

DISTRICTS OF NEPAL









INDICATORS OF DEVELOPMENT

Update 2003



about the organisations

ICIMOD

The International Centre for Integrated Mountain Development (ICIMOD) is an independent 'Mountain Learning and Knowledge Centre' serving the eight countries of the Hindu Kush-Himalayas – Afghanistan , Bangladesh , Bhutan , China , India , Myanmar , Nepal , and Pakistan  – and the global mountain community. Founded in 1983, ICIMOD is based in Kathmandu, Nepal, and brings together a partnership of regional member countries, partner institutions, and donors with a commitment for development action to secure the future of the Hindu Kush-Himalayas. The primary objective of the Centre is to promote the development of economically and environmentally sound mountain ecosystems and to improve the living standards of mountain populations. The Mountain Environment and Natural Resources Information Systems (MENRIS), a part of the Information and Knowledge Management (IKM) Programme, serves as a hub for the HKH region, promoting geo-information technology (Geo-IT) at ICIMOD and among its partner institutions and strengthening their capacity to apply it to mountain specific problems for the purpose of improving planning and decision-making in sustainable mountain development.

CBS

The Central Bureau of Statistics (CBS) is a government organisation located within the National Planning Commission Secretariat of His Majesty's Government of Nepal. The CBS is charged with preparing different types of socioeconomic data as needed by the government for the formulation of policies and plans, and development work. The Bureau has been conducting population, agriculture, and manufacturing establishment censuses, at intervals of 10 and 5 years respectively, since 1911 (population) and the early sixties (agriculture and manufacturing). It also conducts various statistical surveys like the Nepal Living Standard Survey (NLSS), Nepal Labour Force Survey (LFS), and Nepal Multiple Indicators Surveillance (NMIS).

SNV

The Netherlands Development Organisation, SNV-Nepal's mission is to build the capacity of intermediate level organizations and local capacity builders to alleviate poverty and improve governance. SNV does not implement development projects; instead, it works through local organizations and government bodies. In Nepal, SNV provides advice and management expertise to strengthen the capacity of Nepali partner organizations, working with its partner organizations to identify where support is most needed, and also facilitates access to funding for these organizations. By focusing on strengthening the capacity of organizations at the intermediate level in society, SNV aims to build a better link between the problems of poverty in communities and the government policies at the national level. It makes commitments to long term cooperation and coordinates its efforts with other development organizations. As such, SNV ensures that problems are approached in an integrated way and at different levels concurrently.

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Foreword

In 1997, the International Centre for Integrated Mountain Development (ICIMOD) and the Netherlands Development Assistance (SNV-Nepal) prepared a study 'Districts of Nepal – Indicators of Development', which provided an assessment of the comparative development status of Nepal's districts. The primary aim was to provide a means of selecting priority districts for development assistance. The districts were classed as belonging to one of three levels of development in terms of each of a number of primary indicators; and these were then aggregated according to an agreed scheme to provide a single overall development index. The study received widespread appreciation and recognition by the many organisations involved in policy development and decision-making in Nepal, including His Majesty's Government, development agencies, different line-agencies, NGOs/INGOs, and donor organisations. The huge demand for the publication and its successive reprints have been testimony to its usefulness.

With the publication of the data from the tenth National Population Census held by the Central Bureau of Statistics (CBS) in June 2001, an update of the study appeared timely. ICIMOD, CBS and SNV-Nepal forged a partnership to revise the publication using more recent data, and to review the changes. Where possible, the present study used the same indicators as in the previous study and followed the same methodology for deriving the status of districts so that the two studies would be comparable. Despite the inevitable differences – no new data were available for some of the indicators and for others definitions of specific parameters had changed – the present report provides a useful pointer to the comparative development status of Nepal's districts at present, as well as an indication of the changes that have taken place.

It is hoped that this document will prove useful for the development community in general, and policy and decision-makers in Nepal in particular, as well as being of interest to a broader audience.

We would like to express our great appreciation to the joint study team for their excellent efforts in preparing this volume in a very short time. We solicit readers to provide useful comments and feedback, which we hope will enable us to further improve future editions of this work.

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Contents

Foreword
Acknowledgements

Introduction

Background and Objectives	1
Data Indicators, Sources, and Methodology	1
Poverty and Deprivation	1
Socioeconomic and Infrastructural Development	2
Women's Empowerment	2
Computation of Composite Indices	8
First stage indices	8
Second stage indices	9
Third stage index	9
GIS Mapping	10
Major Findings and Analysis	11
Sensitivity analysis	11
Analysis of patterns seen in maps	11
Comparison with 1997 indicators	15
Interrelationships	15
Bibliography (including data sources)	16
Maps	
Major Indices	
Contributing Indices and Indicators	
Poverty and Deprivation Index	31
Socioeconomic and Infrastructural Development Index	53
Women's Empowerment Index	95
Annex 1: Zero-to-one scoring transformation	105

List of Maps

Introduction

1: Administrative Map of Nepal	19
--------------------------------------	----

Major Indices

2: Rank According to the Overall Composite Index	23
3: Rank According to the Poverty and Deprivation Index	25
4: Rank According to the Socioeconomic and Infrastructural Development Index	27
5: Rank According to the Women's Empowerment Index	29

Contributing Indices and Indicators

Poverty and Deprivation Index 31

6: Rank according to the Child Deprivation Index	33
7: Child Illiteracy Rate	35
8: Child Economic Activity Rate	37
9: Proportion of Child Marriage	39
10: Rank According to the Gender Discrimination Index	41
11: Adult Gender Imbalance Ratio in Literacy Status	43
12: Adult Gender Imbalance Ratio in Non-agricultural Occupations	45
13: Percentage of Educationally Disadvantaged Population	47
14: Percentage of Marginal Farm Households	49
15: Per Capita Food Production	51

Socioeconomic and Infrastructural Development Index 53

16: Rank According to the Health Development Index	55
17: Contraceptive Prevalence Rate	57
18: Drinking Water Coverage	59
19: Toilet Facilities	61
20: Rank According to the Primary Sector Development Index	63
21: Agricultural Credit	65
22: Farm Size	67
23: Livestock per Farm Household	69
24: Percentage of Irrigated Area	71
25: Rank According to the Infrastructure Development Index	73
26: Road Density	75
27: Banks Density	77
28: Cooperatives Density	79
29: Health Institutions Density	81
30: Post Office Density	83

31:	Percentage of Forest User Households	85
32:	Per Capita Regular Budget Expenditure	87
33:	Per Capita Development Budget Expenditure	89
34:	Overall Literacy Rate	91
35:	Broad Occupational Structure	93

Women's Empowerment Index 95

36:	Percentage Share of Females in Literacy	97
37:	Percentage Share of Females in Non-agricultural Occupations	99
38:	Percentage Share of Female Teachers at Primary Level	101
39:	Percentage Share of Girls Enrolled at Primary Level	103

Introduction

Background and Objectives

In 1997, the International Centre for Integrated Mountain Development (ICIMOD) carried out an assessment of the development status of Nepal's districts in collaboration with SNV-Nepal to aid the selection of priority districts for development assistance. The results were published as 'Districts of Nepal – Indicators of Development'. Recently, ICIMOD collaborated with the Central Bureau of Statistics (CBS) in the publication of 'Nepal Census Indicators and Trends in Maps - 2001' to present census data and trends in map form using a geographical information system (GIS) platform. In this context, it was felt timely to revisit the indicators used in the 1997 study, and examine changes in the development status of Nepal's 75 districts revealed by the data gathered during the Population Census 2001, among others. The Netherlands Development Organisation (SNV-Nepal) generously provided a part of the support needed to undertake the study and publish the results, which are summarised in the present document.

Where possible, the present study used the same indicators as in the previous study and followed the same methodology for deriving the status of districts so that the two studies would be comparable. Following the earlier approach, the indicators were divided into three main groups: (i) poverty and deprivation, (ii) socioeconomic and infrastructural development, and (iii) women's empowerment. The section on 'natural resource endowment and management' could not be updated as the new data for these indicators have not yet been released. Similarly, no new data were available for some of the other indicators used previously, and these were dropped from the present study. Differences in the definition and/or use of indicators is described in the relevant sections. In order to increase the comparability with the earlier study, a new composite index was calculated for the 1997 study which excluded the indicators for natural resources endowment and management, as these are not included in the present index. All the indicators in the present study were calculated from data collected between 2000 and 2003, in particular data from the 2001 Population Census.

It is hoped that by presenting the relative levels of development of districts in a visual form, the results will be more easily comprehensible and accessible, and that the maps will be useful for policy makers, development planners, donor agencies, and other stakeholders interested in the development of Nepal.

Indicators, Sources, and Methodology

The present study used 29 indicators divided into three main groups to develop composite indices of development. The indicators, their definitions, and source information are listed in Table 1. The 1997 study used 39 indicators, 32 of which fell within the same three groups; the remainder related to the area of 'natural resource endowment and management' which is not included here. The 29 indicators employed in this study capture various dimensions of socioeconomic conditions and the level of development, including major constraints to development in each district, and portray the current scenarios for poverty and deprivation; socioeconomic and infrastructural development; and women's empowerment.

Poverty and Deprivation

As in the earlier study, eight indicators were selected to measure aspects of poverty and deprivation: three to measure child deprivation, two to measure gender discrimination, one to measure the concentration of disadvantaged groups, one to measure marginal farm households, and one to measure food production.

Child Deprivation – the three basic indicators used to measure child deprivation were child illiteracy rate, child economic activity rate, and child marriage. Of the 2.98 million children aged 10-14 years enumerated in the 2001 census, 21.4% were reported to be illiterate, 20.0% to be usually economically active, and 1.3% to be married. These three groups of children are not mutually exclusive, but they reveal the magnitude of these three basic children's issues.

Gender Discrimination – The two indicators used to measure gender discrimination were adult gender imbalance ratio in literacy status, and adult gender imbalance ratio in non-agricultural occupations.

Disadvantaged Groups – In the 1997 study, an indicator was used to measure the residential concentration of 15 ethnic groups (Musahar, Dhusadh, Chamar, Mallah, Muslim, Kewat, Dhanuk, Sarki, Kurmi, Kami, Yadav, Tharu, Tamang, Damai, and Kushwha) who had been found to be educationally disadvantaged in an analysis of the 1991 census data. In the present study, educationally disadvantaged groups in a particular district were assumed to be those caste/ethnic groups among the 103 in Nepal, whose literacy rates were below or equal to 30% in that district. In 2001, the educationally disadvantaged groups defined in this way accounted for 2.71 million individuals which is 11.92% of the (enumerated) national population.

Marginal Farm Households – Marginal farm households are taken as those households with operational agricultural landholdings (worked by the farm household as owner or tenant) of 0.5 ha or less. The data on the area of agricultural landholdings from the 2001/02 agriculture census had not been released at the time this report was compiled, thus the unpublished data on agricultural landholdings from the 2001 population census were used provisionally to compute the indicator. An indicator based on marginal farm households was used to measure the concentration of marginal farm households in each district.

Food Production – The major food production in each district was converted into kilocalories per capita per day and used as an indicator of the availability of food. Major food production was taken as the total production of rice, maize, wheat, millet, barley, and potatoes.

Socioeconomic and Infrastructural Development

Seventeen indicators were used to show aspects of socioeconomic and infrastructural development: nine were social and health related, and eight were for infrastructure. Two of the 18 indicators used in the previous study – infant mortality rate and cropping intensity – were not available for the present study; toilet facilities were added as a new social- and health-related indicator.

In the previous study, per capita regular and development budget allocations were used as indicators of infrastructure development. In the present study, per capita regular and development budget expenditures were used since they provide a more realistic picture.

Women's Empowerment

Four indicators were used to capture aspects of women's empowerment in terms of their participation in economic activity and education. No new data was available to update two of the indicators used in the earlier study – percentage share of elected females at district level, and percentage share of girl dropouts at primary level. The variables on gender discrimination were moved to the poverty and deprivation category.

Table 1: List of indicators, definitions, and data sources, and indices they contribute to

Index	Indicator	Definition	Source (Data Year)	Comparison with 1997	Remarks
POVDEPI	Poverty and Deprivation				
CDI	Child Deprivation				
	5CILR	<i>Child Illiteracy Rate</i> : Illiterate children aged 10-14 years as a percentage of total children in the same age group	PC [2001]	Same	Status of child illiteracy
	CLABR	<i>Child Economic Activity Rate</i> : Usually economically active children aged 10-14 years as a percentage of total children in the same age group	PC [2001]	Same	Status of child labour
	CMMAR	<i>Proportion of Child Marriage</i> : Married children aged 10-14 years as a percentage of total children in the same age group	PC [2001]	Same	Status of child marriage
GDI	Gender Discrimination				
	GIRLR	<i>Adult Gender Imbalance Ratio in Literacy Status</i> : Ratio of females to males among the literate population aged 15+ years multiplied by the sex ratio of the same age group	PC [2001]	Same	Status of adult female literacy compared to adult male literacy
	GIRE	<i>Adult Gender Imbalance Ratio in Non-agricultural Occupations</i> : Ratio of females to males among the population aged 15+ years engaged in non-agricultural occupations multiplied by the sex ratio of the same age group	PC [2001]	Same	Status of adult female involvement in non-agricultural occupations compared to adult male involvement
	Disadvantaged Groups				
	PEDEGP	<i>Percentage of Educationally Disadvantaged Population</i> : Educationally disadvantaged (ethnic) population as a percentage of total population	[PC 2001]	Definition changed	In the 1997 study, certain caste/ethnic groups were assumed to be educationally disadvantaged based on their low literacy rates at the national level. In the present study, caste/ethnic groups with literacy rates below or equal to 30% in a particular district were taken to be educationally disadvantaged.
	Marginal Farm Households				
	PLM	<i>Percentage of Marginal Farm Households</i> : Marginal farm households (with operational agricultural landholdings ≤ 0.5 ha) as a percentage of total households multiplied by the agricultural labour force (the ratio of usually economically active population engaged in agriculture to the total usually economically active population).	PC [2001]	Different data source, definition changed	The data from the 2001/02 agriculture census were not available; unpublished data on operational agricultural landholdings from the 2001 population census were used.
	Food Production				
	PCFA	<i>Per Capita (Per Diem) Food Production</i> : The caloric value of food production (rice, wheat, maize, millet, barley, and potatoes) divided by the rural population, per day	MoAC [2000/01] (food prod.), PC [2001] (rural population), CFRL [1986]	Not adjusted for adult equivalence	

Index	Indicator	Definition	Source (Data Year)	Comparison with 1997	Remarks
SEIDI	Socioeconomic and Infrastructural Development				
HDI	Health and Development				
	CPR	<i>Contraceptive Prevalence Rate</i> : Number of fertile couples using a contraceptive method per 100 married women of reproductive age	DoHS [2001]	Same	Status of family planning/ population control measures
	WATER	<i>Drinking Water Coverage</i> : Households having access to taps, piped water, or tube-well water for drinking as a percentage of total households	PC [2000/2001]	Different data source, definition changed	In the 1997 study, the population with access to safe water was considered. In the present study, households with access to pipes and tube-wells as a source of drinking water were taken as an alternative indicator.
	TOILET	<i>Toilet Facilities</i> : Households using any type of toilet facility (flush, pit, other) as a percentage of total households	PC [2001]	New	Sanitation status
PSDI	Primary Sector Development				
	ACREDIT	<i>Agricultural Credit</i> : Population with an agricultural loan as a percentage of usually economically active population aged 15+ years engaged in agricultural occupations	ADB/N [2001/2002] (loanee population) PC [2001]	Different data source, definition changed	Availability of agricultural credit
	FARMSIZE	<i>Farm Size</i> : Operational agricultural land area in hectares divided by the number of farm households	PC [2001]	Different data source	As data from the 2001/02 agriculture census were not available, unpublished operational data on the agricultural land area from the 2001 population census were used provisionally.
	LIVE	<i>Livestock per Farm Household</i> : Number of livestock kept for agricultural purposes divided by number of farm households. Livestock refer to domestic animals like cattle, yak, buffalo, goats, sheep, pigs, rabbits and others. Livestock used for transportation and other-than-agricultural work are not included.	PC [2001]	Different data source, definition changed, not weighted	As data from the 2001/02 agriculture census were not available, unpublished operational data of livestock holdings from the 2001 population census were used provisionally.
	IAPAA	<i>Percentage of Irrigated Area</i> : Year round and seasonal irrigated land area as a percentage of operational agricultural land area in hectares	MoAC 2001 (irrigated land) PC [2001] (unpublished operational agricultural land area)	Different data source, definition changed	

Index	Indicator	Definition	Source [Data Year]	Comparison with 1997	Remarks
IDI	Infrastructure Development				
	ROAD	<i>Road Density</i> : Sum of all categories of road as a percentage of total surface area (in km per 100 km ²)	DoR [2001]	Not weighted	
	BANK	<i>Bank Density</i> : Number of banks per 1000 population divided by population distance*	NRB [2002]	Same	Projected population for 2002 was used
	COOP	<i>Cooperatives Density</i> : Number of cooperatives per 1000 population divided by population distance*	DoC [2002]	Same	Projected population for 2002 was used
	PHI	<i>Health Institutions Density</i> : Number of health institutions per 1000 population divided by population distance*	DoHS [2001]	Same	
	PPO	<i>Post Office Density</i> : Number of post offices per 1000 population divided by population distance*	DoPS 2001/02	Same	Projected population for 2002 was used
	FORESTHH	<i>Percentage of Forest User Households</i> : Percentage of total households who are members of forest user groups	CFD/DoF 2003	Same	Estimated number of households for 2003 was used
	PCREXP	<i>Per Capita Regular Budget Expenditure</i> : Total regular budget expenditure in NRs divided by total population	FCGO [2001]	Changed	Regular budget expenditure rather than budget allocation (as in the 1997 study) as more realistic
	PCDEXP	<i>Per Capita Development Budget Expenditure</i> : Total development budget expenditure in NRs divided by total population	FCGO [2001]	Changed	Development budget expenditure rather than allocation
	Overall Literacy				
	LR	<i>Overall Literacy Rate</i> : Literate population aged 6 years and above as a percentage of the total population of the same age group	PC [2001]	Same	
	Broad Occupational Structure				
	EMPS	<i>Broad Occupational Structure</i> : Ratio of usually economically active population of 15+ years engaged in non-agricultural occupations compared to agricultural occupations	PC [2001]	Same	Status of economic diversification
WEI	Women's Empowerment				
	FLR	<i>Percentage Share of Females in Literacy</i> : Literate female population of age 10+ years as a percentage of total literate population in the same age group	PC [2001]	Same	Share of females in literacy
	PWNAG	<i>Percentage Share of Females in Non-agricultural Occupations</i> : Female population of age 15+ years engaged in non-agricultural occupations as a percentage of total population of the same age group engaged in the same activities	PC [2001]	Same	Share of adult females in non-agricultural occupations
	F_TEACH	<i>Percentage Share of Female Teachers at Primary Level</i> : Number of female teachers in primary schools as a percentage of total primary schoolteachers	DoE [2001]	Same	Participation of females as primary teachers
	G_ENR	<i>Percentage Share of Girls Enrolled at Primary Level</i> : Number of girls enrolled at primary level as a percentage of total enrolment at the same level	DoE [2001]	Same	Girls' enrolment in primary schools

*Population distance is the square root of the reciprocal of population density

Table 1: Data Sources

ADB/N	Agriculture Development Bank/Nepal	Primary data – loanee population
CFD/DoF	Community Forest Division, Department of Forest	Primary data – forest user households
CFRL	Central Food and Research Laboratory	CFRL (1986)
DoC	Department of Cooperatives	Primary data – number of cooperatives
DoE	Department of Education	DoE (2003)
DoHS	Department of Health Services	DoHS (2001)
DoPS	Department of Postal Services	Primary data, post office statistics
DoR	Department of Roads	Primary data, road statistics 2000 (length of different categories of road
FCGO	Financial Comptroller General Office	FCGO (2001) and primary data, budget expenditure
MoAC	Ministry of Agriculture and Cooperatives	MoAC (2001)
NRB	Nepal Rastra Bank	NRB (2002) and primary data – number of banks
PC 2001	Population Census 2001	CBS (2002), CBS (nd, b)

Computation of Composite Indices

The 29 basic indicators may be viewed as 29 aspects of the level of development performance at the district level. A district identified as least developed by one indicator may not be identified as least developed by another indicator. In theory, these 29 indicators could generate 29 different sets of least developed districts. In order to achieve one overall composite index, the 29 indicators were aggregated into next level indices in three stages (Figure 1).

First stage indices

In the first stage, the 29 indicators were reduced to 14 through combination into indices that reflect the prevailing socioeconomic conditions in the districts.

- The three indicators child illiteracy rate, child economic activity rate, and proportion of child marriage were aggregated to form the **Child Deprivation Index (CDI)**.
- The two indicators adult gender imbalance ratio in literacy status, and adult gender imbalance ratio in non-agricultural occupations were aggregated to form the **Gender Discrimination Index (GDI)**.
- The three indicators contraceptive prevalence rate, drinking water coverage, and toilet facilities were aggregated to form the **Health Development Index (HDI)**.
- The four indicators agricultural credit, farm size, livestock per farm household, percentage of irrigated area were aggregated to form the **Primary Sector Development Index (PSDI)**.
- The eight indicators road density, bank density, cooperatives density, health institutions density, post office density, percentage of forest user households, per capita regular budget expenditure, and per capita development budget expenditure were aggregated to form the **Infrastructural Development Index (IDI)**.

