978/79, the proportion of cropland in the tarai increased from 38.5 percent to 49.8 percent (Table 6). In 1963/64, the tarai forest divisions included 1,150,196 hectares of cultivated land. The percentage of such land was 51.1 in the east, 43.0 in the central and 12.8 in the west. By 1978/79, the proportion of cultivated land increased in all regions, particularly in the west, from 12.8 percent to 26.8 percent of its regional area. It increased from 43 percent to 50.4 percent in the central and from 51.1 percent to 64.3 percent in eastern tarai.

The series of data on the estimate of area under various crops provide another evidence of expansion in cultivated area. It is to be noted, however, that the cultivated area and cropped area vary due to double and multiple-cropping³. During the decade 1970/71-80/81, Nepal's total area under various crops is estimated to have increased by 14.6 percent. (Nepal, FAM, 1972, and 1983). Of this increase, 236,600 hectares or 74.8 percent was registered in the lowlands. The tarai had 14.3 percent and inner tarai 25.1 percent increase in cropland (Table 8). Eastern tarai registered 13 percent decrease in forest land during 1963/64-1974/75 and cropland increase of same percent during 1970/71-1980/81. In central tarai the percent of increase in cropland was twice that of percent of depletion in forest land.

During the decade 1970/71-1980/81, the lowlands had 236,220 hectares or 16 percent increase in cropland as against population increase of 2,532,593 or 51.5 percent (Table 8). It meant an increase of 11 persons for each additional cropped hectare. Population increase vis-a-vis cropland increase was high in western tarai (16 persons/hectare) and low in central tarai (7 persons/hectare). The total volume of net migration to the tarai recorded in 1981 census was 686,178. It meant an increase of 3.8 more migrants on each additional hectare of land. In other words, the tarai regions being the prime destination of most migrants experienced rapid change in land use, and the process was basically one of the converting forest and other land use categories into cropland.

D. Making of a Dynamic Region

Nepal has been experiencing large-scale redistribution of population through spontaneous migration. Two-third of inter-regional migrants and most immigrants were directed to the lowlands that contributed to a rapid population growth of 2.5 times in less than three decades. Despite dominance of rural-to-rural migration, urban growth was also high. The average annual rate of urban population growth in lowlands was 7.8 percent as compared to 3.5 percent in the highlands. Overall, the lowlands had an average annual growth rate twice that of the highlands.

Table 8: Change in Area Under Crops and Population Increase in Inner Tarai and Tarai, 1971-1981

	1970/71		1980/81		Change		Population Increase 1971-81	
	'000 Hac.	%	'000 Hac.	%	'000 Hac.	%	Person	%
<i>Inner Tarai</i>	232080	15.7	290220	16.9	58140	25.1	370197	40.7
West	75900	5.1	120230	7.0	44330	58.4	141292	48.5
Central	107600	7.1	111870	6.5	4270	4.0	149675	42.4
East	48580	3.3	58112	3.4	9540	19.6	79230	30.0
<i>Tarai</i>	1245360	84.3	1423840	83.1	178480	14.3	2018479	50.3
West	199800	13.5	223690	13.1	23890	12.0	293202	89.8
Central	236250	16.0	285620	16.7	49370	20.9	325568	51.5
East	809310	54.8	914060	53.4	105220	13.0	1299709	44.2
Total	1477440	100.0	1714060	100.0	236620	16.0	2532593	51.5

Source: Nepal, Food and Agriculture Ministry, 1983:97-246

Levels of development by geographic regions show higher values for the lowland regions (Table 9). In economic development (agriculture, industry, transport, banking), the tarai led all other elevation zones. Among geographic regions, Kathmandu ranked first and central inner tarai second. Most lowland regions except eastern tarai had a higher economic development level than the highland regions except Kathmandu Valley. In socio-cultural (education, health, communication) development) also, the tarai and inner tarai ranked higher than the hill and mountain elevation zones. Kathmandu Valley ranked highest in socio-cultural development. Eastern and central tarai, and central hill came next. Western mountain and hill had very low levels of socio-cultural development.