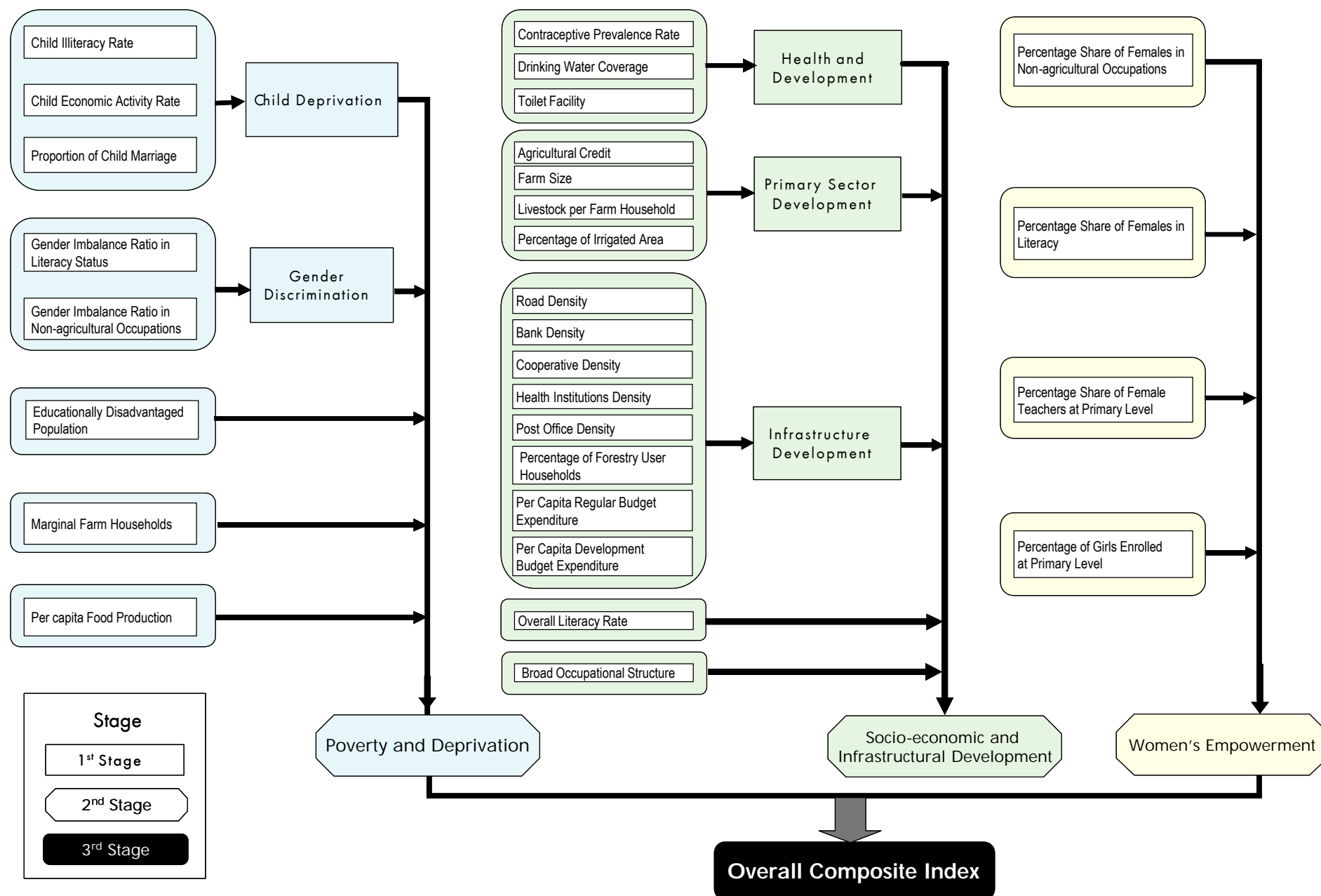


Figure 1: Scheme of aggregation of the 29 indicators to form an Overall Composite Index

The remaining nine indicators were not aggregated at this stage.

Second stage indices

In the second stage, the five first stage indices and remaining nine primary indicators were further reduced to three indices.

- The indices for child deprivation and gender discrimination were combined with the indicators for percentage of educationally disadvantaged population, percentage of marginal farm households, and per capita food production to produce the **Poverty and Deprivation Index (POVDEPI)**.
- The indices for health and development, primary sector development, and infrastructure development were combined with the indicators for overall literacy rate and broad occupation structure to produce the **Socioeconomic and Infrastructural Development Index (SEIDI)**.
- The indicators for percentage share of females in literacy, percentage share of females in non-agricultural occupations, percentage share of female teachers at primary level, and percentage share of girls enrolled at primary level were combined to produce the **Women's Empowerment Index (WEI)**.

Third stage index

In the third stage, the three indices of the second stage were aggregated to form an **Overall Composite Index (OCI)**.

Aggregation method of basic indicators

A zero-to-one scoring method was used to aggregate the indicators (see Annex 1 for mathematical explanation of zero-to-one transformation). This method ensures that the final indicator values are ranked so that an increase in value corresponds to an increase in performance regardless of whether initial values increased with a decrease in performance (from most developed to least developed) or increased with an increase in performance (from least developed to most developed).

The nine indices or weighted indicators (CDI, GDI, HDI, PSDI, IDI, POVDEPI, SEIDI, WEI, and OCI) were constructed by aggregating or, equivalently, summing the weighted scores of the appropriate basic indicators and indices (see Annex 1 for mathematical explanation of their construction).

GIS Mapping

The development levels of the districts as indicated by the values of the indicators and indices were displayed in map form using ArcGIS software from ESRI and using as the base a district map from the Department of Survey 1988 at a scale of 1:250,000 digitised by MENRIS (Map 1).

All districts were ranked according to the weighted scores (Table 2). The 75 districts were categorised into three groups: least developed (districts with ranks 1 to 25), intermediate (districts with ranks 26 to 50), and most developed (districts with ranks 51 to 75). The rank forms the basis of categorisation for mapping of the nine indices. The 75 values of each of the 29 basic indicators were also mapped separately. For each map, districts were classified as least developed, intermediate, and most developed by arranging the 75 districts in ascending order according to their level of performance.

The ranking according to the Overall Composite Index is shown in Map 2; the ranking according to the Poverty and Deprivation Index (PDI), the Socioeconomic Infrastructural Development Index (SEIDI), and Women's Empowerment Index (WDI) are shown in Map 3-5; the ranking according to the indices and level of performance of indicators, contributing to the PDI, SEIDI, and WEI are shown in Maps 6-16, 17-35, and 36-39, respectively.

Major findings and analysis

Sensitivity analysis

There are four possible combinations of the three dimensions of development performance (poverty and deprivation; socio-economic and infrastructural development; and women's empowerment) considered in this study. The results in terms of ranks of districts in each of these possible combinations were compared, and in each case the 25 least developed districts identified. The districts common to all four combinations or configurations were identified. Eight districts – Achham, Bajura, Dadeldhura, Darchula, Jajarkot, Jumla, Rolpa, and Rukum – were among the least developed in all configurations. Most of these are mountain and hill districts in the Mid-Western and Far Western Development Regions.

Analysis of patterns seen in maps

The 25 least developed districts as identified by the Overall Composite Index are listed in Table 2 and shown in Map 2. The distribution of these among the country's 15 eco-development regions (the mountain, hill and Terai areas of the five development regions) is summarised in Table 3. Six of the 20 Terai districts (30%), 9 of the 40 hill districts (23%), and 10 of the 15 mountain districts (62%) were among the 'least developed'. There was at least one least developed district in each of the five development regions, with the greatest number, nine, located in the Mid-Western Development Region and the greatest proportion (seven of nine) in the Far Western Development Region. Two clusters of worst-performing districts emerged from the ranking exercise: one group of contiguous districts in the hill and mountain districts of the Far Western and Mid-Western Development Regions; and one group of contiguous districts in the central Terai region. A total of 16 of the 24 districts in the Far Western and Mid-Western Development Regions were among the country's least developed districts. In the Central Development Region it was seven out of 19, five of them in the Terai.

The Overall Composite Index indicates that Mugu, Humla, and Bajhang are the country's three least developed districts overall (Map 2). The three least developed in terms of the Poverty and Deprivation Index were Mugu, Achham, and Humla (Map 3); in terms of the Socioeconomic and Infrastructural Development Index they were Achham, Bajhang, and Mugu (Map 4); and in terms of the Women's Empowerment Index they were Mugu, Bajhang, and Humla (Map 5). In other words only four districts appear among the three least developed in all three indices: and all are located in the mountains and hills of the Mid-Western and Far Western Development Regions, where the country's seven least-developed districts are clustered (Map 2).

Comparison with 1997 indicators

As far as possible, this study attempted to prepare the same indicators as used in the 1997 study so that a direct comparison would be possible. However, some indicators could not be included as no more recent data were available, and some changes in definitions had to be made as a result of the definitions used and data collected in the currently available data sources. This means that the ranking of districts by individual indicators or indices may differ from those in the 1997 study as a result of the incomparability of data rather than of actual change. An attempt was made during the analysis to analyse reasons for changes in the ranking of districts, but this proved impossible as the lack of direct data comparability caused too many misleading anomalies. However, the general pattern of performance by districts across the country remains the same. The ranking of districts according to the Overall Composite Index for 1997 (recalculated without the indicators for Natural Resources Endowment and Management) and 2001 is shown in Table 2.

Table 2: Ranking of Districts Based on Weighted Scores

Index	Overall Composite	Overall Composite*	PDI ⁺	SEIDI ⁺	WEI ⁺
District	2001	1997	2001	2001	2001
Kathmandu	1	1	9	1	2
Chitwan	2	11	3	4	8
Jhapa	3	4	1	6	16
Bhaktapur	4	10	12	3	13
Lalitpur	5	3	21	2	9
Kaski	6	5	4	7	3
Dhankuta	7	6	2	14	12
Palpa	8	14	14	13	4
Syangja	9	8	22	21	1
Manang	10	2	25	10	5
Morang	11	16	5	9	24
Ilam	12	9	6	11	19
Rupandehi	13	38	11	5	31
Sunsari	14	21	10	8	27
Kabhrepalanchok	15	35	18	12	21
Tanahu	16	15	23	31	7
Terhathum	17	7	13	22	25
Sankhuwasabha	18	18	7	43	22
Mustang	19	13	33	17	17
Parbat	20	12	39	23	11
Dang	21	34	8	28	32
Lamjung	22	17	35	30	14
Panchthar	23	23	17	38	23
Baglung	24	26	45	26	10
Myagdi	25	22	44	42	6
Makawanpur	26	40	26	16	35
Gulmi	27	24	38	33	15
Surkhet	28	32	24	20	34
Solukhumbu	29	31	28	44	20
Banke	30	36	16	15	47
Bhojpur	31	27	15	41	36
Gorkha	32	20	34	45	18
Taplejung	33	19	27	37	28
Bardiya	34	43	20	35	40
Kanchanpur	35	33	19	24	49
Nuwakot	36	41	29	32	38
Nawalparasi	37	29	36	36	33

* OCI 1997 excluding Natural Resources Endowment Index

Table 2: Ranking of Districts Based on Weighted Scores (cont...)

Index	Overall Composite	Overall Composite*	PDI ⁺	SEIDI ⁺	WEI ⁺
District	2001	1997	2001	2001	2001
Khotang	38	28	30	52	29
Okhaldhunga	39	30	32	34	37
Kailali	40	46	31	27	42
Dolakha	41	47	47	25	41
Arghakhanchi	42	25	50	47	26
Udayapur	43	39	41	48	39
Dhading	44	37	51	54	30
Salyan	45	51	40	51	46
Dhanusa	46	57	46	18	59
Saptari	47	52	37	19	62
Sindhupalchok	48	50	60	50	43
Sindhuli	49	44	56	58	45
Pyuthan	50	42	54	57	48
Ramechhap	51	48	53	62	50
Parsa	52	53	43	29	63
Rasuwa	53	49	62	59	44
Kapilbastu	54	54	48	53	58
Bara	55	55	42	39	67
Dadeldhura	56	58	52	49	57
Darchula	57	45	59	60	52
Siraha	58	60	49	40	65
Jajarkot	59	66	58	69	51
Rukum	60	63	55	67	53
Sarlahi	61	56	57	46	64
Baitadi	62	64	63	55	60
Dailekh	63	67	64	66	55
Rolpa	64	62	65	68	54
Mahottari	65	61	61	56	71
Doti	66	70	66	64	61
Dolpa	67	59	69	71	56
Rautahat	68	65	68	61	72
Jumla	69	69	67	65	70
Kalikot	70	74	71	63	69
Bajura	71	68	72	70	66
Achham	72	75	74	75	68
Bajhang	73	71	70	74	74
Humla	74	73	73	72	73
Mugu	75	72	75	73	75

* PDI = Poverty & Deprivation Index; SEIDI= Socioeconomic & Infrastructural Development Index; WEI= Women's Empowerment Index

Table 3: Distribution of least developed districts over 15 eco-development regions

Eco-belt	Development Region										Total	
	Eastern		Central		Western		Mid-Western		Far Western			
Terai	1	[5] ⁺	5	[7]	0	[3]	0	[3]	0	[2]	7	[20]
Hill	0	[8]	1	[9]	0	[11]	4	[7]	4	[4]	9	[39]
Mountains	0	[3]	1	[3]	0	[2]	5	[5]	3	[3]	9	[16]
Total	1	[16]	7	[19]	1	[16]	9	[15]	7	[9]	25	[75]

* [x] = total no. of districts in category

Table 4: Correlation coefficients of social indicators

Social indicators	Correlation with overall literacy 2001	Correlation with overall literacy 1997
Child illiteracy rate	-0.91	-0.96
Child economic activity rate	-0.83	-0.90
Proportion of child marriage	-0.35	-0.37
Adult gender imbalance ratio in literacy status	0.89	0.86
Adult gender imbalance ratio in non-agricultural occupations	0.54	0.56
Contraceptive prevalence rate	0.66	0.73
Percentage share of females in literacy	0.83	0.87
Percentage share of females in non-agricultural occupations	0.59	0.67
Percentage share of females teachers at primary level	0.70	0.67
Percentage share of girls enrolled at primary level	0.76	0.85
Infant mortality rate	N/A	-0.53

Table 5: Correlation coefficients of infrastructural indicators with road density

Infrastructural indicators	Correlation with road density 1997	Correlation with road density 2001
Bank density	0.72	0.93
Cooperatives density	0.60	0.85
Per capita public budget expenditure	0.65	0.64

Interrelationships

The relationship between selected indicators and overall literacy was examined using correlation analysis. The correlation coefficients show that the issues of child deprivation, gender discrimination, and women's empowerment are more serious in those districts where the overall literacy rate is lower than in those districts where the overall literacy rate is higher. Specifically, there are relatively high correlations between the overall literacy rate and the child illiteracy rate, child economic activity rate, proportion of child marriage, gender imbalance ratio among the literate adult population, gender imbalance ratio among the non-agricultural adult labour force, percentage share of females in the literate population, percentage share of females in non-agricultural occupations, percentage share of females in primary level teaching, and percentage share of girls enrolled at primary level (Table 4). Moreover, higher literacy seems to be associated with higher contraceptive prevalence. A similar analysis in the 1997 study showed a similar pattern of association between indicators. Roads, in general, play an important role in the development of infrastructure. Correlation analysis showed that the density of both banks and cooperatives, and per capita public expenditure are higher in those districts where the road density is higher. The correlation between road density, and the density of both banks and cooperatives appeared to be higher than in the 1997 study, whereas the correlation between road density and public expenditure is almost the same as previously (Table 5).

Bibliography (including data sources)

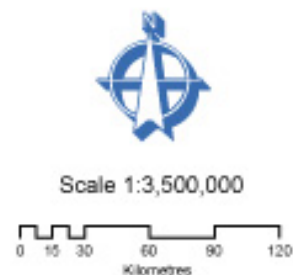
- CBS (2002) *Population Census 2001 – National Report*. Kathmandu: Central Bureau of Statistics/UNFPA
- CBS (2003) *Women in Nepal – Some Statistical Facts*. Kathmandu: Central Bureau of Statistics
- CBS (2002) *CD on National Population Census 2001 Nepal*. Kathmandu: Central Bureau of Statistics/UNFPA
- CBS (2002) *Population Census Results in Gender Perspective (Population Census 2001): Vols I, 2, 3*. Kathmandu: Central Bureau of Statistics/UNFPA
- CFRL (1986) *Nutrient Content of Nepalese Foods*. Kathmandu: Central Food Research Laboratory, Ministry of Agriculture
- DoE (2003) *School Level Educational Statistics of Nepal 2001 (2058)*. Sanothimi (Nepal): Department of Education
- DoHS (2001) *Annual Report 2000/2001*. Kathmandu: Department of Health Services
- FCGO (2001) *Consolidated Financial Statements of His Majesty's Government/Nepal — Fiscal Year 2000/2001*. Kathmandu: Financial Comptroller General Office
- ICIMOD (1997) *Districts of Nepal – Indicators of Development*. Kathmandu: ICIMOD
- MoAC (2001) *Statistical Information on Nepalese Agriculture 2000/2001*. Kathmandu: Ministry of Agriculture and Cooperatives
- NCST (1980) *Nepal – Atlas of Economic Development*. Kathmandu: HMGN National Council for Science and Technology, Mapping Sub-committee
- NRB (2002) *Banking and Financial Statistics No 39*. Kathmandu: Nepal Rastra Bank

Maps

Map 1: Administrative Boundaries



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
* Refer to Table 1.

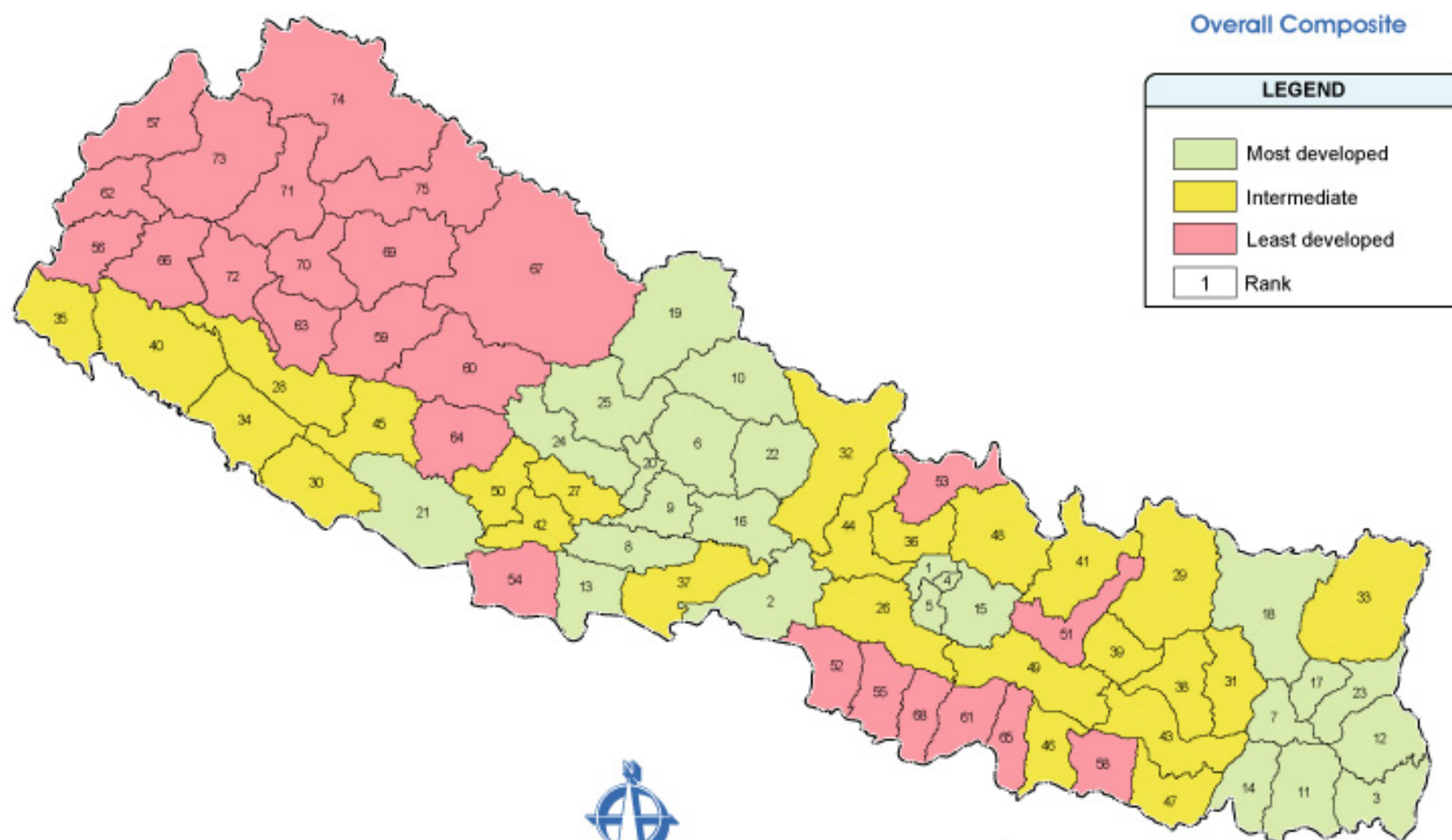


Major Indices

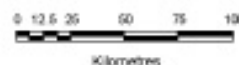
Rank According to the Overall Composite Index - Map 2

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Kathmandu	1	Makawanpur	26	Ramechhap	51
Chitwan	2	Gulmi	27	Parsa	52
Jhapa	3	Surkhet	28	Rasuwa	53
Bhaktapur	4	Solukhumbu	29	Kapilbastu	54
Lalitpur	5	Banke	30	Bara	55
Kaski	6	Bhojpur	31	Dadeldhura	56
Dhankuta	7	Gorkha	32	Darchula	57
Palpa	8	Taplejung	33	Siraha	58
Syangja	9	Bardiya	34	Jajarkot	59
Manang	10	Kanchanpur	35	Rukum	60
Morang	11	Nuwakot	36	Sarlahi	61
Ilam	12	Nawalparasi	37	Baitadi	62
Rupandehi	13	Khotang	38	Dailekh	63
Sunsari	14	Okhaldhunga	39	Rolpa	64
Kabhrepalanchok	15	Kailali	40	Mahottari	65
Tanahu	16	Dolakha	41	Doti	66
Terhathum	17	Arghakhanchi	42	Dolpa	67
Sankhuwasabha	18	Udayapur	43	Rautahat	68
Mustang	19	Dhading	44	Jumla	69
Parbat	20	Salyan	45	Kalikot	70
Dang	21	Dhanusa	46	Bajura	71
Lamjung	22	Saptari	47	Achham	72
Panchthar	23	Sindhupalchok	48	Bajhang	73
Baglung	24	Sindhuli	49	Humla	74
Myagdi	25	Pyuthan	50	Mugu	75

Map 2: Rank According to the Overall Composite Index



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1 for references



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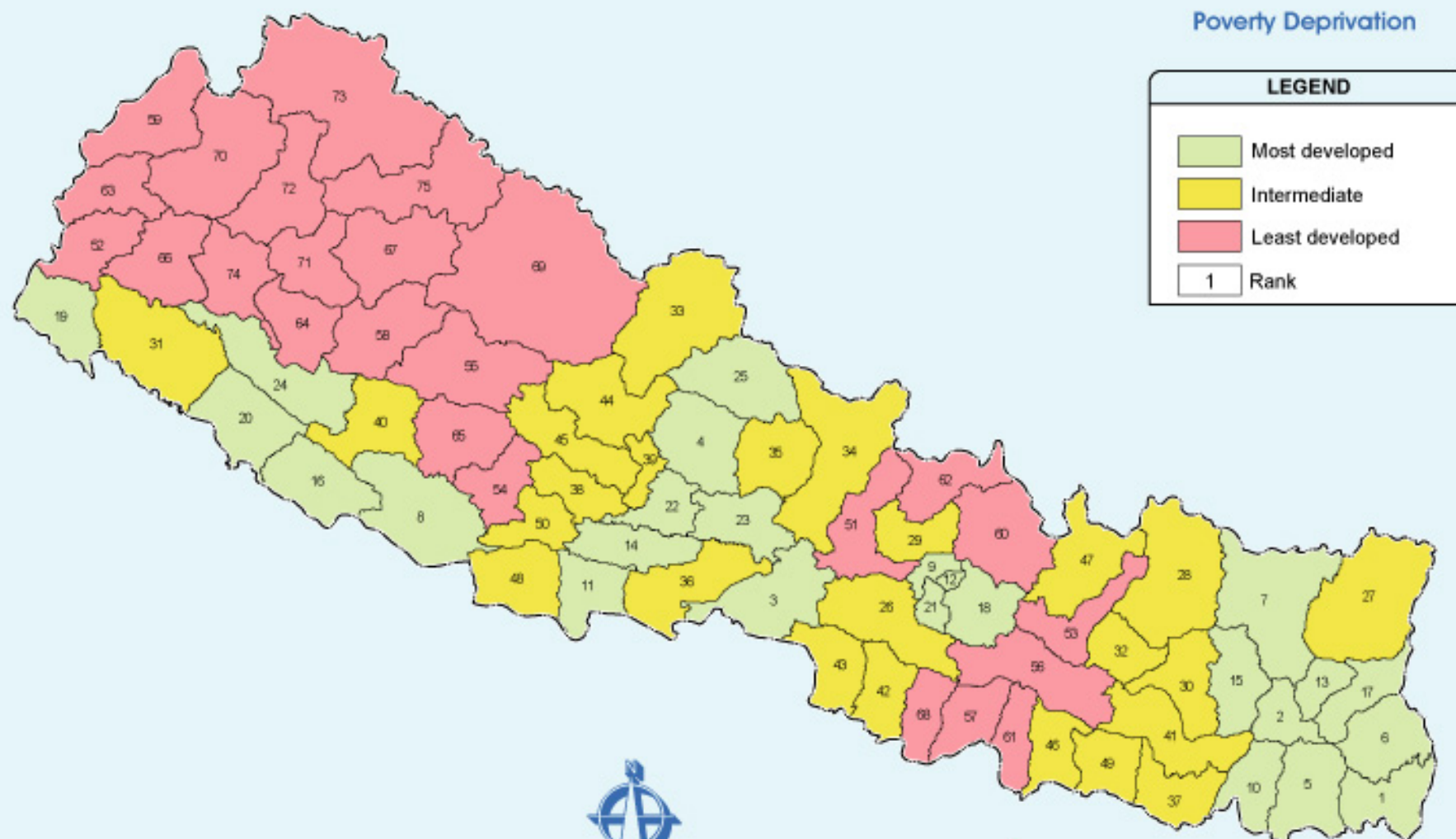


Rank According to the Poverty and Deprivation Index - Map 3

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Jhapa	1	Makawanpur	26	Dhading	51
Dhankuta	2	Taplejung	27	Dadeldhura	52
Chitwan	3	Solukhumbu	28	Ramechhap	53
Kaski	4	Nuwakot	29	Pyuthan	54
Morang	5	Khotang	30	Rukum	55
Ilam	6	Kailali	31	Sindhuli	56
Sankhuwasabha	7	Okhaldhunga	32	Sarlahi	57
Dang	8	Mustang	33	Jajarkot	58
Kathmandu	9	Gorkha	34	Darchula	59
Sunsari	10	Lamjung	35	Sindhupalchok	60
Rupandehi	11	Nawalparasi	36	Mahottari	61
Bhaktapur	12	Saptari	37	Rasuwa	62
Terhathum	13	Gulmi	38	Baitadi	63
Palpa	14	Parbat	39	Dailekh	64
Bhojpur	15	Salyan	40	Rolpa	65
Banke	16	Udayapur	41	Doti	66
Panchthar	17	Bara	42	Jumla	67
Kabhrepalanchok	18	Parsa	43	Rautahat	68
Kanchanpur	19	Myagdi	44	Dolpa	69
Bardiya	20	Baglung	45	Bajhang	70
Lalitpur	21	Dhanusa	46	Kalikot	71
Syangja	22	Dolakha	47	Bajura	72
Tanahu	23	Kapilbastu	48	Humla	73
Surkhet	24	Siraha	49	Achham	74
Manang	25	Arghakhanchi	50	Mugu	75

Map 3: Rank According to the Poverty Deprivation Index

Contributing indices and indicators: Maps 6, 10, 13, 14, 15



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1 for references



Rank According to the Socioeconomic and Infrastructural Development Index - Map 4

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Kathmandu	1	Baglung	26	Salyan	51
Lalitpur	2	Kailali	27	Khotang	52
Bhaktapur	3	Dang	28	Kapilbastu	53
Chitwan	4	Parsa	29	Dhading	54
Rupandehi	5	Lamjung	30	Baitadi	55
Jhapa	6	Tanahu	31	Mahottari	56
Kaski	7	Nuwakot	32	Pyuthan	57
Sunsari	8	Gulmi	33	Sindhuli	58
Morang	9	Okhaldhunga	34	Rasuwa	59
Manang	10	Bardiya	35	Darchula	60
Ilam	11	Nawalparasi	36	Rautahat	61
Kabhrepalanchok	12	Taplejung	37	Ramechhap	62
Palpa	13	Panchthar	38	Kalikot	63
Dhankuta	14	Bara	39	Doti	64
Banke	15	Siraha	40	Jumla	65
Makawanpur	16	Bhojpur	41	Dailekh	66
Mustang	17	Myagdi	42	Rukum	67
Dhanusa	18	Sankhuwasabha	43	Rolpa	68
Saptari	19	Solukhumbu	44	Jajarkot	69
Surkhet	20	Gorkha	45	Bajura	70
Syangja	21	Sarlahi	46	Dolpa	71
Terhathum	22	Arghakhanchi	47	Humla	72
Parbat	23	Udayapur	48	Mugu	73
Kanchanpur	24	Dadeldhura	49	Bajhang	74
Dolakha	25	Sindhupalchok	50	Achham	75

Map 4. Rank According to the Socioeconomic and Infrastructural Dev. Index

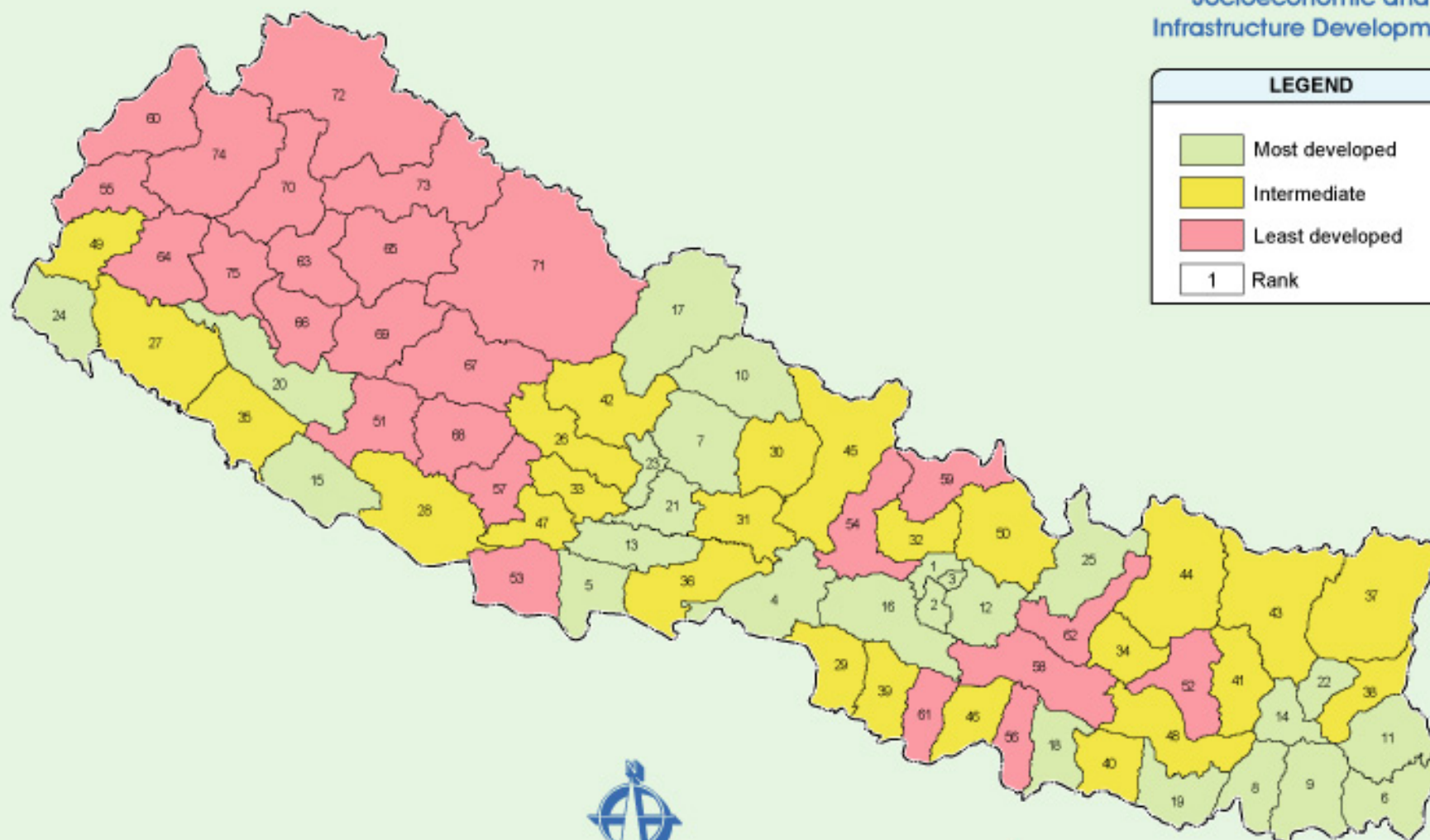
Contributing indices and indicators: Maps 16, 20, 25, 34, 35

Socioeconomic and
Infrastructure Development

LEGEND

- Most developed
- Intermediate
- Least developed

1 Rank



Scale 1:3,500,000

0 12.5 25 50 75 100
Kilometres

Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1



CBS/HMGN

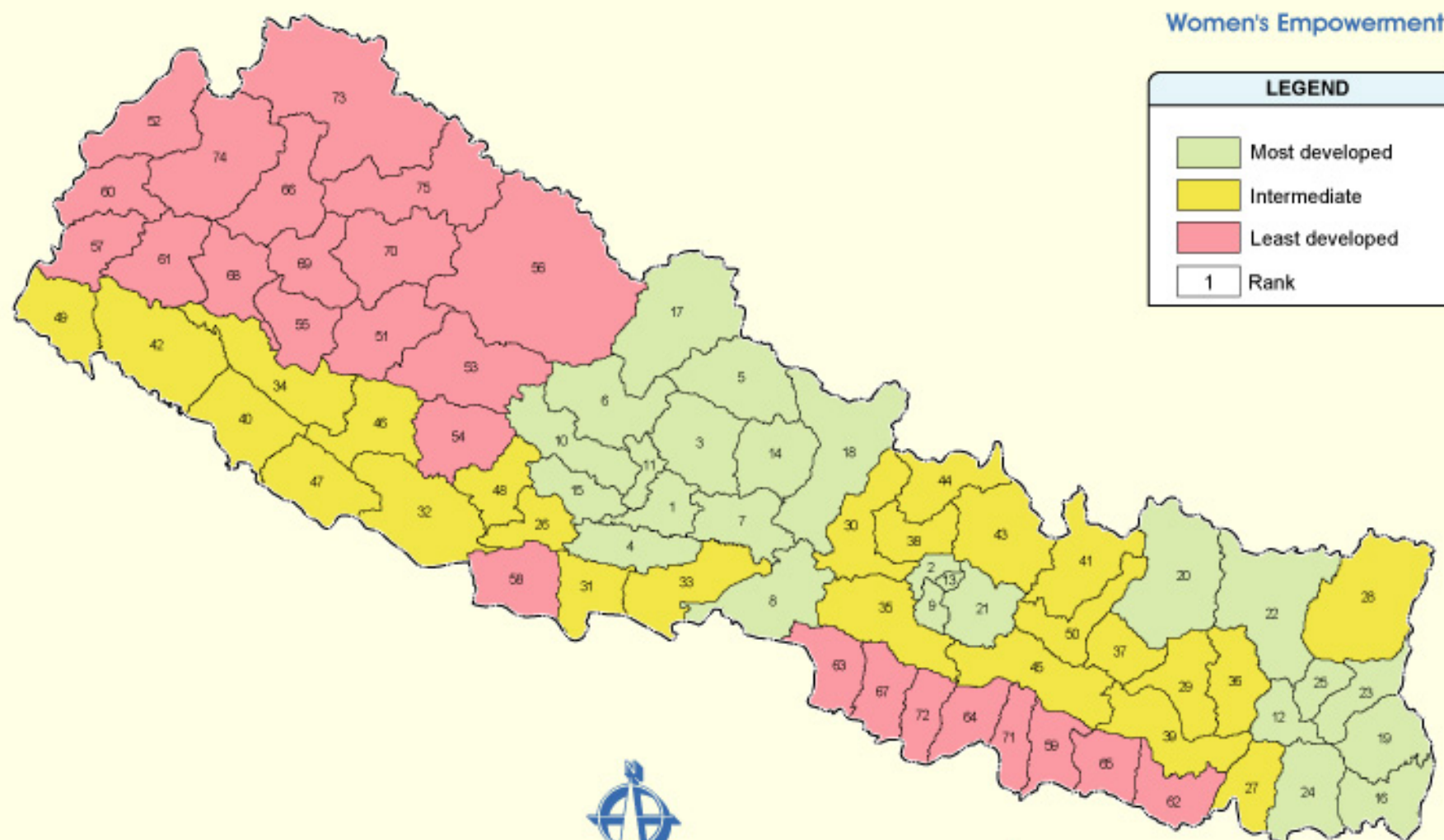
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Rank According to the Women's Empowerment Index - Map 5

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Syangja	1	Arghakhanchi	26	Jajarkot	51
Kathmandu	2	Sunsari	27	Darchula	52
Kaski	3	Taplejung	28	Rukum	53
Palpa	4	Khotang	29	Rolpa	54
Manang	5	Dhading	30	Dailekh	55
Myagdi	6	Rupandehi	31	Dolpa	56
Tanahu	7	Dang	32	Dadeldhura	57
Chitwan	8	Nawalparasi	33	Kapilbastu	58
Lalitpur	9	Surkhet	34	Dhanusa	59
Baglung	10	Makawanpur	35	Baitadi	60
Parbat	11	Bhojpur	36	Doti	61
Dhankuta	12	Okhaldhunga	37	Saptari	62
Bhaktapur	13	Nuwakot	38	Parsa	63
Lamjung	14	Udayapur	39	Sarlahi	64
Gulmi	15	Bardiya	40	Siraha	65
Jhapa	16	Dolakha	41	Bajura	66
Mustang	17	Kailali	42	Bara	67
Gorkha	18	Sindhupalchok	43	Achham	68
Ilam	19	Rasuwa	44	Kalikot	69
Solukhumbu	20	Sindhuli	45	Jumla	70
Kabhrepalanchok	21	Salyan	46	Mahottari	71
Sankhuwasabha	22	Banke	47	Rautahat	72
Panchthar	23	Pyuthan	48	Humla	73
Morang	24	Kanchanpur	49	Bajhang	74
Terhathum	25	Ramechhap	50	Mugu	75

Map 5. Rank According to the Women's Empowerment Index

Contributing indicators: Maps 36, 37, 38, 39



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1 for references

Scale 1:3,500,000

0 12.5 25 50 75 100
Kilometres



Contributing Indices and Indicators

Poverty and Deprivation Index

Rank According to the Child Deprivation Index - Map 6

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Manang	1	Dadeldhura	26	Banke	51
Syangja	2	Darchula	27	Kailali	52
Ilam	3	Dang	28	Saptari	53
Kathmandu	4	Sunsari	29	Sindhupalchok	54
Kaski	5	Taplejung	30	Jajarkot	55
Bhaktapur	6	Okhaldhunga	31	Ramechhap	56
Jhapa	7	Morang	32	Dhanusa	57
Kabhrepalanchok	8	Mustang	33	Rasuwa	58
Panchthar	9	Solukhumbu	34	Siraha	59
Bhojpur	10	Baitadi	35	Rolpa	60
Lalitpur	11	Surkhet	36	Bara	61
Terhathum	12	Dhading	37	Dolpa	62
Myagdi	13	Khotang	38	Doti	63
Palpa	14	Kanchanpur	39	Sarlahi	64
Arghakhanchi	15	Pyuthan	40	Achham	65
Chitwan	16	Nuwakot	41	Mahottari	66
Dhankuta	17	Udayapur	42	Bajhang	67
Makawanpur	18	Rupandehi	43	Bajura	68
Lamjung	19	Dolakha	44	Parsa	69
Sankhuwasabha	20	Sindhuli	45	Kalikot	70
Gulmi	21	Bardiya	46	Humla	71
Baglung	22	Rukum	47	Kapilbastu	72
Tanahu	23	Salyan	48	Jumla	73
Parbat	24	Nawalparasi	49	Rautahat	74
Gorkha	25	Dailekh	50	Mugu	75

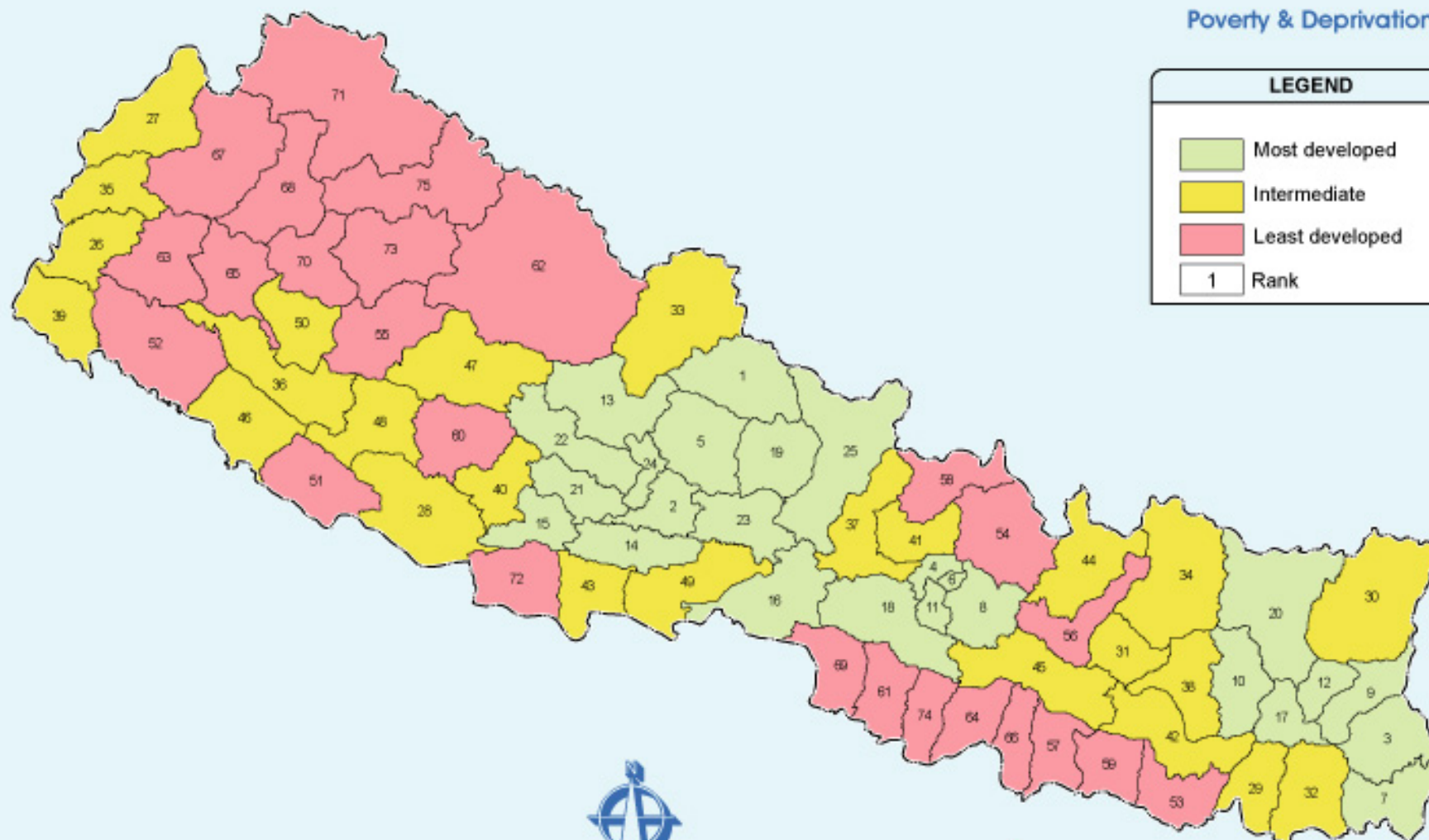
Map 6: Rank According to the Child Deprivation Index

Contributing indicators: Maps 7, 8, 9

Poverty & Deprivation

LEGEND

- Most developed
- Intermediate
- Least developed
- 1 Rank



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1 for references



Child Illiteracy Rate - Map 7

Illiterate children aged 10–14 years as a percentage of total children in the same age group

• Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Manang	3.31	26	Kanchanpur	15.43	51	Jajarkot	24.79
2	Syangja	3.98	27	Sankhuwasabha	15.82	52	Banke	25.34
3	Bhaktapur	4.17	28	Dolakha	16.18	53	Rukum	26.51
4	Kaski	5.44	29	Darchula	16.36	54	Bardiya	28.25
5	Kathmandu	5.65	30	Rupandehi	16.50	55	Ramechhap	28.31
6	Chitwan	7.97	31	Dadeldhura	16.54	56	Saptari	28.69
7	Ilam	8.45	32	Dang	17.12	57	Doti	30.58
8	Kabhrepalanchok	9.27	33	Taplejung	17.39	58	Rolpa	33.49
9	Lalitpur	9.38	34	Nuwakot	17.78	59	Rasuwa	33.49
10	Lamjung	9.58	35	Sunsari	18.19	60	Dhanusa	33.51
11	Palpa	10.13	36	Khotang	18.37	61	Bara	34.69
12	Dhankuta	10.21	37	Mustang	18.57	62	Kapilbastu	36.71
13	Tanahu	10.31	38	Okhaldhunga	19.07	63	Siraha	37.28
14	Jhapa	10.67	39	Baitadi	19.35	64	Parsa	37.81
15	Baglung	11.38	40	Salyan	19.72	65	Bajura	37.83
16	Gorkha	12.14	41	Nawalparasi	20.34	66	Bajhang	38.02
17	Arghakhanchi	12.17	42	Morang	20.54	67	Achham	38.28
18	Gulmi	12.21	43	Pyuthan	20.79	68	Dolpa	40.14
19	Myagdi	12.42	44	Udayapur	20.83	69	Sarlahi	41.99
20	Parbat	12.49	45	Dhading	21.07	70	Kalikot	42.73
21	Bhojpur	12.92	46	Sindhuli	22.04	71	Humla	45.26
22	Surkhet	12.94	47	Solukhumbu	22.22	72	Mahottari	46.34
23	Terhathum	13.45	48	Dailekh	23.89	73	Jumla	46.60
24	Panchthar	13.46	49	Sindhupalchok	24.61	74	Rautahat	48.40
25	Makawanpur	14.27	50	Kailali	24.75	75	Mugu	51.75