All three tarai regions and central tarai ranked high in the level of regional development. Of the 18 tarai districts, 17 had regional development values higher than the national level average (Shrestha and Sharma, 1980: 140-145). In inner tarai, 3 districts were above and 3 below the national level. In the hill, 10 districts have higher and 23 lower values. Of the 15 mountain districts, only 2 had values higher than the national level. Thus, 20 out of 24 lowland districts had levels of development higher than the country's average level. The aggregate values of development level for the tarai and inner tarai were much higher than those of mountain and the hill. Kathmandu

Valley appeared as an island of high-level development in the backward highland area. In macro regional terms, one might state that higher the elevation of a geographic region, lower the level of regional development.

Development indicators of recent years and available into 15 divisions comparable to the census regions also show the comparative advantage of the tarai regions. For example, in terms of road length as ratio of the regional area, the tarai leads with 11.0 followed by the hill with 22.9 while the road length/area ratio for the mountain is 245.8 (Nepal, National Planning Commission, 1987:22-23). Three mountain regions (midwest, west and east) have no road (Table 10). All five tarai regions rank high in road length/area ratio. An exception to hill backwardness in road facility is the central hill (including Kathmandu Valley) that ranks second. Physical quality of life index (calculated on the basis of average life expectancy at birth, infant mortality and literacy rate), also places three tarai regions on the top followed by two hill regions. Far west and mid west regions in the mountain and hill rank very low in physical quality of life index (Nepal, NPC, op.cit. 32-34). Of the total development expenditure of Rs. 3.297 million during fiscal year 1985/86, the hill claimed 59.8 percent as against 33.9 percent for the tarai and 6.2 percent for the mountain (Nepal, NPC, op.cit: 14-15). Central hill (including the capital region) ranked first in development expenditure followed by central tarai. But most tarai regions were higher placed than other hill and mountain regions except western hill (Table 10). The five mountain regions ranked very low in development expenditure.

The total estimated GDP was valued at Rs. 4,174 at the 1984/85 current prices and of this 56.5 percent was contributed by the tarai regions. The share of hill regions was 39.2 percent and that of mountain regions only 4.3 percent (Nepal, NPC, 1987: 11-12). Central tarai ranked first and central hill second. Eastern and western tarai ranked third and fourth in GDP contribution. The level of development based on 25 variables placed the central hill (including the capital region) in the first rank. The next four places were taken by tarai regions (Nepal, NPC, op. cit: 35-39). The last four in the level of development were mountain regions (Table 10). As a general pattern, the tarai regions had a comparatively higher level of development except the central hill that includes the capital region.

The lowlands with concentration of infrastructural and production factors has emerged as a dominant region of demographic and economic transformation. Once a region associated with large estates of absentee landlords, increasing numbers of landless households encroaching and squatting on forest and common land have generated political tension (Kaplan and Shrestha, 1982). The problem of squatters, a new expression of increasing poverty and economic inequality, is basically the outcome of the increasing migration from the resource poor highlands. Interregional migrants are directed to the lowlands with land

Table 9: Levels of Development by Geographic Regions, 1977

	Economic		Socio-Cultural		Regional	
	Value	Rank	Value	Rank	Value	Rank
<i>Mountain</i>	362.9	D	552.6	D	915.5	D
1. West	247.6	13	467.1	13	714.8	12
2. Central	458.3	11	707.2	7	1,165.3	10
3. East	521.8	9	607.8	11	1,129.5	11
<i>Hill</i>	568.0	C	704.3	C	1,272.3	C
4. West	368.8	12	497.3	12	865.6	13
5. Central	683.0	7	818.9	4	1,502.1	6
6. Kathmandu Valley	1,154.7		1,172.7		2,327.5	
7. East	618.0	8	762.3	5	1,380.3	8
<i>Inner Tarai</i>	781.3	1	733.8	1	1,515.1	1
8. West	776.3	6	643.0	10	1,419.3	7
9. Central	1,065.3	2	863.0	3	1,928.3	2
10. East	502.3	10	695.5	8	1,197.8	9
<i>Tarai</i>	1,010.3	A	803.3	A	1,812.9	A
11. West	948.6	5	718.8	6	1,666.5	5
12. Central	1,038.5	3	685.7	9	1,724.2	4
13. East	1,025.1	4	866.2	2	1,890.4	3