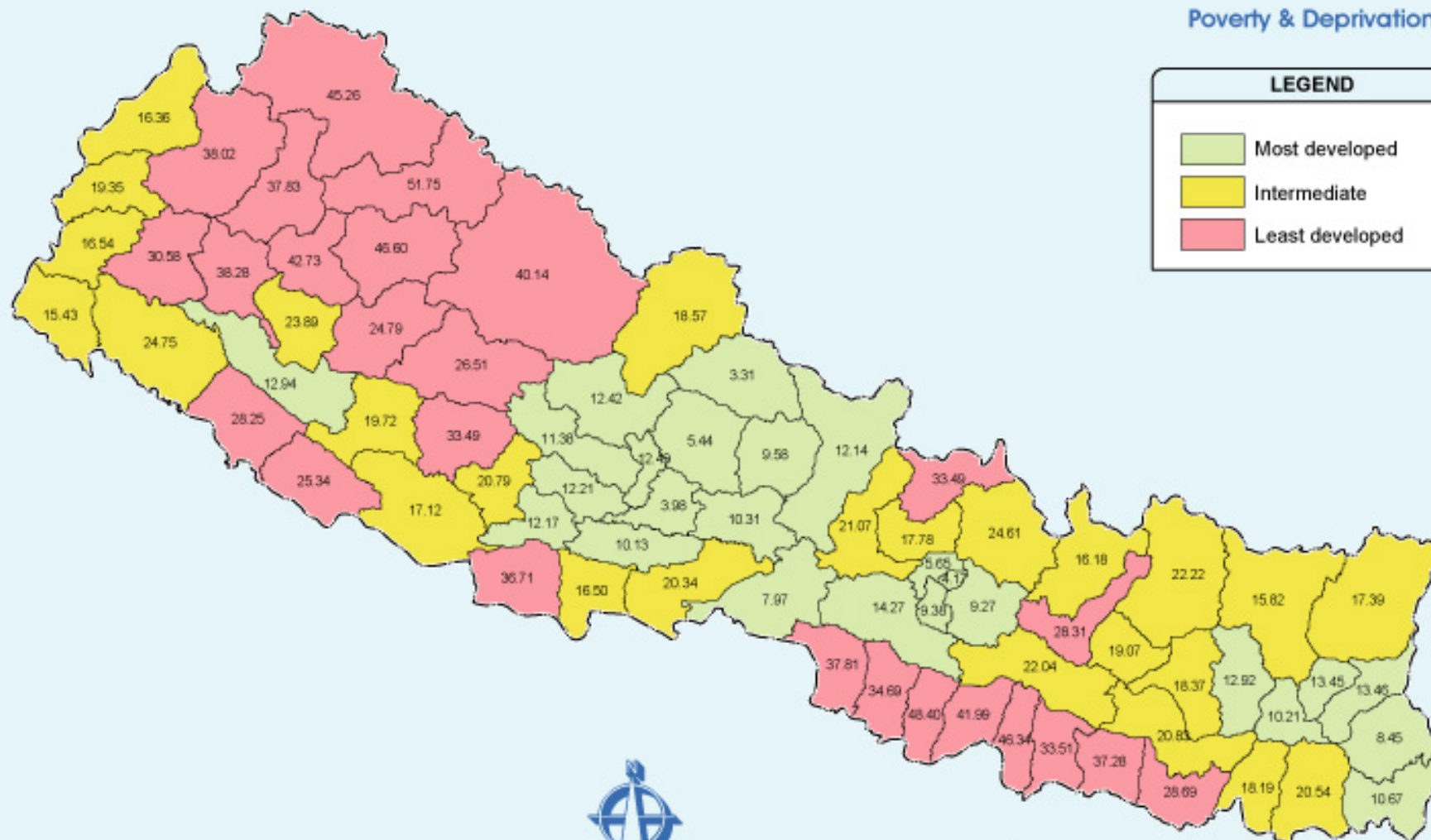
Map 7: Child Illiteracy Rate

Illiterate children aged 10-14 years as a percentage of total children in the same age group

Poverty & Deprivation

LEGEND

- Most developed
- Intermediate
- Least developed



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMGN

ICIMOD
MENRIS 2003

Child Economic Activity Rate - Map 8

Usually economically active children aged 10–14 years as a percentage of total children in the same age group

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Manang	6.62	26	Bara	15.86	51	Kanchanpur	24.03
2	Syangja	8.40	27	Chitwan	15.98	52	Rukum	24.98
3	Ilam	9.40	28	Dhankuta	16.12	53	Dolakha	25.18
4	Panchthar	9.42	29	Tanahu	16.43	54	Dhanusa	25.65
5	Kaski	9.77	30	Parbat	16.47	55	Mahottari	26.67
6	Jhapa	10.00	31	Sunsari	17.02	56	Sindhuli	26.71
7	Kathmandu	10.36	32	Morang	18.12	57	Jajarkot	27.24
8	Kabhrepalanchok	11.25	33	Solukhumbu	19.05	58	Kailali	27.30
9	Bhojpur	11.34	34	Taplejung	19.26	59	Dailekh	27.32
10	Arghakhanchi	11.76	35	Baitadi	19.53	60	Sindhupalchok	28.43
11	Myagdi	12.49	36	Surkhet	19.55	61	Sarlahi	30.88
12	Lalitpur	12.82	37	Pyuthan	19.75	62	Rautahat	32.43
13	Terhathum	13.04	38	Okhaldhunga	19.83	63	Ramechhap	32.64
14	Palpa	13.15	39	Dhading	20.25	64	Rasuwa	33.01
15	Makawanpur	13.15	40	Kapilbastu	20.41	65	Salyan	34.94
16	Sankhuwasabha	13.34	41	Banke	21.18	66	Rolpa	35.46
17	Gulmi	13.50	42	Parsa	21.31	67	Dolpa	35.90
18	Bhaktapur	13.85	43	Khotang	21.31	68	Bajhang	38.28
19	Dadeldhura	14.02	44	Bardiya	21.66	69	Doti	38.80
20	Darchula	14.11	45	Saptari	22.12	70	Achham	41.22
21	Rupandehi	14.61	46	Nawalparasi	22.35	71	Jumla	43.53
22	Lamjung	14.72	47	Mustang	22.50	72	Bajura	43.60
23	Baglung	15.21	48	Siraha	23.05	73	Kalikot	45.95
24	Dang	15.67	49	Udayapur	23.51	74	Mugu	48.26
25	Gorkha	15.73	50	Nuwakot	23.86	75	Humla	48.78

Map 8: Child Economic Activity Rate

Usually economically active children aged 10-14 years as a percentage of total children in the same age group



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000
0 12.5 25 50 75 100
Kilometres



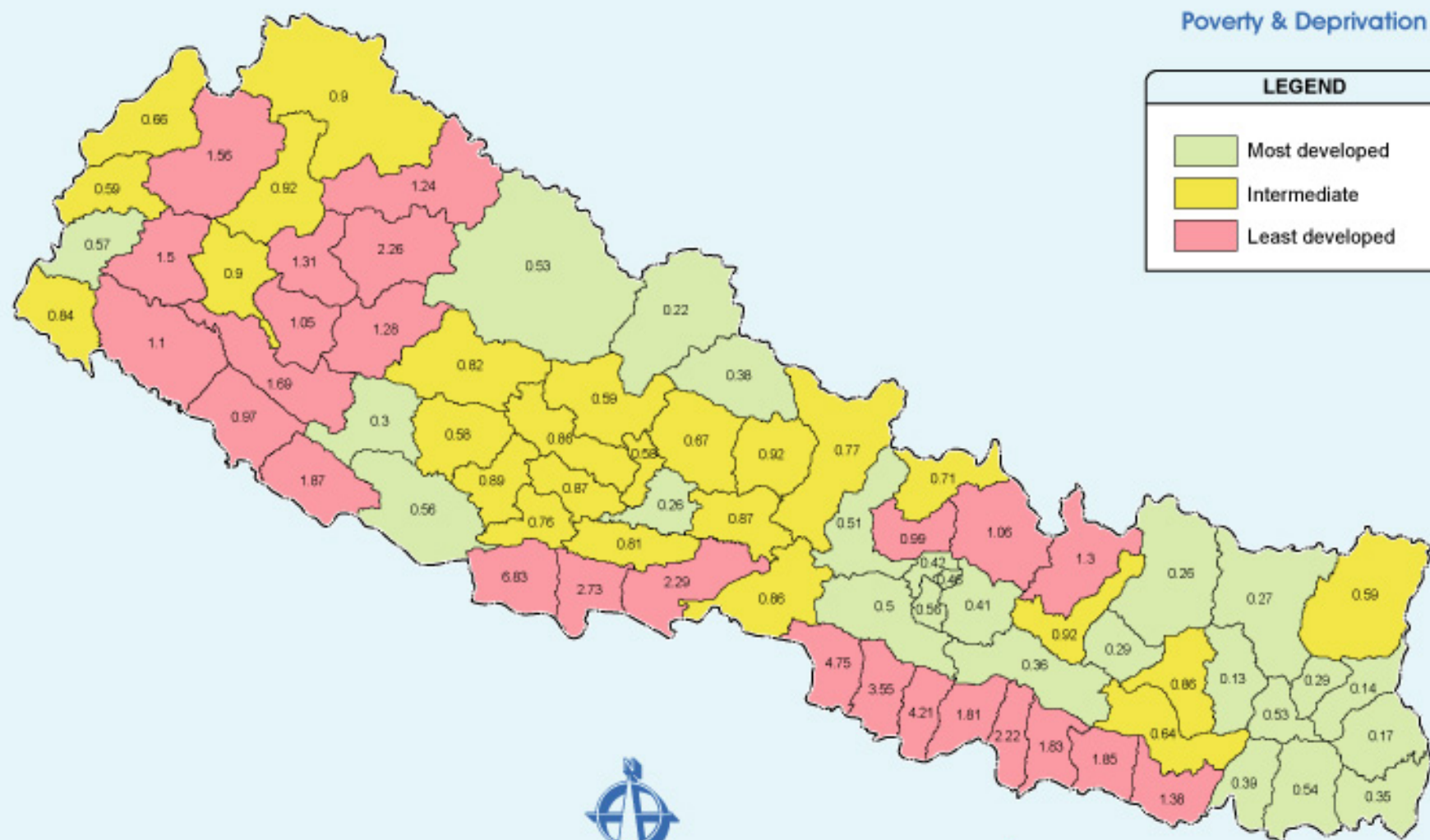
Proportion of Child Marriage - Map 9

Married children aged 10–14 years as a percentage of the total children in the same age group

Most Developed			Intermediate			Least Developed		
S.N.	District	%	S.N.	District	%	S.N.	District	%
1	Bhojpur	0.13	26	Parbat	0.58	51	Bardiya	0.97
2	Panchthar	0.14	27	Rolpa	0.58	52	Nuwakot	0.99
3	Ilam	0.17	28	Taplejung	0.59	53	Dailekh	1.05
4	Mustang	0.22	29	Baitadi	0.59	54	Sindhupalchok	1.06
5	Solukhumbu	0.26	30	Myagdi	0.59	55	Kailali	1.10
6	Syangja	0.26	31	Udayapur	0.64	56	Mugu	1.24
7	Sankhuwasabha	0.27	32	Darchula	0.66	57	Jajarkot	1.28
8	Terhathum	0.29	33	Kaski	0.67	58	Dolakha	1.30
9	Okhaldhunga	0.29	34	Rasuwa	0.71	59	Kalikot	1.31
10	Salyan	0.30	35	Arghakhanchi	0.76	60	Saptari	1.38
11	Jhapa	0.35	36	Gorkha	0.77	61	Doti	1.50
12	Sindhuli	0.36	37	Palpa	0.81	62	Bajhang	1.56
13	Manang	0.38	38	Rukum	0.82	63	Surkhet	1.69
14	Sunsari	0.39	39	Kanchanpur	0.84	64	Sarlahi	1.81
15	Kabhrepalanchok	0.41	40	Chitwan	0.86	65	Dhanusa	1.83
16	Kathmandu	0.42	41	Khotang	0.86	66	Siraha	1.85
17	Bhaktapur	0.46	42	Baglung	0.86	67	Banke	1.87
18	Makawanpur	0.50	43	Tanahu	0.87	68	Mahottari	2.22
19	Dhading	0.51	44	Gulmi	0.87	69	Jumla	2.26
20	Dhankuta	0.53	45	Pyuthan	0.89	70	Nawalparasi	2.29
21	Dolpa	0.53	46	Achham	0.90	71	Rupandehi	2.73
22	Morang	0.54	47	Humla	0.90	72	Bara	3.55
23	Lalitpur	0.56	48	Lamjung	0.92	73	Rautahat	4.21
24	Dang	0.56	49	Ramechhap	0.92	74	Parsa	4.75
25	Dadeldhura	0.57	50	Bajura	0.92	75	Kapilbastu	6.83

Map 9: Proportion of Child Marriage

Married children aged 10-14 years as a percentage of the total children in the same age group



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



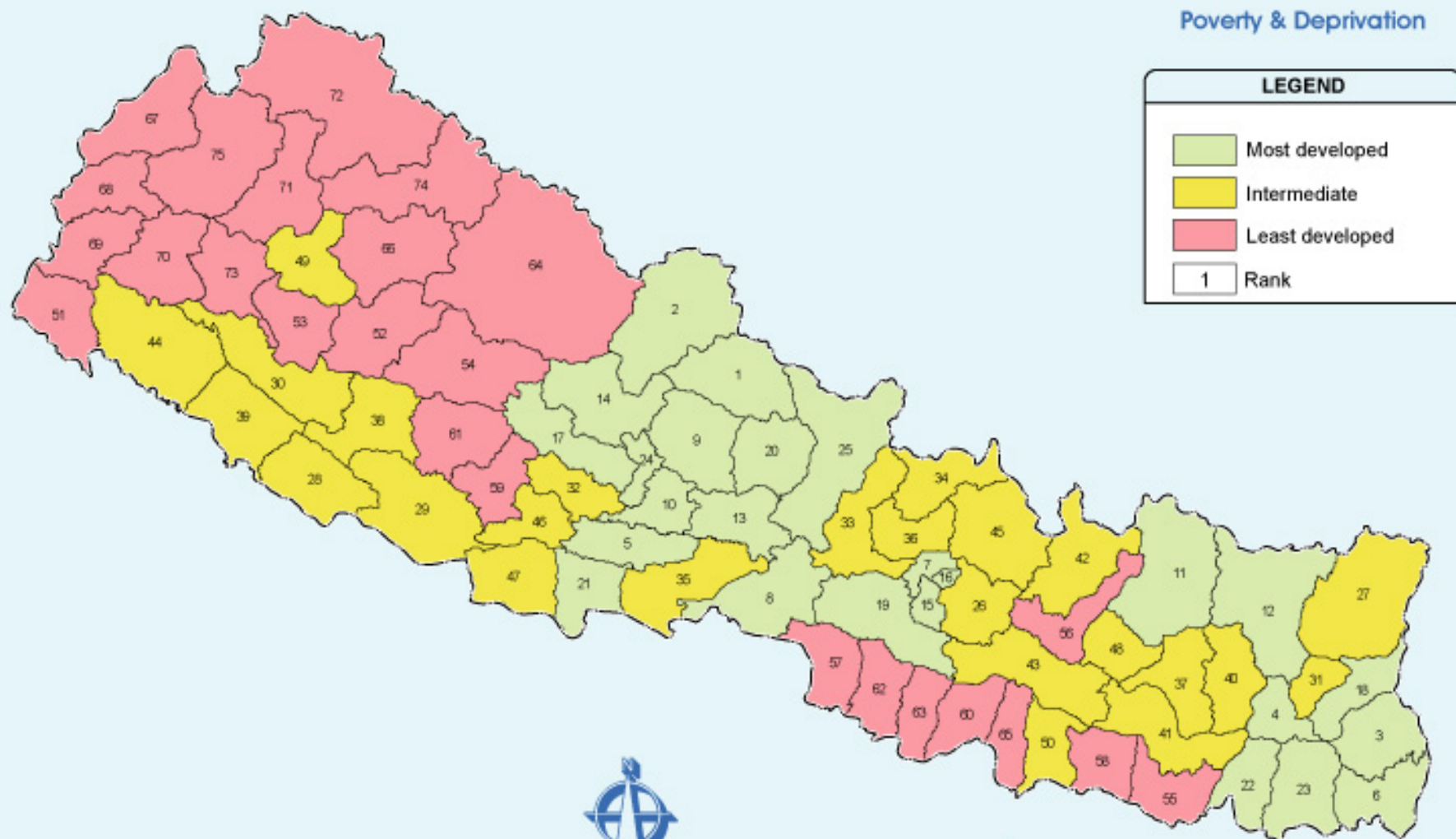
Rank According to the Gender Discrimination Index - Map 10

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Manang	1	Kabhrepalanchok	26	Kanchanpur	51
Mustang	2	Taplejung	27	Jajarkot	52
Ilam	3	Banke	28	Dailekh	53
Dhankuta	4	Dang	29	Rukum	54
Palpa	5	Surkhet	30	Saptari	55
Jhapa	6	Terhathum	31	Ramechhap	56
Kathmandu	7	Gulmi	32	Parsa	57
Chitwan	8	Dhading	33	Siraha	58
Kaski	9	Rasuwa	34	Pyuthan	59
Syangja	10	Nawalparasi	35	Sarlahi	60
Solukhumbu	11	Nuwakot	36	Rolpa	61
Sankhuwasabha	12	Khotang	37	Bara	62
Tanahu	13	Salyan	38	Rautahat	63
Myagdi	14	Bardiya	39	Dolpa	64
Lalitpur	15	Bhojpur	40	Mahottari	65
Bhaktapur	16	Udayapur	41	Jumla	66
Baglung	17	Dolakha	42	Darchula	67
Panchthar	18	Sindhuli	43	Baitadi	68
Makawanpur	19	Kailali	44	Dadeldhura	69
Lamjung	20	Sindhupalchok	45	Doti	70
Rupandehi	21	Arghakhanchi	46	Bajura	71
Sunsari	22	Kapilbastu	47	Humla	72
Morang	23	Okhaldhunga	48	Achham	73
Parbat	24	Kalikot	49	Mugu	74
Gorkha	25	Dhanusa	50	Bajhang	75

Map 10: Rank According to the Gender Discrimination Index

Contributing indicators: Maps 11, 12

Poverty & Deprivation



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1 for references



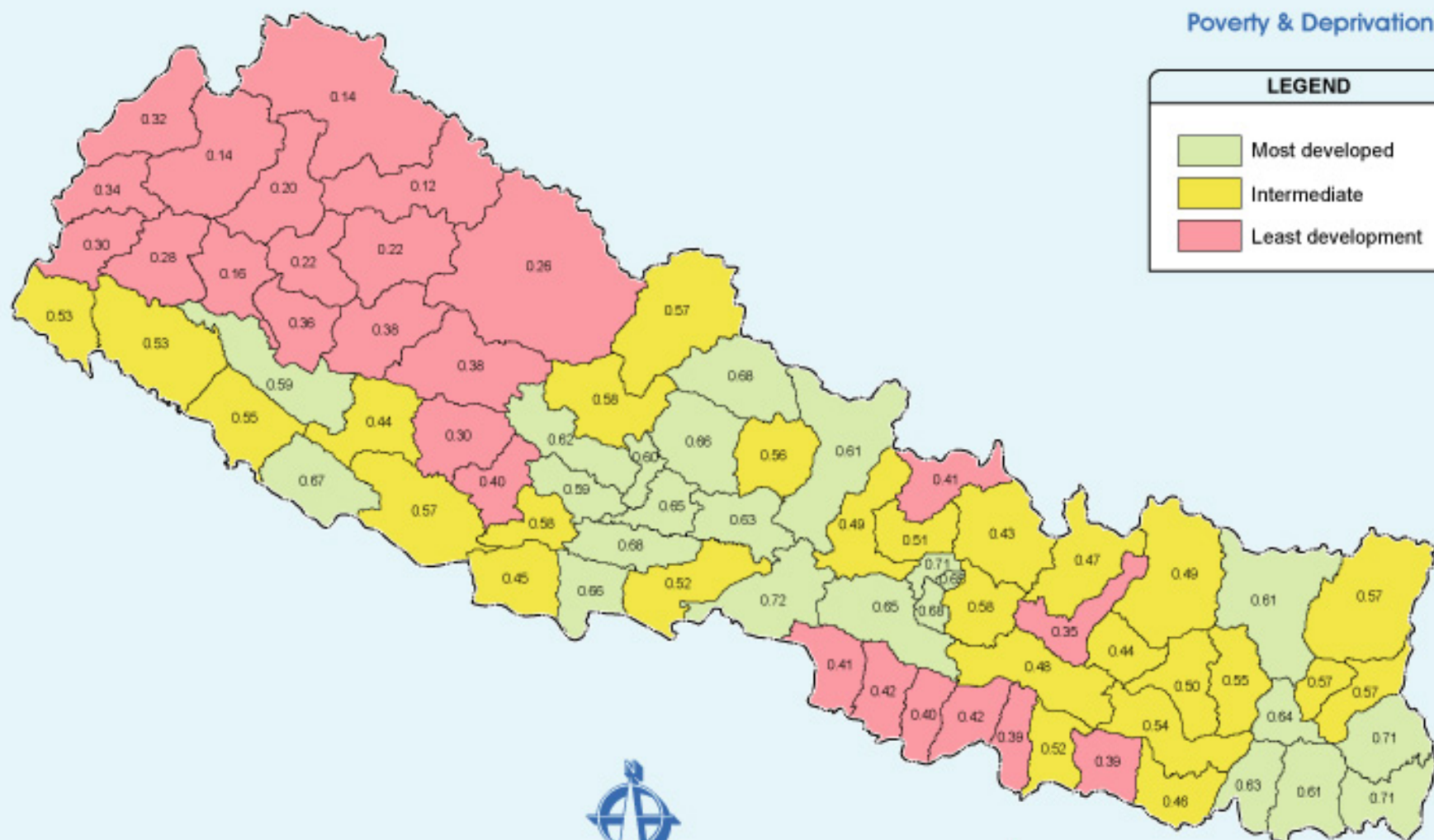
Adult Gender Imbalance Ratio in Literacy Status - Map 11

Ratio of females to males among the literate population aged 15 and above years
multiplied by the sex ratio of the same age group

Most Developed			Intermediate			Least Developed		
S.N.	District	Ratio	S.N.	District	Ratio	S.N.	District	Ratio
1	Chitwan	0.72	26	Myagdi	0.58	51	Sarlahi	0.42
2	Jhapa	0.71	27	Dang	0.57	52	Bara	0.42
3	Kathmandu	0.71	28	Panchthar	0.57	53	Parsa	0.41
4	Ilam	0.71	29	Mustang	0.57	54	Rasuwa	0.41
5	Manang	0.68	30	Terhathum	0.57	55	Rautahat	0.40
6	Palpa	0.68	31	Taplejung	0.57	56	Pyuthan	0.40
7	Lalitpur	0.68	32	Lamjung	0.56	57	Mahottari	0.39
8	Banke	0.67	33	Bhojpur	0.55	58	Siraha	0.39
9	Rupandehi	0.66	34	Bardiya	0.55	59	Rukum	0.38
10	Kaski	0.66	35	Udayapur	0.54	60	Jajarkot	0.38
11	Syangja	0.65	36	Kailali	0.53	61	Dailekh	0.36
12	Makawanpur	0.65	37	Kanchanpur	0.53	62	Ramechhap	0.35
13	Bhaktapur	0.65	38	Dhanusa	0.52	63	Baitadi	0.34
14	Dhankuta	0.64	39	Nawalparasi	0.52	64	Darchula	0.32
15	Tanahu	0.63	40	Nuwakot	0.51	65	Rolpa	0.30
16	Sunsari	0.63	41	Khotang	0.50	66	Dadeldhura	0.30
17	Baglung	0.62	42	Solukhumbu	0.49	67	Doti	0.28
18	Morang	0.61	43	Dhading	0.49	68	Dolpa	0.26
19	Sankhuwasabha	0.61	44	Sindhuli	0.48	69	Kalikot	0.22
20	Gorkha	0.61	45	Dolakha	0.47	70	Jumla	0.22
21	Parbat	0.60	46	Saptari	0.46	71	Bajura	0.20
22	Surkhet	0.59	47	Kapilbastu	0.45	72	Achham	0.16
23	Gulmi	0.59	48	Salyan	0.44	73	Humla	0.14
24	Kabhrepalanchok	0.58	49	Okhaldhunga	0.44	74	Bajhang	0.14
25	Arghakhanchi	0.58	50	Sindhupalchok	0.43	75	Mugu	0.12