Source: Shrestha and Sharma, 1980: 140-145.

available for agricultural settlement. The lowlands, particularly the tarai, is also the prime destination of immigrants. Unlike internal migrants, the immigrants are moving to lowland areas that were settled earlier and to urban areas. The dynamism of the lowlands economy has attracted immigrants and many of them intend to stay permanently (Nepal, Task Force on Migration, 1983). With few a exception tarai districts with high percent of foreign born and foreign citizens have a comparatively low percent of internal migrants. Thus, inter-regional migrants and immigrants are moving into different ecological niches: the former to frontier lands and the latter to settled areas and generally in secondary and tertiary occupations.

Table 10: Rank Order of Census Regions by Selected Indicators

Region	Road Mileage 1985	Physical Quality of Life	Development Expenditure 1985/86	Estimated GDP 1984/85	Level of Development Based on 25 Variables)
<i>Mountain</i>					
1.Far West	12	14	12	13	14
2.Mid West	-	15	14	14	15
3.West	-	11	15	15	9
4.Central	10	10	11	12	13
5.East	-	9	13	11	12
<i>Hill</i>					
6.Far West	9	12	10	10	10
7.Mid West	11	13	8	9	11
8.West	7	7	3	5	6
9.Central a	2	5	1	2	1
10.East	8	4	7	7	8
<i>Tarai</i>					
11.Far West	6	6	9	8	7
12.Mid West	5	8	6	6	5
13.West	3	2	5	4	3
14.Central	4	3	2	1	4
15.East	1	1	4	3	2

a : Including Kathmandu Valley

Source : National Planning Commission, 1987.

The traditional Nepalese term for the inner tarai and the tarai lowlands is 'madhesh' as a geographical extension of the 'madhyadesha' (heartland) referring to the Gangetic plain. Prevalence of endemic malaria until the late 1950's however, made it a peripheral region. Large-scale migration and development activities in the last three decades have since transformed its locational situation. Recent demographic and economic processes have all the potentials of transforming the lowlands into a dynamic region.

II. POLICY IMPLICATIONS

a. Pattern and Determinant

Nepal has been experiencing rapid population growth in recent decades. In less than three decades (1952/54-81), the total population increased from 8.5 to 15 million. Projections of population for 2,001 range from 21 to 26 million under low and high variants respectively or an increase of 1.4 to 1.7 times in another two decades (Nepal. Central Bureau of Statistics, 1986b). Another significant feature is the increasing magnitude of population redistribution through migration. During the period 1952/54-81, the increase in total population was 1.8 times as against 2.7 times increase in absentee population (reported away from home for six months or more). Increase in number of such absentees was ten times for those inside the country compared to two times for those outside the country, indicating increasing internal mobility. The last two decades (1961-81) recorded about 6.7 times increase in out-migrants from the highlands and about 5.6 times increase in in-migrants to the lowlands. The principal migration trajectory was from the hills to contiguous tarai regions. Given the fertility, mortality and migration trend of the last intercensal (1971-81) period, the total population of the tarai is projected to exceed 10 (low variant) to 13 (high variant) million by 2,001 from the present 6.6 million (Nepal, Central Bureau of Statistics, 1986 b: Table 50). This increment needs to be directed in a planned manner.