Map 11: Adult Gender Imbalance Ratio in Literacy Status

Ratio of females to males among the literate population aged 15 and above years multiplied by the sex ratio of the same age group



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000
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Kilometres



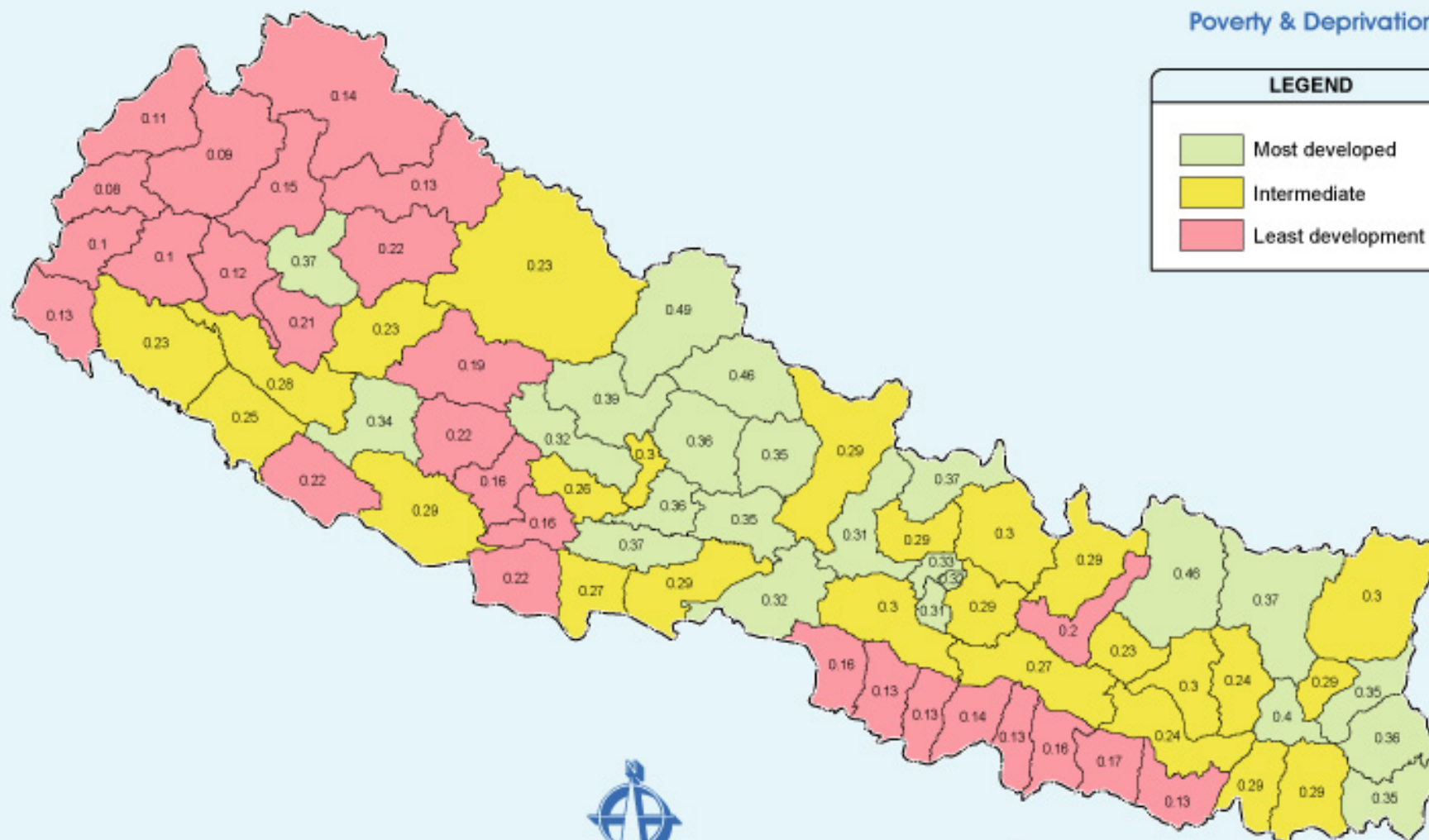
Adult Gender Imbalance Ratio in Non-agricultural Occupations - Map 12

Ratio of females to males aged 15 years and above engaged in non-agricultural occupations
multiplied by the sex ratio of the same age group

Most Developed			Intermediate			Least Developed		
S.No.	District	Ratio	S.No.	District	Ratio	S.No.	District	Ratio
1	Mustang	0.49	26	Taplejung	0.30	51	Kapilbastu	0.22
2	Manang	0.46	27	Sindhupalchok	0.30	52	Jumla	0.22
3	Solukhumbu	0.46	28	Makwanpur	0.30	53	Dailekh	0.21
4	Dhankuta	0.40	29	Morang	0.29	54	Ramechhap	0.20
5	Myagdi	0.39	30	Nuwakot	0.29	55	Rukum	0.19
6	Sankhuwasabha	0.37	31	Terhathum	0.29	56	Siraha	0.17
7	Kalikot	0.37	32	Dang	0.29	57	Arghakhanchi	0.16
8	Palpa	0.37	33	Nawalparasi	0.29	58	Pyuthan	0.16
9	Rasuwa	0.37	34	Gorkha	0.29	59	Parsa	0.16
10	Syangja	0.36	35	Kabhrepalanchok	0.29	60	Dhanusa	0.16
11	Ilam	0.36	36	Sunsari	0.29	61	Bajura	0.15
12	Kaski	0.36	37	Dolakha	0.29	62	Sarlahi	0.14
13	Panchthar	0.35	38	Surkhet	0.28	63	Humla	0.14
14	Tanahu	0.35	39	Sindhuli	0.27	64	Kanchanpur	0.13
15	Lamjung	0.35	40	Rupandehi	0.27	65	Mahottari	0.13
16	Jhapa	0.35	41	Gulmi	0.26	66	Saptari	0.13
17	Salyan	0.34	42	Bardiya	0.25	67	Bara	0.13
18	Kathmandu	0.33	43	Udayapur	0.24	68	Rautahat	0.13
19	Baglung	0.32	44	Bhojpur	0.24	69	Mugu	0.13
20	Bhaktapur	0.32	45	Kailali	0.23	70	Achham	0.12
21	Chitwan	0.32	46	Jajarkot	0.23	71	Darchula	0.11
22	Dhading	0.31	47	Okhaldhunga	0.23	72	Doti	0.10
23	Lalitpur	0.31	48	Dolpa	0.23	73	Dadeldhura	0.10
24	Khotang	0.30	49	Banke	0.22	74	Bajhang	0.09
25	Parbat	0.30	50	Rolpa	0.22	75	Baitadi	0.08

Map 12: Adult Gender Imbalance Ratio in Non-agricultural Occupations

Ratio of females to males aged 15 years and above engaged in non-agricultural occupations multiplied by the sex ratio of the same age group



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000
0 12.5 25 50 75 100
Kilometres



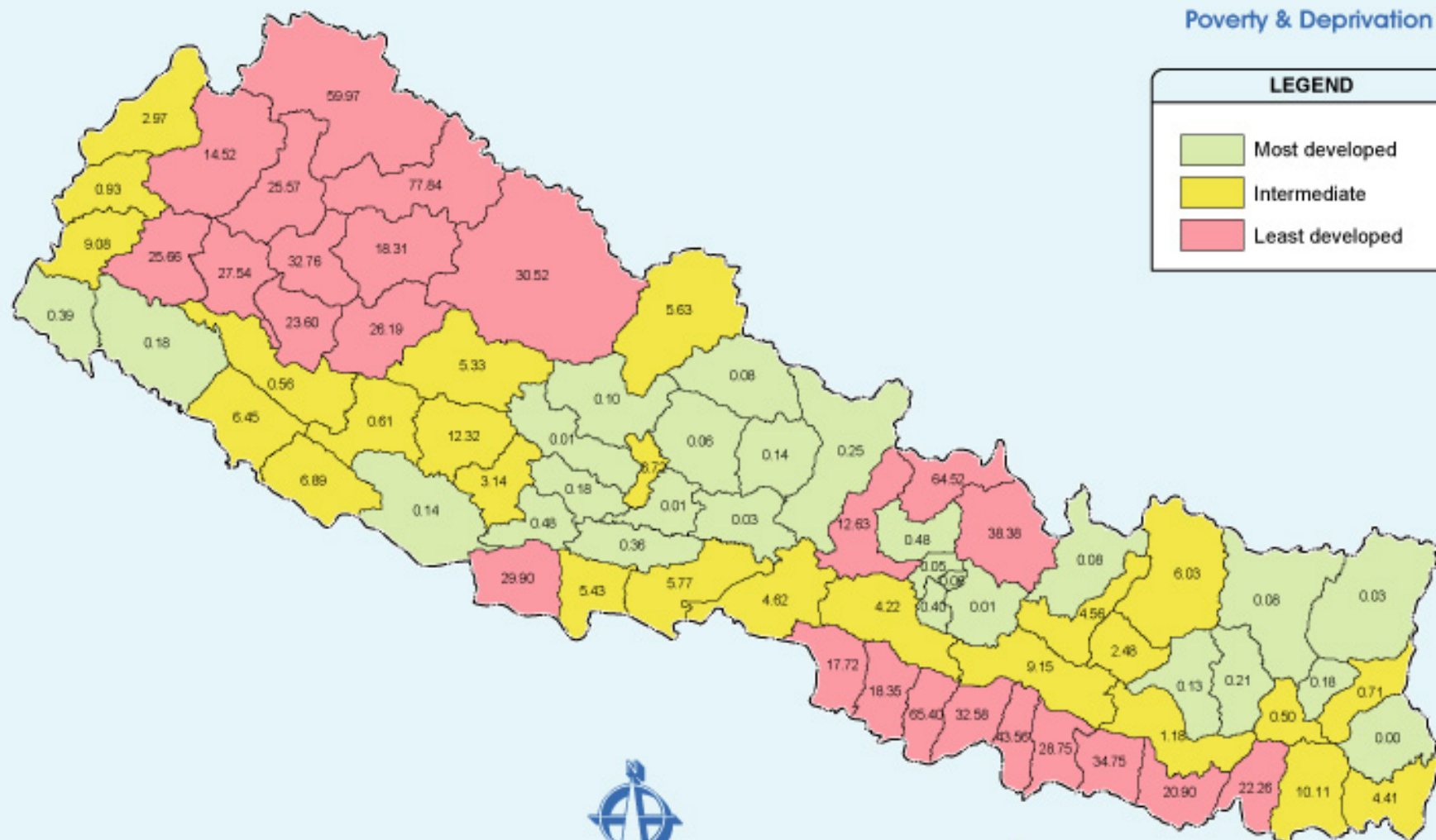
Percentage of Educationally Disadvantaged Population - Map 13

Educationally disadvantaged population (those caste/ethnic population with literacy rates below or equal to 30%)
as a percentage of total population

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Ilam	0.00	26	Nuwakot	0.48	51	Rolpa	12.32
2	Kabhrepalanchok	0.01	27	Dhankuta	0.50	52	Dhading	12.63
3	Baglung	0.01	28	Surkhet	0.56	53	Bajhang	14.52
4	Syangja	0.01	29	Salyan	0.61	54	Parsa	17.72
5	Tanahu	0.03	30	Panchthar	0.71	55	Jumla	18.31
6	Taplejung	0.03	31	Baitadi	0.93	56	Bara	18.35
7	Kathmandu	0.05	32	Udayapur	1.18	57	Saptari	20.90
8	Kaski	0.06	33	Okhaldhunga	2.48	58	Sunsari	22.26
9	Bhaktapur	0.06	34	Darchula	2.97	59	Dailekh	23.60
10	Dolakha	0.08	35	Pyuthan	3.14	60	Bajura	25.57
11	Manang	0.08	36	Makawanpur	4.22	61	Doti	25.66
12	Sankhuwasabha	0.08	37	Jhapa	4.41	62	Jajarkot	26.19
13	Myagdi	0.10	38	Ramechhap	4.56	63	Achham	27.54
14	Khotang	0.13	39	Chitwan	4.62	64	Dhanusa	28.75
15	Lamjung	0.14	40	Rukum	5.33	65	Kapilbastu	29.90
16	Dang	0.14	41	Rupandehi	5.43	66	Dolpa	30.52
17	Kailali	0.18	42	Mustang	5.63	67	Sarlahi	32.58
18	Terhathum	0.18	43	Nawalparasi	5.77	68	Kalikot	32.76
19	Gulmi	0.18	44	Solukhumbu	6.03	69	Siraha	34.75
20	Bhojpur	0.21	45	Bardiya	6.45	70	Sindhupalchok	38.38
21	Gorkha	0.25	46	Parbat	6.72	71	Mahottari	43.56
22	Palpa	0.36	47	Banke	6.89	72	Humla	59.97
23	Kanchanpur	0.39	48	Dadeldhura	9.08	73	Rasuwa	64.52
24	Lalitpur	0.40	49	Sindhuli	9.15	74	Rautahat	65.40
25	Arghakhanchi	0.48	50	Morang	10.11	75	Mugu	77.84

Map 13: Percentage of Educationally Disadvantaged Population

Educationally disadvantaged population (those caste/ethnic population with literacy rates below or equal to 30%) as a percentage of total population



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000
0 12.5 25 50 75 100
Kilometres



Percentage of Marginal Farm Households - Map 14

Marginal farm households (farm size ≤ 0.5 ha) as a percentage of total farm households multiplied by the proportion of agricultural labour force*

Most Developed			Intermediate			Least Developed		
S.N.	District	%	S.N.	District	%	S.N.	District	%
1	Sunsari	15.14	26	Makawanpur	29.02	51	Pyuthan	39.10
2	Banke	15.15	27	Kailali	29.20	52	Salyan	40.27
3	Jhapa	15.72	28	Kanchanpur	29.39	53	Doti	42.75
4	Kathmandu	16.80	29	Rautahat	29.46	54	Dhading	43.35
5	Rupandehi	17.21	30	Mugu	31.32	55	Sindhupalchok	44.26
6	Dhanusa	17.56	31	Kaski	32.03	56	Manang	44.44
7	Morang	17.88	32	Kabhrpalanchok	32.97	57	Gorkha	46.14
8	Siraha	17.89	33	Udayapur	32.97	58	Darchula	46.80
9	Saptari	20.12	34	Humla	33.45	59	Syangja	46.81
10	Sarlahi	20.87	35	Nawalparasi	33.72	60	Parbat	50.29
11	Kapilbastu	22.11	36	Solukhumbu	33.87	61	Lamjung	52.03
12	Parsa	22.26	37	Nuwakot	34.56	62	Baglung	52.64
13	Mahottari	23.64	38	Panchthar	34.60	63	Dolpa	53.89
14	Bara	23.71	39	Bhaktapur	35.42	64	Arghakhanchi	53.91
15	Bardiya	23.82	40	Ramechhap	35.43	65	Rukum	54.35
16	Dang	24.18	41	Dolakha	35.69	66	Myagdi	56.45
17	Chitwan	24.90	42	Khotang	35.73	67	Dailekh	56.68
18	Ilam	26.00	43	Bhojpur	35.86	68	Jumla	56.72
19	Dhankuta	26.31	44	Taplejung	35.87	69	Bajhang	57.82
20	Terhathum	26.44	45	Rasuwa	35.93	70	Rolpa	58.36
21	Lalitpur	27.09	46	Jajarkot	36.01	71	Baitadi	58.97
22	Sankhuwasabha	27.27	47	Gulmi	37.10	72	Sindhuli	59.14
23	Okhaldhunga	27.71	48	Mustang	37.30	73	Bajura	62.05
24	Surkhet	28.67	49	Tanahu	37.98	74	Kalikot	62.32
25	Palpa	28.97	50	Dadeldhura	38.78	75	Achham	66.34

* Operational agricultural land area is used to derive the indicator from unpublished data of the 2001 population census or (unpublished operational agricultural land area data of 2001 population census is provisionally used to derive the indicator).

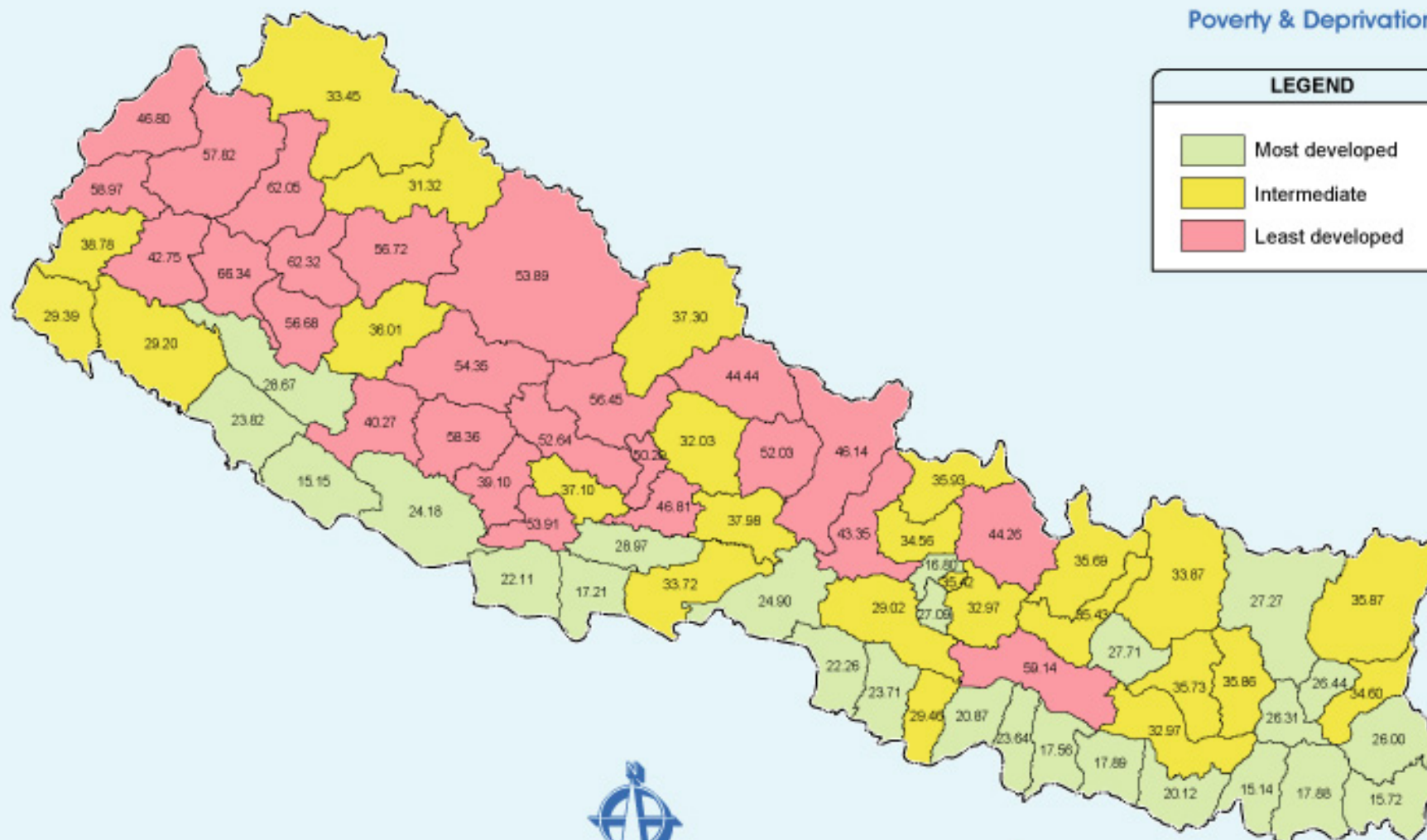
Map 14: Percentage of Marginal Farm Households

Marginal farm households (farm size ≤ 0.5 ha) as a percentage of total farm households multiplied by the proportion of agricultural labour force

Poverty & Deprivation

LEGEND

- Most developed
- Intermediate
- Least developed



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMGN



Per Capita Food Production - Map 15

Caloric values of food (paddy, wheat, maize, millet, barley and potatoes) production per day divided by the rural population

Most Developed			Intermediate			Least Developed		
S.No.	District	Kilo calories	S.No.	District	Kilo calories	S.No.	District	Kilo calories
1	Jhapa	6076	26	Khotang	3639	51	Ramechhap	2635
2	Kanchanpur	5302	27	Dhanusa	3625	52	Baglung	2634
3	Morang	5166	28	Lamjung	3621	53	Udayapur	2619
4	Chitwan	5071	29	Taplejung	3610	54	Jajarkot	2486
5	Kaski	5030	30	Tanahu	3536	55	Arghakhanchi	2474
6	Parsa	4961	31	Parbat	3518	56	Lalitpur	2385
7	Bara	4915	32	Salyan	3480	57	Dailekh	2277
8	Bhojpur	4855	33	Surkhet	3462	58	Kathmandu	2263
9	Dhankuta	4844	34	Gorkha	3432	59	Dhading	2206
10	Sunsari	4763	35	Ilam	3404	60	Mustang	2196
11	Bardiya	4618	36	Nawalparasi	3366	61	Manang	2194
12	Dang	4611	37	Okhaldhunga	3195	62	Gulmi	2178
13	Kapilbastu	4346	38	Solukhumbu	3179	63	Rolpa	2086
14	Bhaktapur	4267	39	Rukum	3169	64	Doti	2055
15	Rupandehi	4250	40	Sindhupalchok	3161	65	Dolpa	2004
16	Saptari	4226	41	Mahottari	3158	66	Darchula	1994
17	Sankhuwasabha	4056	42	Palpa	3143	67	Dolakha	1774
18	Banke	3929	43	Rasuwa	3100	68	Bajura	1628
19	Terhathum	3828	44	Dadeldhura	3057	69	Bajhang	1578
20	Nuwakot	3812	45	Rautahat	3003	70	Achham	1519
21	Kabhrepalanchok	3722	46	Myagdi	2792	71	Pyuthan	1511
22	Siraha	3684	47	Jumla	2781	72	Kalikot	1445
23	Kailali	3683	48	Makawanpur	2739	73	Baitadi	1418
24	Panchthar	3674	49	Sarlahi	2738	74	Mugu	1127
25	Syangja	3640	50	Sindhuli	2727	75	Humla	1018