The principal reason for out-migration, particularly from the hills, has been increasing pressure of population on limited land resources. Considering the sizable volume of emigration in the last century, population pressure in the Nepal hills does not seem to be a new phenomenon. In the past, despite state inducements to settle in the lowlands, out-migration was primarily directed outside the country to new frontier lands in Eastern Himalaya and for service in India. Since the late 1950's, however, there has been a major shift as to the migrant destination. The increase in number of absentees abroad during 1952/54-61 was 65.8 percent. In the following two decades, 1961-81, it increased only by 22.7 percent. Absentees abroad as percent of the total absentees declined from 84.9 in 1961 to 68.2 in 1981. That only 3.5 percent of the total absentees abroad were for agricultural reason is indicative of the limited scope of land colonisation outside the country.

The main reason for the shift of migratory trajectory with the tarai and inner tarai as new destinations was the control of malaria that led to the transformation of the lowlands from one of marginality to a viable settlement area. The opening of the lowlands through malaria eradication and resettlement programs since mid-1950's provided a new frontier for large-scale rural-to-rural migration within the country. To the increasing number of land-hungry peasants from the

over-populated highlands, the virgin forest and grassland of the lowlands became a new resource for conversion to farmland. That most inter-regional migrants as well as inmigrants to the lowlands moved for agricultural reason is a clear evidence of land availability as the primary motive for internal migration. In addition, concentration of infrastructural and other developmental activities in the lowlands provided new opportunities for further in-migration.

The lowlands has now emerged as the area of migrant convergence from both within and outside the country. The impelling forces have, however, a subtle distinction. The influx of internal migrants to the tarai and inner tarai is basically a man-resource adjustment with cultivated land as the resource base. On the other hand, immigration represents both a population movement from high to low density area and new economic opportunities across the open border. Established migration streams of internal migration as well as immigrants to the lowlands indicate further increases in their number with much implication on demographic, developmental and political aspects of the country.

b. Population Redistribution

Economic development plans even without spatial consideration may induce population distribution with major consequences. This is what happened in the case of Nepal. The earlier periodic plans had no explicit policies on regional development pattern and population redistribution. However, the initiation of development planning in Nepal in 1956 coincided with the opening of the central inner tarai for resettlement with malaria control. The main objective of the programme was rehabilitation of hill population adversely affected by natural disasters. This was followed by extension of malaria eradication and resettlement programmes to cover other lowland areas in the subsequent plans for agricultural development through cropland expansion. This led to expansion of cultivated area at the cost of forest and also resulted in sizable redistribution of population.

A more comprehensive population policy was first formulated in the Fifth Plan (1975-80). Of the five stated policy instruments, one dealt with fertility control and the remaining four were with regard to population redistribution (Nepal, National Planning Commission, 1975:42). The measures related to the latter were regulation of internal migration, population shift to the low density tarai (particularly to western tarai), deliberate urbanisation in backward regions, and immigration control. However, the plan did not include any concrete programmes to support these policies except in resettlement. Even in the case of the resettlement programme, targets set were modest compared to the large magnitude of spontaneous migrants that overwhelmed government efforts. And, achievement in land settled was 42 percent and families resettled was 61.8 percent of the target.

The Sixth Plan (1980-85) included seven policy measures with reference to population but only one of these dealt with redistribution (Nepal, National Commission on Population, 1980:716). It referred to regulation of internal migration and development of small towns but there was lack of implementation programmes. Despite increasing illegal encroachment in lowland forests, targets for resettlement were considerably reduced and the achievement in land settled was 62.2 percent and families resettled 82.2 percent. Subsequently, a national population strategy with five major thrusts were formulated of which four related to mechanisms of fertility control, and one to immigration control (Nepal, National Commission on Population, 1983:4). The references to 'initiate comprehensive and planned migration and urbanisation process' as policy measures (ibid:52) were not supported with specific programmes.