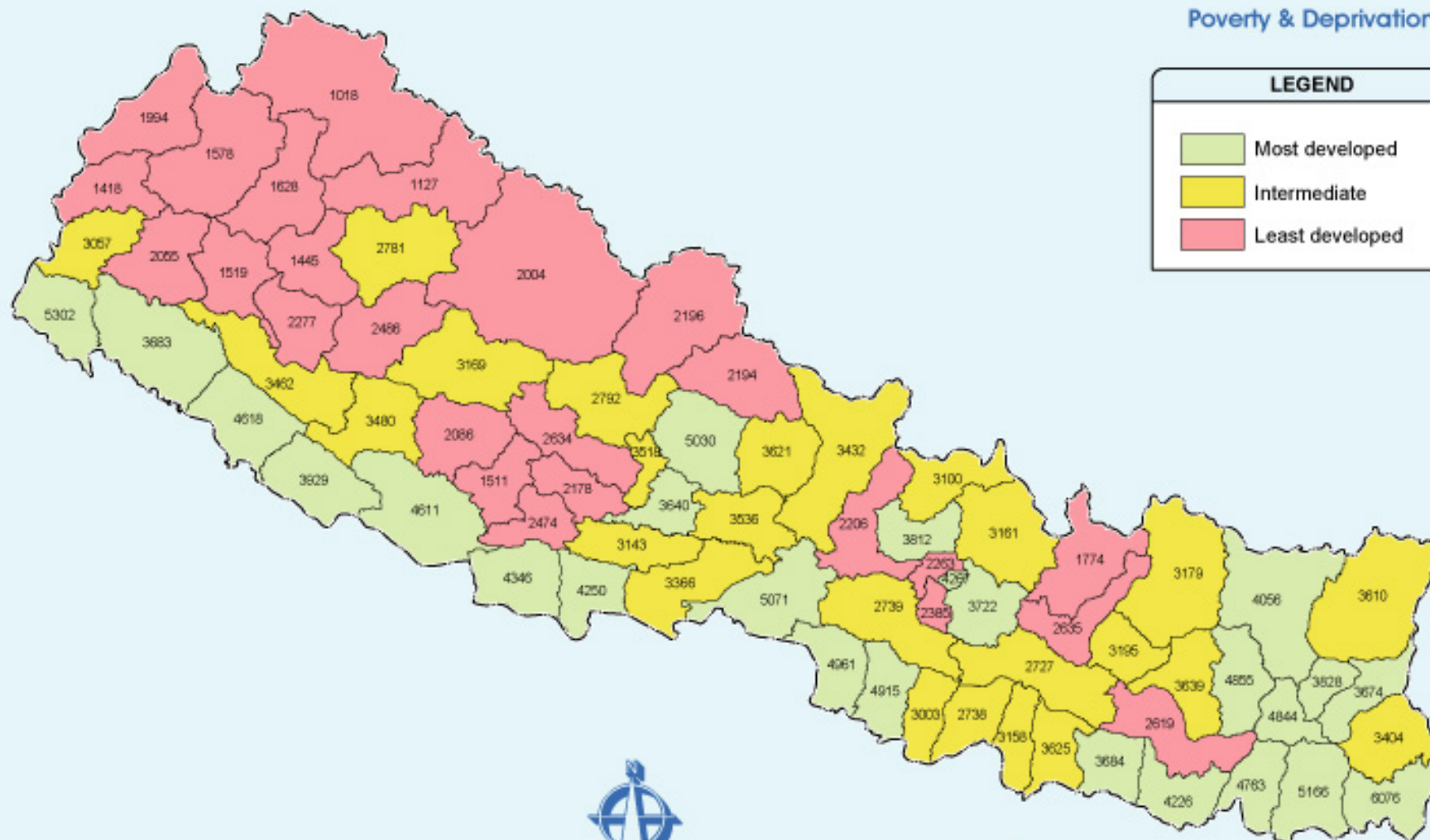
Map 15: Per Capital Food Production

Caloric values of food (paddy, wheat, maize, millet, barley and potatoes) production per day divided by the rural population

Poverty & Deprivation

LEGEND

- Most developed
- Intermediate
- Least developed



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMGN



Contributing Indices and Indicators

Socioeconomic and Infrastructural Development Index

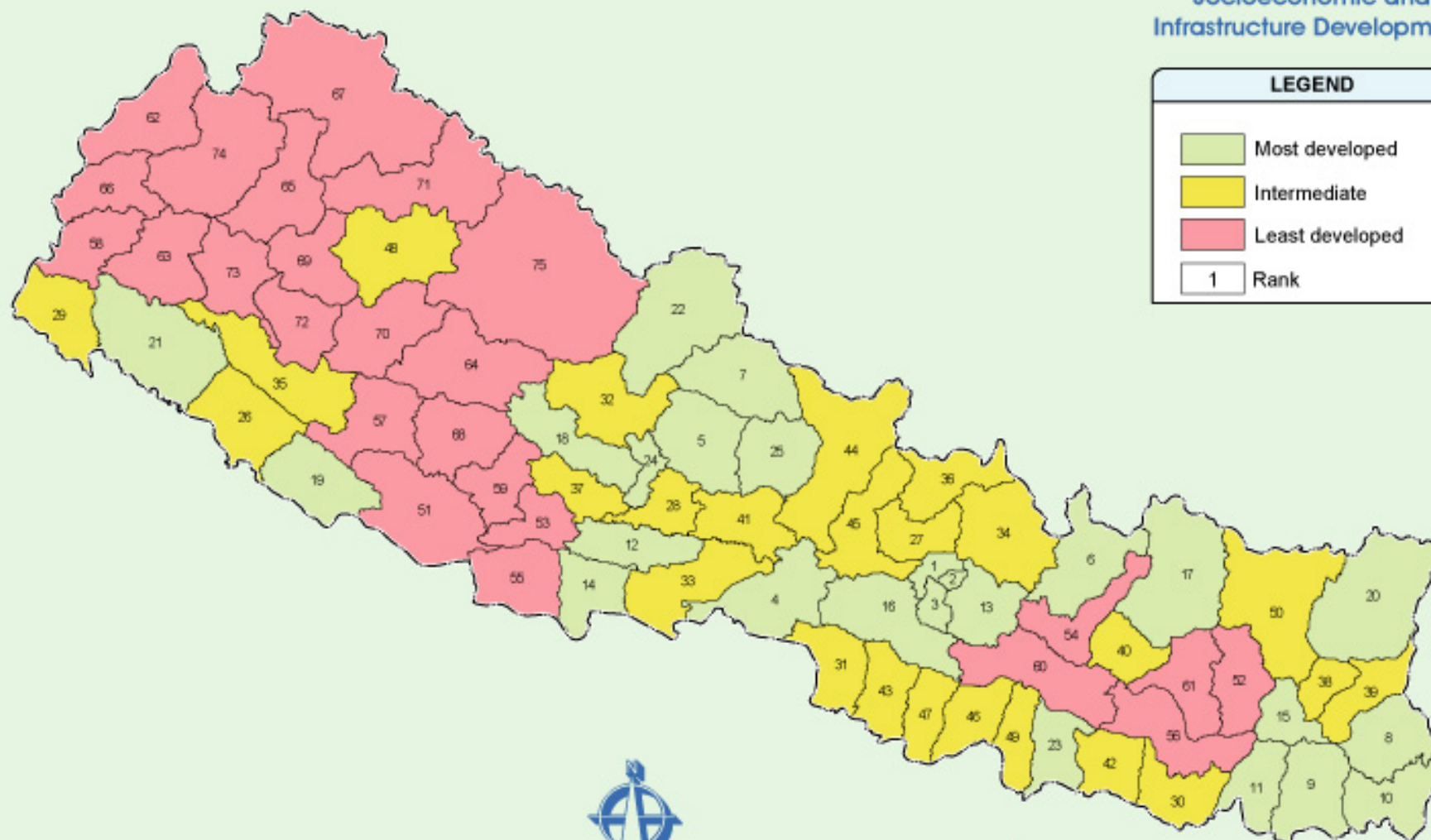
Rank According to the Health and Development Index - Map 16

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Kathmandu	1	Bardiya	26	Dang	51
Bhaktapur	2	Nuwakot	27	Bhojpur	52
Lalitpur	3	Syangja	28	Arghakhanchi	53
Chitwan	4	Kanchanpur	29	Ramechhap	54
Kaski	5	Saptari	30	Kapilbastu	55
Dolakha	6	Parsa	31	Udayapur	56
Manang	7	Myagdi	32	Salyan	57
Ilam	8	Nawalparasi	33	Dadeldhura	58
Morang	9	Sindhupalchok	34	Pyuthan	59
Jhapa	10	Surkhet	35	Sindhuli	60
Sunsari	11	Rasuwa	36	Khotang	61
Palpa	12	Gulmi	37	Darchula	62
Kabhrepalanchok	13	Terhathum	38	Doti	63
Rupandehi	14	Panchthar	39	Rukum	64
Dhankuta	15	Okhaldhunga	40	Bajura	65
Makawanpur	16	Tanahu	41	Baitadi	66
Solukhumbu	17	Siraha	42	Humla	67
Baglung	18	Bara	43	Rolpa	68
Banke	19	Gorkha	44	Kalikot	69
Taplejung	20	Dhading	45	Jajarkot	70
Kailali	21	Sarlahi	46	Mugu	71
Mustang	22	Rautahat	47	Dailekh	72
Dhanusa	23	Jumla	48	Achham	73
Parbat	24	Mahottari	49	Bajhang	74
Lamjung	25	Sankhuwasabha	50	Dolpa	75

Map 16: Rank According to the Health Development Index

Contributing indicators: Maps 17, 18, 19

Socioeconomic and
Infrastructure Development



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1 for references

Scale 1:3,500,000

0 12.5 25 50 75 100
Kilometres



CBS/HMGN

ICIMOD
MENRIS 2003

Contraceptive Prevalence Rate - Map 17

Number of fertile couples using contraceptives per 100 married women of reproductive age

Most Developed			Intermediate			Least Developed		
S.No.	District	Contraceptive Prevalence Rate in %	S.No.	District	Contraceptive Prevalence Rate in %	S.No.	District	Contraceptive Prevalence Rate in %
1	Kathmandu	77.42	26	Taplejung	38.54	51	Dhading	24.40
2	Lalitpur	77.20	27	Parsa	37.19	52	Pyuthan	24.19
3	Bhaktapur	73.14	28	Dhanusa	37.09	53	Parbat	24.00
4	Manang	70.09	29	Nuwakot	36.74	54	Doti	23.92
5	Dolakha	60.27	30	Bhojpur	35.59	55	Salyan	23.84
6	Morang	60.05	31	Rupandehi	35.54	56	Ramechhap	22.45
7	Solukhumbu	59.69	32	Siraha	34.66	57	Kapilbastu	21.57
8	Chitwan	59.26	33	Banke	34.63	58	Gulmi	21.49
9	Jhapa	55.88	34	Gorkha	34.10	59	Arghakhanchi	21.44
10	Kabhrepalanchok	55.03	35	Sarlahi	34.01	60	Rukum	20.58
11	Ilam	52.06	36	Sindhupalchok	33.75	61	Dailekh	19.99
12	Mustang	49.30	37	Panchthar	32.37	62	Jumla	18.99
13	Sunsari	47.82	38	Lamjung	32.00	63	Rolpa	18.61
14	Dhankuta	45.94	39	Mahottari	30.79	64	Baitadi	18.15
15	Kaski	44.77	40	Terhathum	30.65	65	Dadeldhura	17.48
16	Palpa	44.48	41	Baglung	29.52	66	Darchula	16.05
17	Dang	41.89	42	Okhaldhunga	28.90	67	Bajura	14.97
18	Nawalparasi	41.83	43	Tanahu	28.53	68	Jajarkot	14.20
19	Kanchanpur	41.60	44	Bara	28.16	69	Humla	13.86
20	Kailali	41.56	45	Udayapur	27.68	70	Dolpa	12.48
21	Bardiya	40.92	46	Syangja	27.37	71	Bajhang	12.11
22	Rasuwa	40.22	47	Sindhuli	26.71	72	Khotang	11.92
23	Makawanpur	39.83	48	Myagdi	26.63	73	Achham	11.61
24	Surkhet	39.50	49	Rautahat	25.14	74	Mugu	10.37
25	Saptari	39.05	50	Sankhuwasabha	24.68	75	Kalikot	7.87

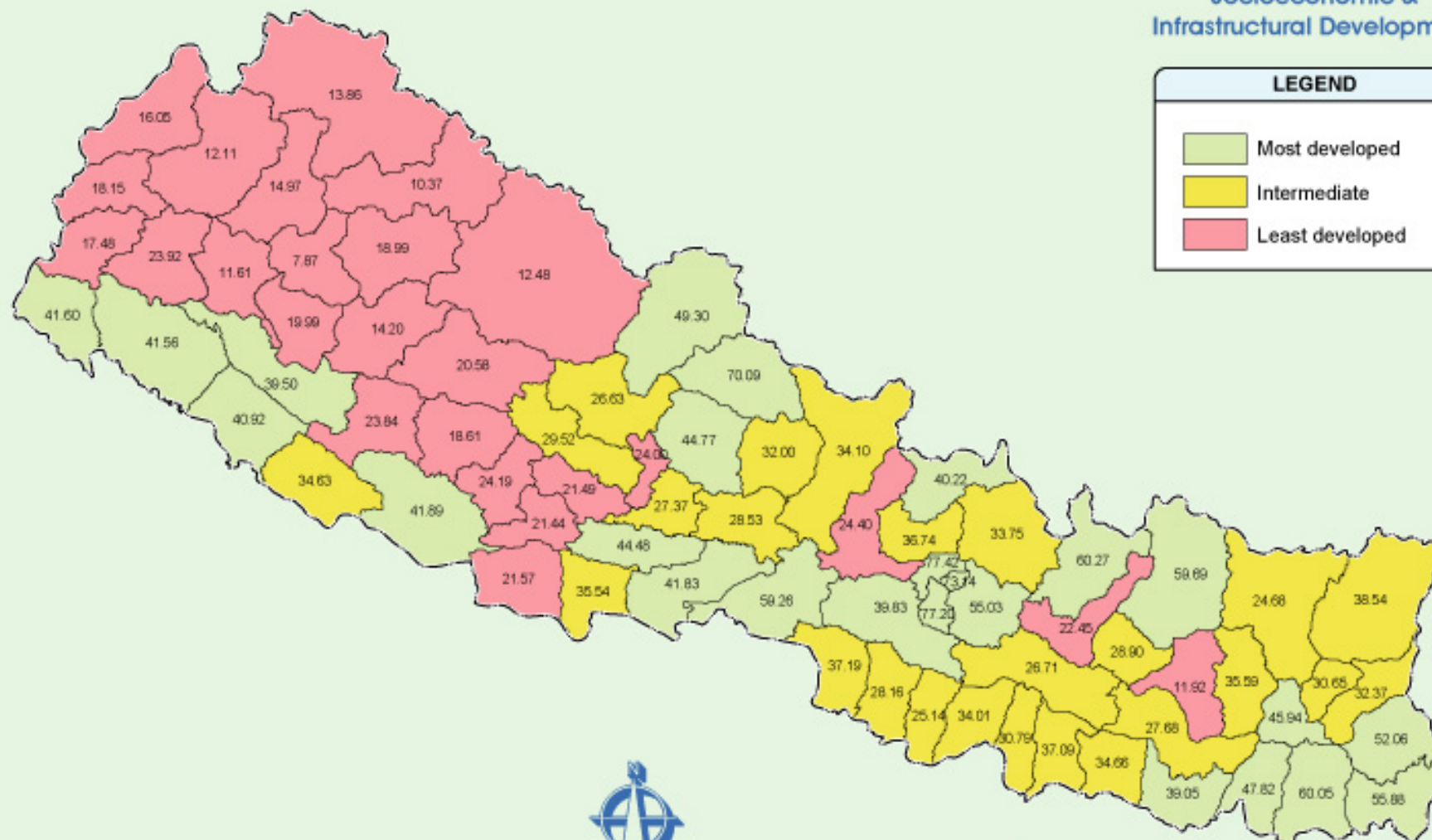
Map 17: Contraceptive Prevalence Rate

Number of fertile couples using contraceptives per 100 married women of reproductive age

Socioeconomic & Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least developed



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



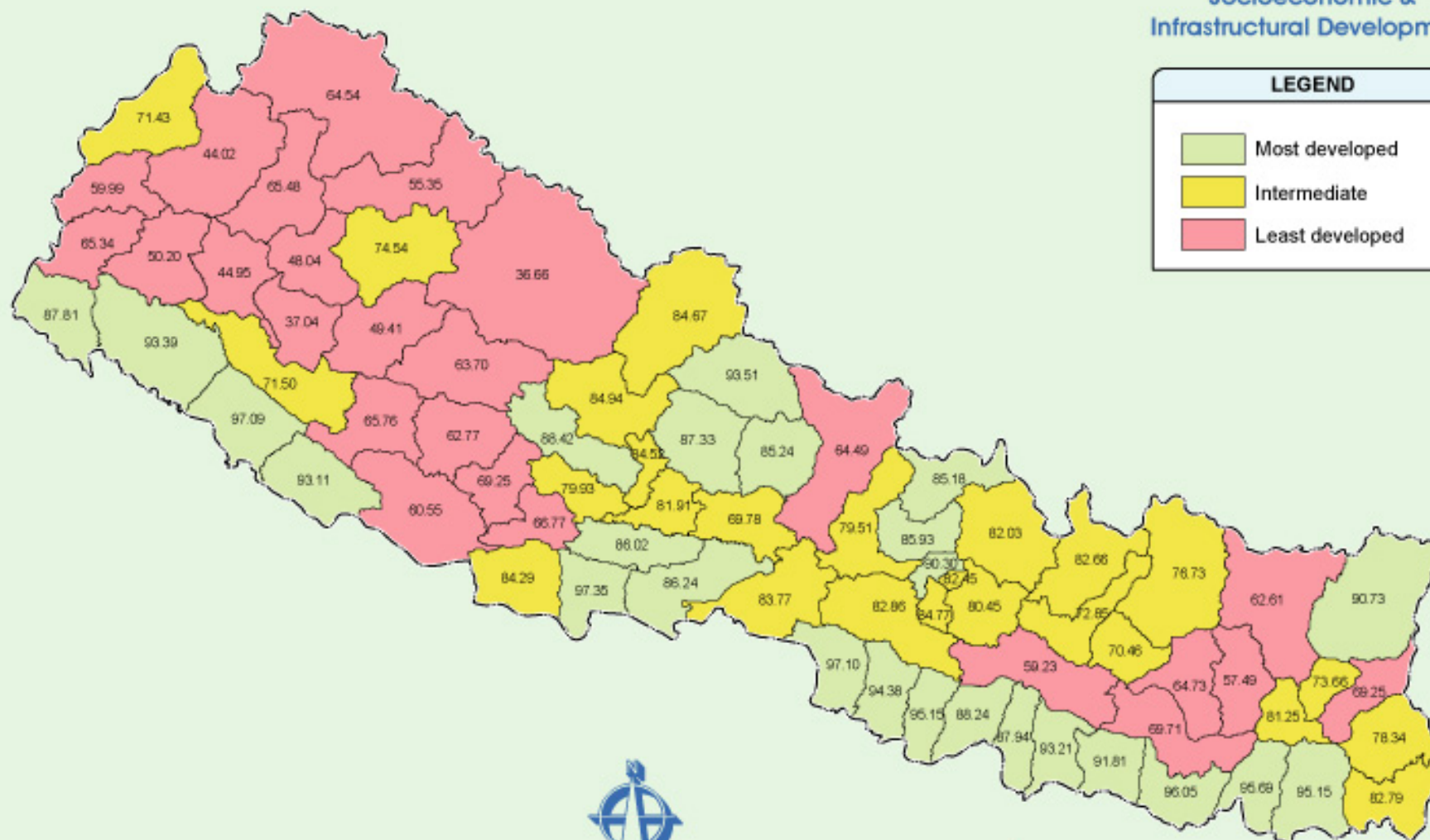
Drinking Water Coverage - Map 18

Percentage of households with access to piped or tap and tube-well water for drinking purposes

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Rupandehi	97.35	26	Myagdi	84.94	51	Udayapur	69.71
2	Parsa	97.10	27	Lalitpur	84.77	52	Panchthar	69.25
3	Bardiya	97.09	28	Mustang	84.67	53	Pyuthan	69.25
4	Saptari	96.05	29	Parbat	84.52	54	Arghakhanchi	66.77
5	Sunsari	95.69	30	Kapilbastu	84.29	55	Salyan	65.76
6	Rautahat	95.15	31	Chitwan	83.77	56	Bajura	65.48
7	Morang	95.15	32	Makawanpur	82.86	57	Dadeldhura	65.34
8	Bara	94.38	33	Jhapa	82.79	58	Khotang	64.73
9	Manang	93.51	34	Dolakha	82.66	59	Humla	64.54
10	Kailali	93.39	35	Bhaktapur	82.45	60	Gorkha	64.49
11	Dhanusa	93.21	36	Sindhupalchok	82.03	61	Rukum	63.70
12	Banke	93.11	37	Syangja	81.91	62	Rolpa	62.77
13	Siraha	91.81	38	Dhankuta	81.25	63	Sankhuwasabha	62.61
14	Taplejung	90.73	39	Kabhrepalanchok	80.45	64	Dang	60.55
15	Kathmandu	90.30	40	Gulmi	79.93	65	Baitadi	59.99
16	Baglung	88.42	41	Dhading	79.51	66	Sindhuli	59.23
17	Sarlahi	88.24	42	Ilam	78.34	67	Bhojpur	57.49
18	Mahottari	87.94	43	Solukhumbu	76.73	68	Mugu	55.35
19	Kanchanpur	87.81	44	Jumla	74.54	69	Doti	50.20
20	Kaski	87.33	45	Terhathum	73.66	70	Jajarkot	49.41
21	Nawalparasi	86.24	46	Ramechhap	72.85	71	Kalikot	48.04
22	Palpa	86.02	47	Surkhet	71.50	72	Achham	44.95
23	Nuwakot	85.93	48	Darchula	71.43	73	Bajhang	44.02
24	Lamjung	85.24	49	Okhaldhunga	70.46	74	Dailekh	37.04
25	Rasuwa	85.18	50	Tanahu	69.78	75	Dolpa	36.66

Percentage of households with access to piped or tap and tube-well water for drinking purposes

LEGEND



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000



CBS/HMGN



Toilet Facilities - Map 19

Percentage of households having access to toilet facilities (modern/flush and ordinary)

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Kathmandu	93.20	26	Jumla	52.38	51	Salyan	29.38
2	Bhaktapur	91.44	27	Surkhet	52.26	52	Bardiya	27.90
3	Lalitpur	81.68	28	Myagdi	51.83	53	Sindhuli	27.36
4	Kaski	81.01	29	Banke	51.66	54	Saptari	26.30
5	Chitwan	80.33	30	Solukhumbu	51.06	55	Udayapur	24.40
6	Ilam	76.39	31	Bhojpur	48.97	56	Parsa	23.64
7	Baglung	70.16	32	Nuwakot	48.20	57	Baitadi	23.50
8	Palpa	69.37	33	Taplejung	47.80	58	Bara	22.54
9	Parbat	67.74	34	Arghakhanchi	45.97	59	Pyuthan	21.49
10	Makawanpur	67.61	35	Sindhupalchok	45.12	60	Bajura	20.15
11	Dolakha	65.78	36	Dhading	43.26	61	Siraha	19.31
12	Dhankuta	64.72	37	Kalikot	42.40	62	Jajarkot	18.84
13	Kabhrepalanchok	63.82	38	Dhanusa	42.12	63	Sarlahi	18.83
14	Jhapa	63.12	39	Morang	41.97	64	Kapilbastu	18.62
15	Syangja	61.74	40	Mustang	40.78	65	Dailekh	18.41
16	Gulmi	60.02	41	Kailali	39.86	66	Humla	18.30
17	Rupandehi	59.78	42	Dang	39.10	67	Mahottari	18.18
18	Sankhuwasabha	59.61	43	Khotang	36.55	68	Rautahat	17.55
19	Tanahu	57.15	44	Dadeldhura	36.39	69	Rukum	16.17
20	Okhaldhunga	57.08	45	Manang	35.94	70	Achham	15.34
21	Panchthar	57.06	46	Kanchanpur	35.35	71	Darchula	14.44
22	Lamjung	54.98	47	Ramechhap	34.89	72	Mugu	14.40
23	Gorkha	54.53	48	Doti	31.95	73	Dolpa	13.94
24	Terhathum	54.01	49	Rasuwa	31.86	74	Bajhang	10.85
25	Sunsari	53.38	50	Nawalparasi	31.03	75	Rolpa	9.61

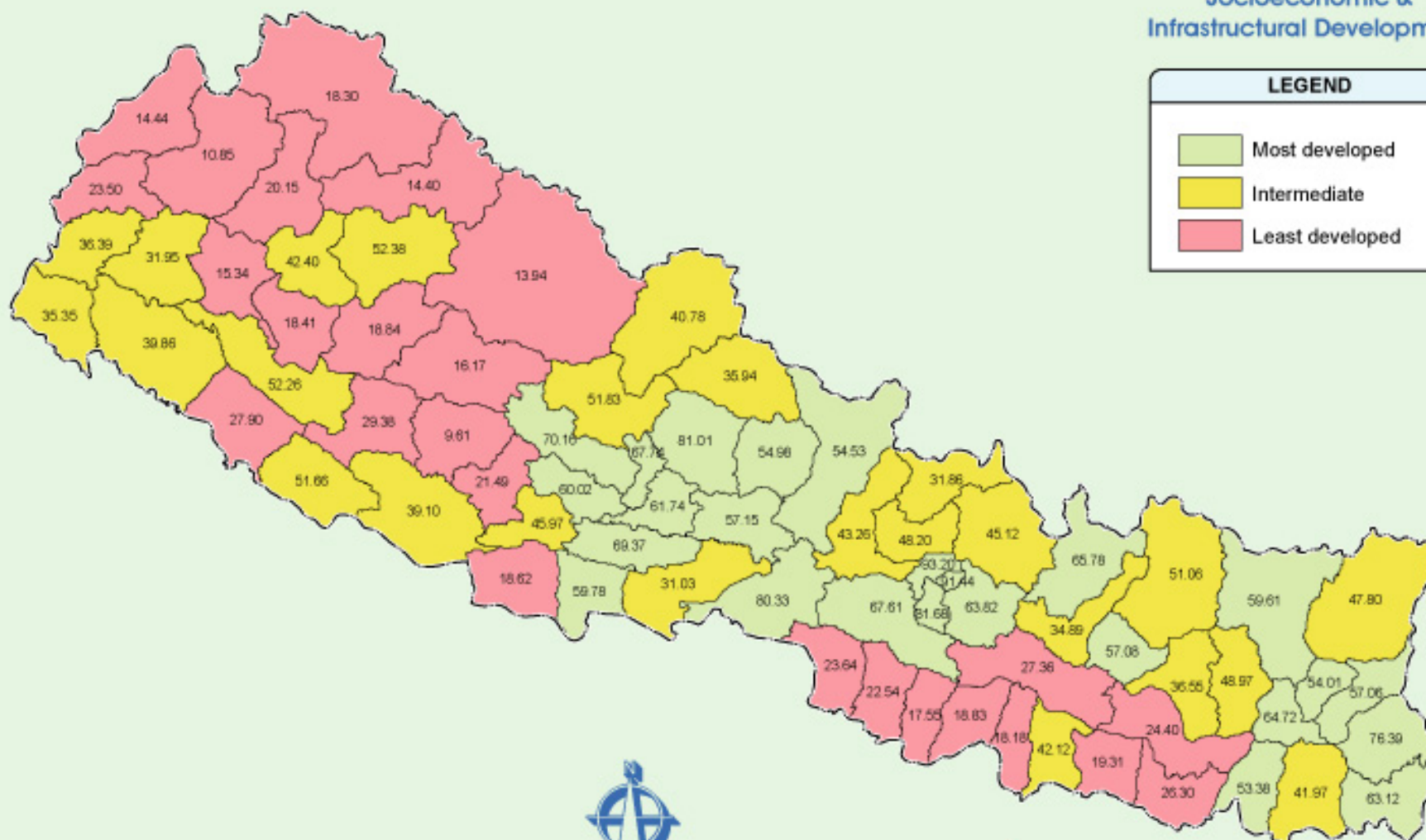
Map 19: Toilet Facilities

Percentage of households having access to toilet facilities (modern/flush and ordinary)

Socioeconomic & Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least developed



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMGN



Rank According to the Primary Sector Development Index - Map 20

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Morang	1	Ilam	26	Gorkha	51
Mustang	2	Salyan	27	Nuwakot	52
Saptari	3	Nawalparasi	28	Rasuwa	53
Bardiya	4	Rautahat	29	Kaski	54
Parsa	5	Mugu	30	Sindhupalchok	55
Sunsari	6	Mahottari	31	Bajhang	56
Kailali	7	Taplejung	32	Tanahu	57
Rupandehi	8	Dhankuta	33	Dhading	58
Jhapa	9	Panchthar	34	Kabhpelanchok	59
Kanchanpur	10	Bhojpur	35	Pyuthan	60
Manang	11	Solukhumbu	36	Gulmi	61
Sarlahi	12	Khotang	37	Rolpa	62
Chitwan	13	Surkhet	38	Dadeldhura	63
Kalikot	14	Udayapur	39	Rukum	64
Dhanusa	15	Ramechhap	40	Baitadi	65
Siraha	16	Jajarkot	41	Arghakhanchi	66
Kapilbastu	17	Darchula	42	Bajura	67
Dang	18	Lalitpur	43	Doti	68
Banke	19	Sindhuli	44	Syangja	69
Bara	20	Makawanpur	45	Myagdi	70
Okhaldhunga	21	Jumla	46	Parbat	71
Dolpa	22	Bhaktapur	47	Kathmandu	72
Terhathum	23	Dolakha	48	Dailekh	73
Humla	24	Palpa	49	Baglung	74
Sankhuwasabha	25	Lamjung	50	Achham	75

Map 20: Rank According to the Primary Sector Development Index

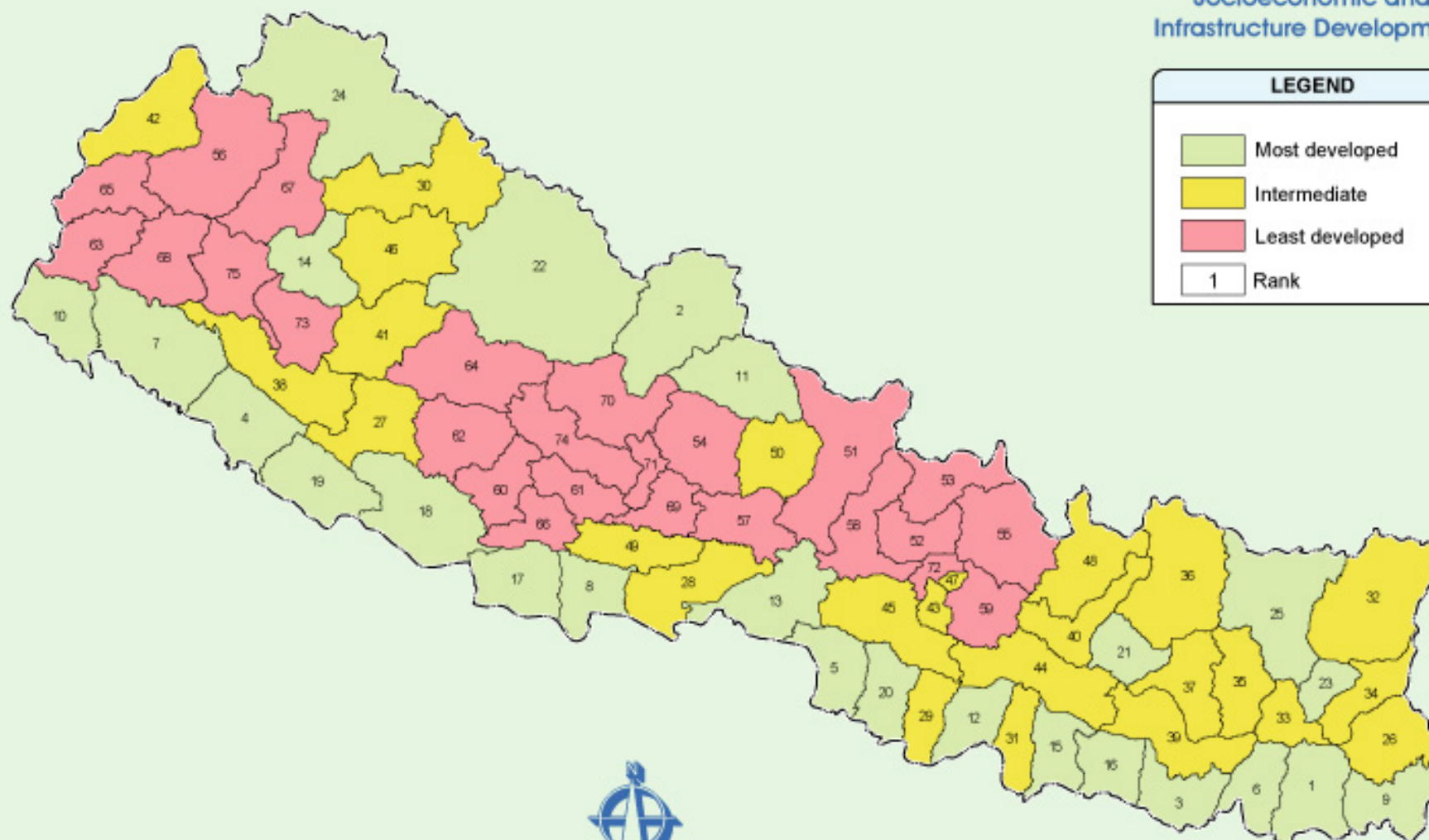
Contributing indicators: Maps 21, 22, 23, 24

Socioeconomic and
Infrastructure Development

LEGEND

- Most developed
- Intermediate
- Least developed

1 Rank



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1 for references



CBS/HMGN



Agricultural Credit - Map 21

*Agricultural loanee population as a percentage of population aged 15 years and above engaged in agriculture related occupations

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Kalikot*		26	Kaski	9.81	51	Jumla	5.87
2	Dhanusa	21.79	27	Surkhet	9.43	52	Dhankuta	5.63
3	Chitwan	18.72	28	Kailali	9.37	53	Nawalparasi	5.61
4	Salyan	17.14	29	Gorkha	9.17	54	Dhading	5.58
5	Sunsari	16.31	30	Parsa	8.96	55	Myagdi	5.52
6	Dang	13.40	31	Okhaldhunga	8.94	56	Rolpa	5.49
7	Morang	13.39	32	Dolakha	8.43	57	Doti	5.37
8	Siraha	13.05	33	Bardiya	8.34	58	Kapilbastu	5.26
9	Mahottari	12.89	34	Nuwakot	8.15	59	Pyuthan	5.07
10	Banke	12.69	35	Kabhrepalanchok	8.12	60	Gulmi	5.07
11	Terhathum	12.63	36	Lamjung	8.01	61	Dadeldhura	4.71
12	Jhapa	12.60	37	Rautahat	7.79	62	Syangja	4.60
13	Sarlahi	12.31	38	Khotang	7.27	63	Mugu	4.37
14	Sindhuli	12.18	39	Taplejung	7.15	64	Darchula	4.00
15	Bara	11.85	40	Manang	6.98	65	Dailekh	3.86
16	Ilam	11.65	41	Arghakhanchi	6.85	66	Jajarkot	3.70
17	Rupandehi	11.48	42	Baitadi	6.78	67	Kathmandu	3.48
18	Makawanpur	11.27	43	Tanahu	6.68	68	Dolpa	3.45
19	Panchthar	10.91	44	Rukum	6.64	69	Mustang	3.41
20	Kanchanpur	10.72	45	Palpa	6.60	70	Bhaktapur	2.90
21	Sankhuwasabha	10.67	46	Parbat	6.55	71	Bajura	2.73
22	Bhojpur	10.63	47	Sindhupalchok	6.41	72	Bajhang	2.29
23	Saptari	10.32	48	Baglung	6.29	73	Humla	2.22
24	Udayapur	10.05	49	Solukhumbu	6.25	74	Achham	2.03
25	Lalitpur	9.94	50	Ramechhap	5.94	75	Rasuwa	0.00

* Population with agricultural loan as reported by Agriculture Development Bank/ Nepal

* The value of the indicator for Kalikot district is not displayed due to insufficient data. The district is one of those highly affected during the enumeration work for the Population Census 2001.

Map 21: Agricultural Credit

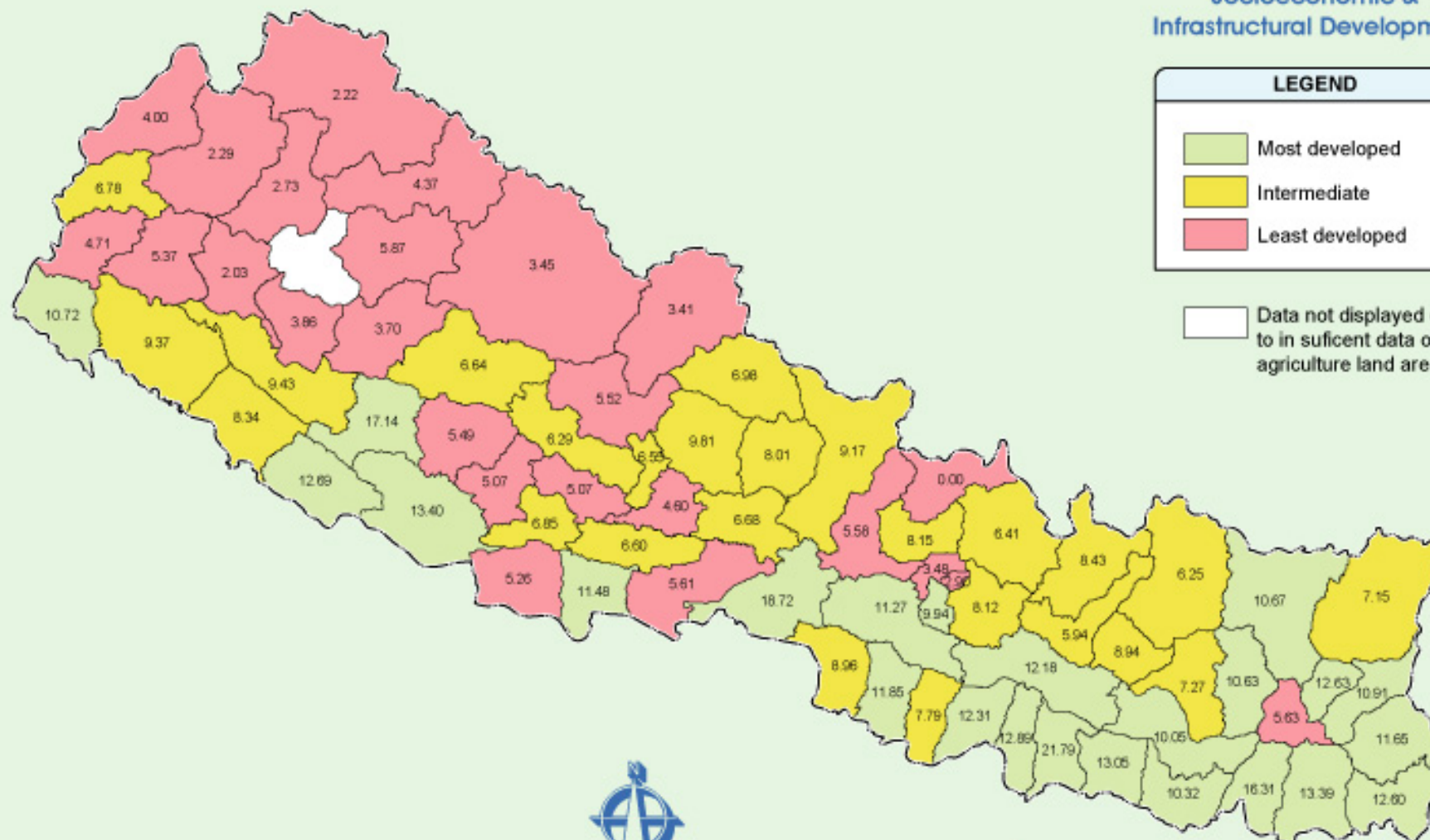
Agricultural loanee population as a percentage of population aged 15 years and above engaged in agriculture related occupations

Socioeconomic &
Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least developed

Data not displayed due to insufficient data on agriculture land area.



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



Farm Size - Map 22

*Operational agricultural land area (in hectares) divided by the number of agricultural households having agricultural land

Most Developed			Intermediate			Least Developed		
S.No.	District	Farm Size	S.No.	District	Farm Size	S.No.	District	Farm Size
1	Kailali	1.33	26	Dhankuta	0.84	51	Gorkha	0.51
2	Kapilbastu	1.25	27	Panchthar	0.81	52	Doti	0.50
3	Siraha	1.09	28	Khotang	0.81	53	Arghakhanchi	0.48
4	Okhaldhunga	1.09	29	Bhojpur	0.78	54	Manang	0.48
5	Jhapa	1.09	30	Ramechhap	0.76	55	Dolpa	0.47
6	Morang	1.07	31	Dang	0.76	56	Mustang	0.47
7	Saptari	1.05	32	Gulmi	0.73	57	Bajura	0.47
8	Bardiya	1.04	33	Nawalparasi	0.72	58	Syangja	0.46
9	Sunsari	1.04	34	Rasuwa	0.71	59	Jumla	0.45
10	Sarlahi	1.03	35	Jajarkot	0.70	60	Lamjung	0.45
11	Ilam	0.98	36	Pyuthan	0.67	61	Parbat	0.44
12	Parsa	0.95	37	Palpa	0.65	62	Kaski	0.44
13	Solukhumbu	0.95	38	Udayapur	0.63	63	Dailekh	0.43
14	Rautahat	0.95	39	Darchula	0.60	64	Rukum	0.42
15	Mahottari	0.95	40	Dadeldhura	0.59	65	Myagdi	0.42
16	Humla	0.94	41	Nuwakot	0.59	66	Rolpa	0.41
17	Banke	0.93	42	Salyan	0.59	67	Baitadi	0.41
18	Terhathum	0.91	43	Dolakha	0.59	68	Baglung	0.41
19	Sankhuwasabha	0.90	44	Chitwan	0.58	69	Achham	0.39
20	Rupandehi	0.89	45	Dhading	0.58	70	Bajhang	0.37
21	Taplejung	0.89	46	Kabhrepalanchok	0.57	71	Lalitpur	0.29
22	Dhanusa	0.88	47	Sindhupalchok	0.57	72	Sindhuli	0.24
23	Bara	0.87	48	Tanahu	0.54	73	Kathmandu	0.24
24	Kanchanpur	0.85	49	Surkhet	0.54	74	Kalikot	0.23
25	Mugu	0.84	50	Makawanpur	0.52	75	Bhaktapur	0.22

* Operational agricultural land area is provisionally used from unpublished data of Population Census 2001 or (unpublished operational agricultural land area data of 2001 population census is provisionally used to derive the indicator).

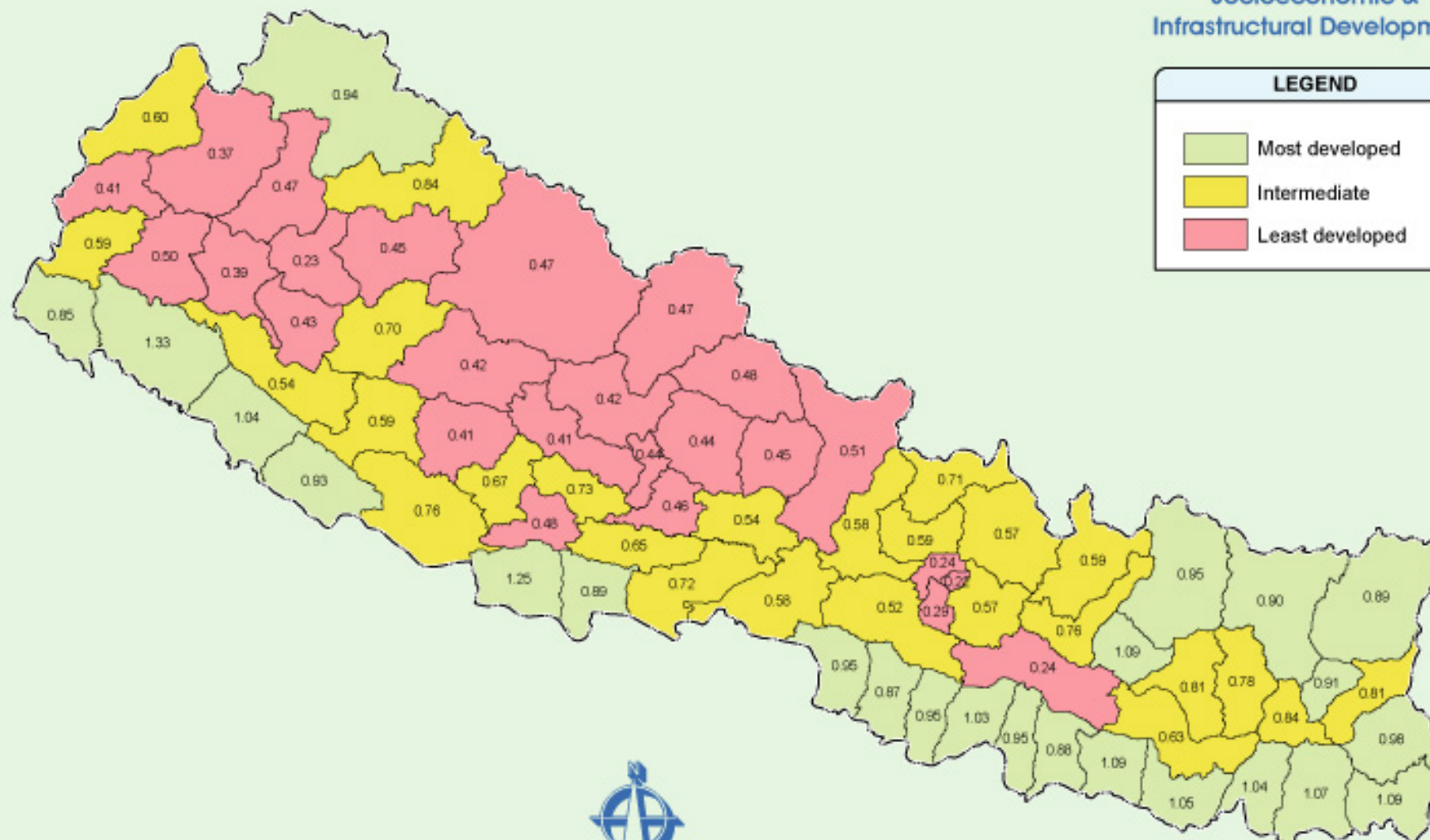
Map 22: Farm Size

Operational agricultural land area (in hectares) divided by the number of agricultural households having agricultural land

Socioeconomic &
Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least developed



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



Livestock per Farm Household - Map 23

*Number of livestock divided by farm households having livestock

Most Developed			Intermediate			Least Developed		
S.No.	District	Livestock	S.No.	District	Livestock	S.No.	District	Livestock
1	Mustang	20.19	26	Dadeldhura	7.18	51	Syangja	5.37
2	Manang	20.05	27	Makawanpur	7.14	52	Chitwan	5.35
3	Dolpa	16.79	28	Surkhet	7.09	53	Kanchanpur	5.24
4	Humla	12.76	29	Palpa	6.93	54	Morang	5.23
5	Jumla	11.20	30	Dang	6.92	55	Jhapa	5.21
6	Mugu	11.19	31	Ramechhap	6.87	56	Myagdi	5.21
7	Jajarkot	9.70	32	Taplejung	6.86	57	Gulmi	5.17
8	Rolpa	9.50	33	Pyuthan	6.53	58	Banke	5.15
9	Darchula	9.48	34	Baitadi	6.40	59	Sunsari	4.66
10	Sindhuli	8.56	35	Panchthar	6.32	60	Kapilbastu	4.63
11	Sankhuwasabha	8.28	36	Lamjung	6.28	61	Rupandehi	4.56
12	Dhankuta	8.26	37	Dailekh	6.27	62	Lalitpur	4.52
13	Bajura	8.20	38	Dolakha	6.24	63	Baglung	4.52
14	Salyan	8.14	39	Doti	6.11	64	Kaski	4.42
15	Okhaldhunga	7.68	40	Kabhrepalanchok	6.04	65	Parbat	4.22
16	Bajhang	7.62	41	Sindhupalchok	5.99	66	Saptari	4.19
17	Rukum	7.60	42	Nuwakot	5.99	67	Sarlahi	3.91
18	Bhojpur	7.58	43	Kalikot	5.91	68	Kathmandu	3.64
19	Tanahu	7.53	44	Solukhumbu	5.80	69	Siraha	3.56
20	Udayapur	7.50	45	Arghakhanchi	5.70	70	Bara	3.42
21	Terhathum	7.38	46	Kailali	5.63	71	Parsa	3.39
22	Dhading	7.34	47	Achham	5.61	72	Bhaktapur	3.37
23	Rasuwa	7.30	48	Ilam	5.57	73	Rautahat	3.31
24	Khotang	7.28	49	Nawalparasi	5.57	74	Mahottari	3.31
25	Gorkha	7.25	50	Bardiya	5.57	75	Dhanusa	3.14

* Number of livestock is taken from the unpublished data of the Population Census 2001 or (unpublished operational agricultural land area data of 2001 population census is provisionally used to derive the indicator).