The current Seventh Plan (1985-90) also evidences the traditional pattern of adopting policy goals that are currently fashionable (Fuchs, 1983:22). The plan has adopted the five major strategic thrusts announced by the National Commission on Population as the basic population policy with no consideration to spatial distribution of population (Nepal, National Planning Commission, 1985:153). Furthermore, the plan has no provision for land-based settlement and the rationale given for this new policy is conservation of existing forest areas to maintain ecological balance (ibid: 488-489). Thus, extant policies on population in Nepal emphasise fertility control and neglect the distribution aspect. Even in the case where there has been policy pronouncement regarding population redistribution (as in the fifth plan), there has been a singular lack of concrete programmes and instruments. A comprehensive population policy need to encompass migration along with fertility and mortality aspects. In a country with immense regional diversity (both natural and developmental), population redistribution through migration has even more relevance.

c. Spatial Development

Population redistribution programmes are often subsidiary component of more general spatial programmes dealing with modernisation and economic development (UN, 1981). Thus, the goals of development strategy in a country ultimately determine the spatial distribution of the population and changes in that distribution (Simmons, 1983:30). In the case of Nepal, the first exercise to visualise national development in spatial dimension was made in the Fourth Plan, 1970-75 (Nepal, National Planning Commission, 1970: Appendix ii). It proposed concentration of development activities along four north-south growth axes with roads in order to integrate the economies of the highlands and lowlands (Gurung, 1969 and 1984). However, the various sectoral programmes included in the plan were not tied to such a spatial development scheme.

Subsequent periodic plans (Nepal. National Planning Commission, 1975:28-33, 1980:182-192 and 1985:229-237) all included policy statements on regional development. These may be listed as specialisation according to elevation zone (cereal production in the tarai, horticulture in the hill and livestock raising in the mountain), development intensification along major roads, development of growth and service centres, and integrated rural development. But as in the case of population policy, regional development policies within national development plans were not integrated with programmes and projects. Thus, with the exception of integrated rural development projects (IRDP), based on external assistance, there were no specific implementation programmes to support the policies adopted. The process of resource allocation persisted along the traditional activity sectors (agriculture and forest, transport and communication, industry and power, and social services) despite the policy goal of reducing disparity among the regions.

The increasing volume of out-migration from the highlands is indicative of the continuing morbidity of the highland economy despite three decades of development effort. Integrated rural development projects (covering 18 highland and 5 lowland districts) were designed to provide coordinated provision of infrastructure and service in rural areas and reduce rural-to-urban migration. The available document on IRD projects (Pradhan, 1985), however, is a only comparative progress review of programmes rather than impact evaluation. Even in the case of specific IRD project for which some data are available, the rate of net migration was unaffected (Banskota, 1984:118-120).

Spatial planning is a long-term strategy and closely linked with infrastructure development. In Nepal, the pattern of arterial routes has changed considerably over the last two decades. The series of north-south roads has now been superseded by the east-west highway, Mahendra Rajmarg. In spatial planning terms, the east-west highway would be the logical spine of national development with the connecting north-south roads as its lateral extension. Concentration of development activities along the east-west highway will also partly resolve the conflict in resource allocation between the hill and the tarai regions. Since the highway traverses parts of the tarai and inner tarai with low density of population and some extensive forest land, the convergence of population from the highlands and lowlands there through planned migration would contribute to economic and social integration.

The recognition of the east-west highway as the pivotal axis of national development will also entail reconsideration on other policy areas such as land use, resettlement and urbanisation. The forests in the lowlands have a bleak future because of its increasing accessibility and immense population pressure evidenced by large-scale encroachment (Kaplan and Shrestha, 1982). Conservation of forest for

environmental purposes would be more meaningful in the highlands with erosion-prone steep slopes than the lowlands. Therefore, lowland forest areas with agricultural potential need to be resettled in order to affect optimum utilization of the limited land resource. Such a land use policy would yield considerable land area for resettlement and agricultural expansion, particularly in western tarai. Again, selected points where the east-west highway intersects with north-south roads would be the most appropriate site for urban development. Location of administrative, commercial and industrial activities at such major road junctions would both maximise benefits from the large infrastructure investment already made and create new employment opportunities.

d. Political Aspect

Internal migration is indicative of regional economic disparity and if properly channelised, it can be an effective mechanism for adjusting population and resources as well as affect national integration. In contrast, international migration involving unrestricted emigration and immigration, as in the case of Nepal, can be detrimental to national interest.⁴ While emigration weakens the State's leverage for an independent policy option on immigration control, large-scale immigration, on the other hand, make existing protectionist policies in labour and employment sectors ineffective.

The tarai, the prime destination of immigrants, has been an area of controversy over citizenship (Gaige, 1975:82-107). There has been increasing pressure for citizenship in recent years. Of the total 1.5 million citizenship certificates distributed during 1972-82, the tarai districts claimed 63.2 percent.⁵ In terms of the total population of 1981, those receiving citizenship certificate were 10 percent. In terms of the 1981 population by regions, those receiving citizenship certificate for the tarai was a 15.7 percent, and for the hill and mountain 5.5 percent each. It is significant that 94.4 percent of those acquiring Nepalese citizenship in the tarai was on the basis of descent. A survey of 5,651 households in 10 tarai districts indicated that of the total sampled household heads, 6.9 percent were immigrants (Nepal, Task Force on Migration, 1983). Of all immigrant household heads, 94.3 percent were from India and of these 42.3 percent had acquired Nepalese citizenship.

Another dimension to the politics of citizenship is the deteriorating situation of emigrants from Nepal to India. The armed conflict for 'Gorkha land' in the hill areas (Darjeeling and Kalimpong) of West Bengal since 1986 and recent wholesale expulsion of settlers of Nepalese origin from Assam and Meghalaya have generated a stream of return migrants into Nepal. The recent events in north-east India also prove that nativist policies that are weak in immigration control but restrictive in naturalisation have all the making of a larger

socio-political conflict. The main contributory factor to the problem of Indo-Nepal migration is the unrestricted entry and exit rules between the two countries. Illegal trade associated with free movement of people across the border has been a matter of concern for both countries. Similarly, policies and programmes for the resolution of Nepal's population problem and planning of population redistribution will have limited impact until the Indo-Nepal border is regulated in terms of human movement.

NOTES

1. This paper is part of a monograph, *Regional Patterns of Migration in Nepal*, prepared as Visiting Fellow at the East-West Population Center, Honolulu, during summer 1984.
2. Dependency ratio is defined as the ratio of children under 15 years of age plus person aged 60 years and above to population 15-59 years of age X 100. That is,

$$DR = \frac{0-14 + 60+}{15-59} \times 100$$

Where, DR = The Dependency Ratio
 0-14 = Children Under 15 years of age
 60+ = Persons aged 60 years and above
 15-59 = Persons aged 15-59 years.

3. For example, during 1980/81, the tarai had 1,401,426 hectares as cultivated area (Nepal, CBS, 1985:19) and 1,570,800 hectares under various crops (Nepal, FAM, 1983) thus yielding an excess of 14 percent in gross cropped area to area under crops.
4. Nepal had a net surplus of immigrants in the two censuses for which data and estimates are available:

	Census Years		Increase	
	1961	1981	Absolute	Percent
A. Emigrants (Absentee abroad)	328,470	402,977	74,507	22.7
B. Immigrants (Foreign Born)	337,620	441,596* 234,039+	103,976	30.8
Excess of B over A	9,150	38,619	29,469	322.1

* Estimate, Nepal, CBS, 1985b, 125-127

+ Reported, Nepal, CBS, 1984, Vol. I, Part II, Table 8.

5. Records of the Home Ministry, Nepal Government, provide the following breakdown of citizenship distribution in 69 out of 75 districts:

Region	By Descent	By Birth and Marriage	Total	Percent
Mountain	59,327	357	59,684	4.0
Hill	350,129	10,869	366,998	24.4
Inner Tarai	130,232	2,664	132,896	8.8
Tarai	896,272	53,467	949,739	63.2
Total	1,435,960	67,357	1,503,317	100.0

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