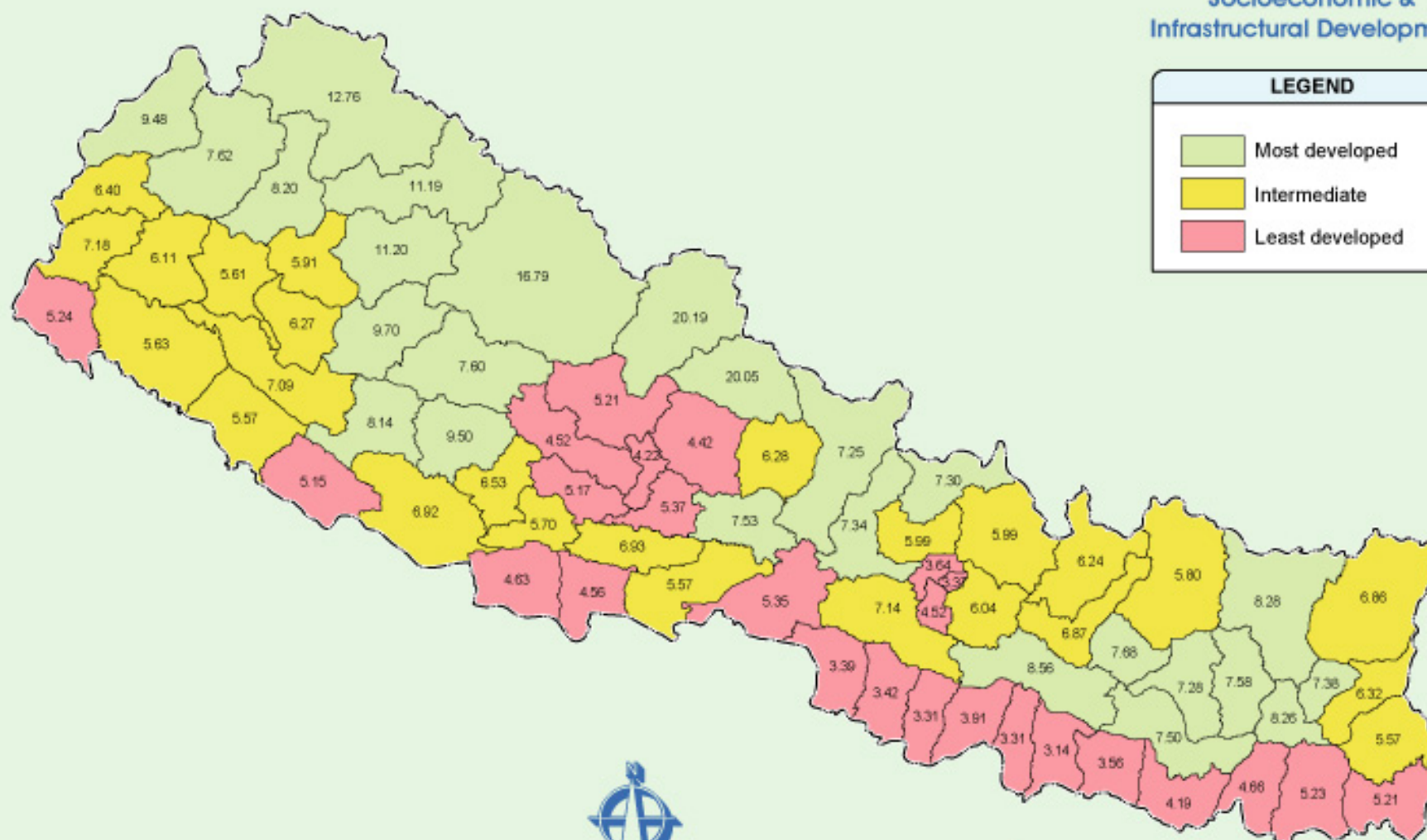
Map 23: Livestock Per Farm Household

Number of livestock divided by farm households having livestock

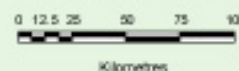
Socioeconomic &
Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least developed



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMGN



Percentage of Irrigated Area - Map 24

*Irrigated land area as a percentage of operational agricultural land area

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Kalikot*		26	Kapilbastu	31.14	51	Ramechhap	10.86
2	Morang	112.36	27	Manang	28.61	52	Tanahu	10.69
3	Saptari	96.08	28	Sindhuli	27.36	53	Arghakhanchi	10.66
4	Parsa	94.78	29	Lamjung	26.93	54	Dhading	10.45
5	Bhaktapur	88.88	30	Dolpa	24.56	55	Panchthar	10.05
6	Mustang	82.62	31	Surkhet	24.26	56	Udayapur	10.00
7	Bardiya	80.29	32	Salyan	21.25	57	Kabhrepalanchok	9.22
8	Kanchanpur	77.22	33	Sindhupalchok	18.32	58	Palpa	8.95
9	Rupandehi	75.80	34	Rasuwa	17.26	59	Rolpa	7.99
10	Chitwan	68.79	35	Ilam	16.27	60	Baglung	7.77
11	Sarlahi	61.11	36	Baitadi	15.11	61	Solukhumbu	7.50
12	Lalitpur	57.40	37	Mahottari	14.83	62	Jumla	7.40
13	Nawalparasi	54.31	38	Dolakha	14.12	63	Khotang	7.14
14	Sunsari	52.68	39	Rukum	14.06	64	Doti	6.88
15	Bara	51.24	40	Syangja	14.03	65	Dadeldhura	6.30
16	Jhapa	48.39	41	Myagdi	13.80	66	Gulmi	5.88
17	Kathmandu	41.43	42	Taplejung	13.78	67	Okhaldhunga	5.67
18	Bajhang	40.01	43	Nuwakot	13.72	68	Humla	5.50
19	Siraha	38.13	44	Parbat	13.58	69	Bajura	4.92
20	Dang	37.66	45	Darchula	13.37	70	Jajarkot	4.81
21	Kailali	37.04	46	Terhathum	13.06	71	Pyuthan	4.76
22	Rautahat	36.86	47	Dhankuta	12.32	72	Dailekh	4.63
23	Dhanusa	36.18	48	Sankhuwasabha	12.21	73	Bhojpur	4.43
24	Banke	32.81	49	Gorkha	11.18	74	Achham	3.81
25	Kaski	31.35	50	Makawanpur	11.13	75	Mugu	3.4

* Operational agricultural land area is provisionally used from unpublished data of Population Census 2001 or (unpublished operational agricultural land area data of 2001 population census is provisionally used to derive the indicator).

*Data not displayed for Kalikot since the data is insufficient in relation to operational agricultural land. The district was highly disturbed during enumeration work.

Note: In some districts the irrigated area is high due to mistotaling of nearest district (e.g. Morang, Saptari, Sarlahi, Parsa & Rupandehi) as reported in "Statistical Information on Nepalese Agriculture 2000/01"

Map 24: Percentage of Irrigated Area

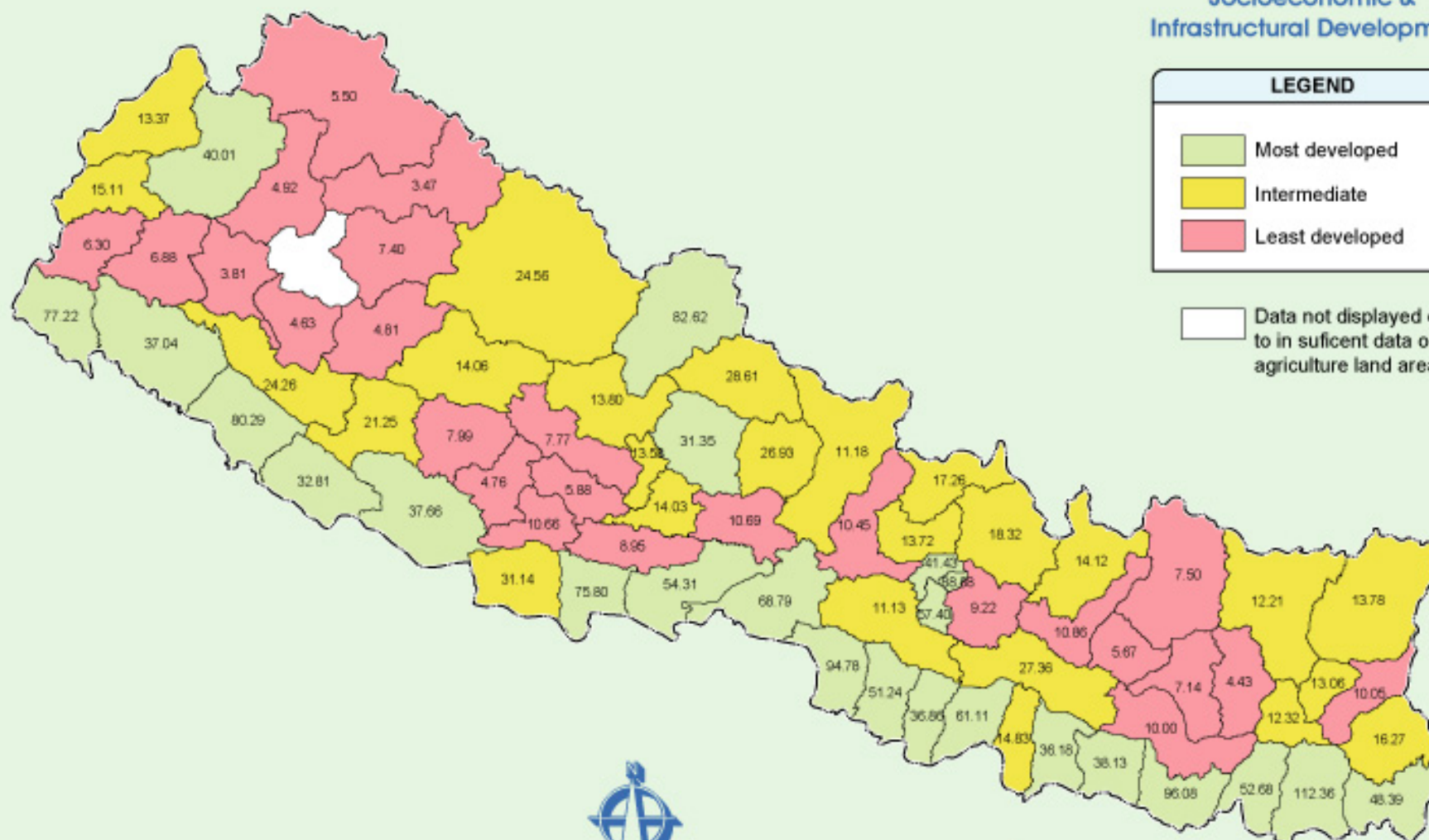
Irrigated land area as a percentage of operational agricultural land area

Socioeconomic &
Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least developed

Data not displayed due to insufficient data on agriculture land area.



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000
0 12.5 25 50 75 100
Kilometres



Rank According to the Infrastructure Development Index - Map 25

Most Developed		Intermediate		Least Developed	
District	Rank	District	Rank	District	Rank
Kathmandu	1	Pyuthan	26	Rolpa	51
Bhaktapur	2	Siraha	27	Kalikot	52
Lalitpur	3	Bara	28	Solukhumbu	53
Parbat	4	Dhanusa	29	Makawanpur	54
Kabhrepalanchok	5	Baglung	30	Jumla	55
Okhaldhunga	6	Dadeldhura	31	Jajarkot	56
Terhathum	7	Rautahat	32	Bajhang	57
Dhankuta	8	Dailekh	33	Morang	58
Bhojpur	9	Parsa	34	Rukum	59
Nuwakot	10	Bajura	35	Humla	60
Rasuwa	11	Ilam	36	Sankhuwasabha	61
Gulmi	12	Mahottari	37	Salyan	62
Achham	13	Darchula	38	Udayapur	63
Palpa	14	Rupandehi	39	Kapilbastu	64
Baitadi	15	Mustang	40	Chitwan	65
Manang	16	Arghakhanchi	41	Dang	66
Ramechhap	17	Dhading	42	Sunsari	67
Syangja	18	Panchthar	43	Sindhuli	68
Khotang	19	Doti	44	Taplejung	69
Lamjung	20	Gorkha	45	Nawalparasi	70
Saptari	21	Dolpa	46	Jhapa	71
Dolakha	22	Tanahu	47	Banke	72
Myagdi	23	Mugu	48	Bardiya	73
Sarlahi	24	Kaski	49	Kanchanpur	74
Sindhupalchok	25	Surkhet	50	Kailali	75

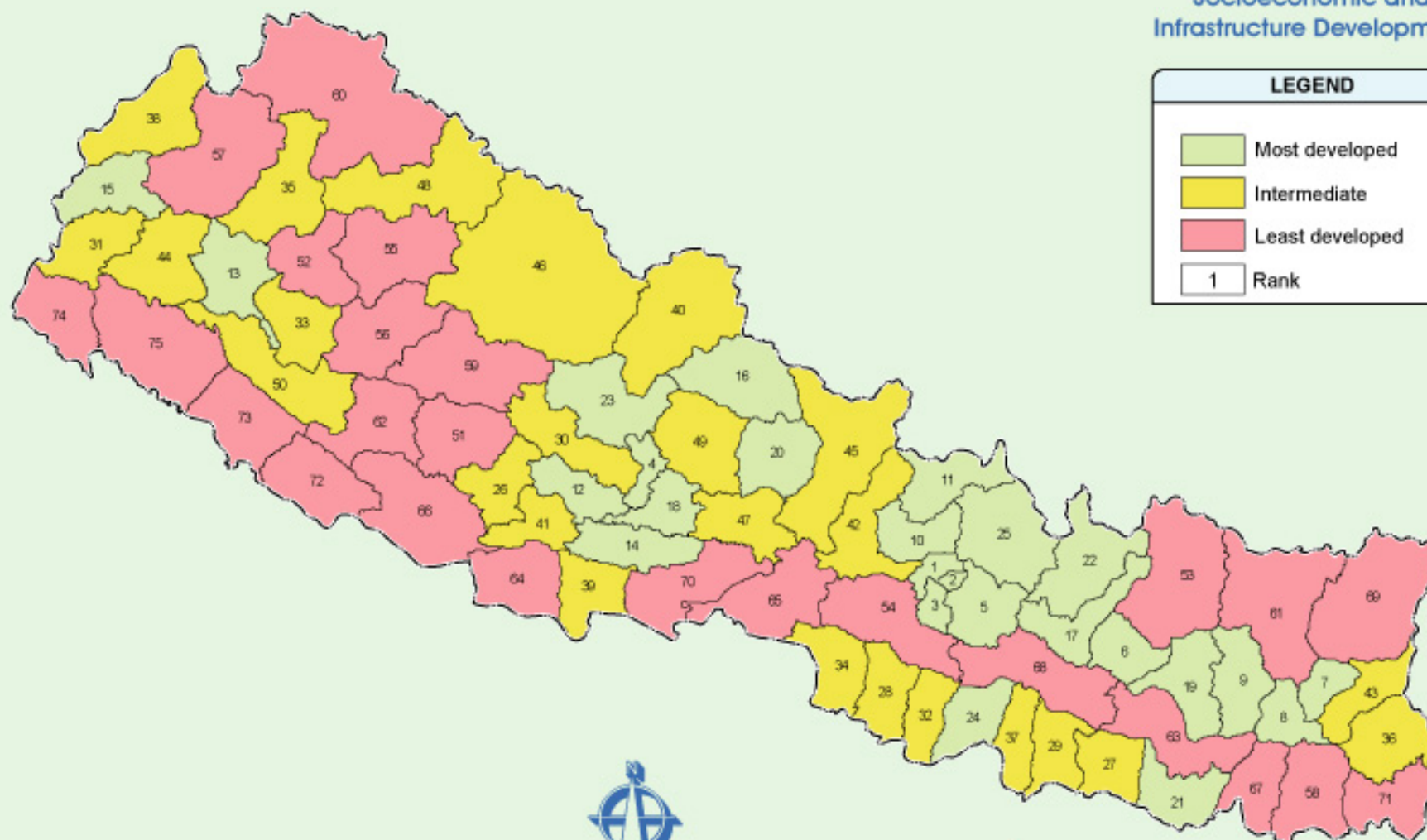
Map 25: Rank According to the Infrastructural Development Index

Contributing indicators: Maps 26, 27, 28, 29, 30, 31, 32, 33

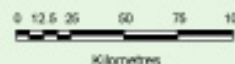
Socioeconomic and
Infrastructure Development

LEGEND

- Most developed
- Intermediate
- Least developed
- 1 Rank



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: See Table 1 for references



CBS/HMG



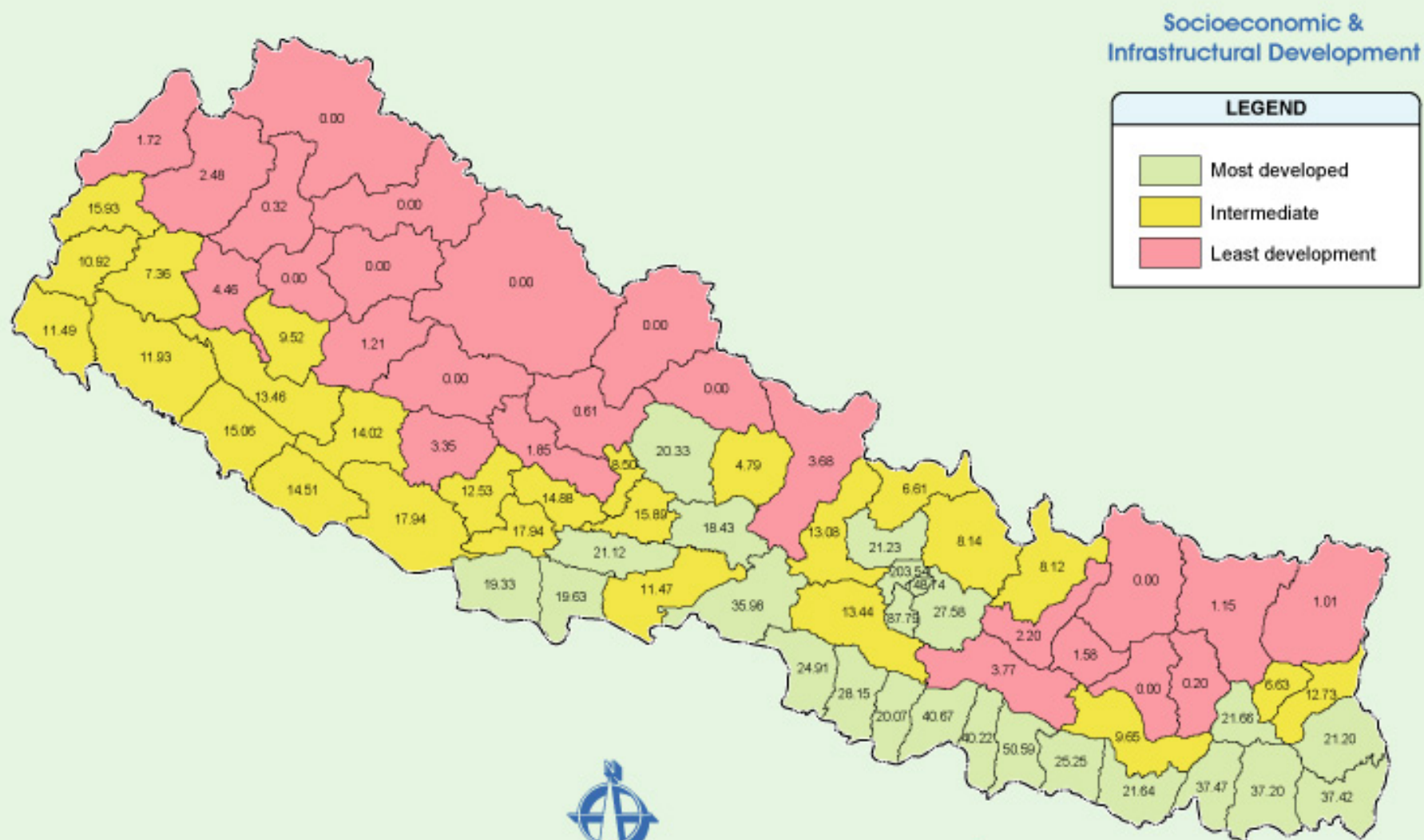
Road Density - Map 26

Sum of different categories of road (in km) per 100 square kilometres of total surface area

Most Developed			Intermediate			Least Developed		
S.No.	District	Road Density / 100 Sq. Km.	S.No.	District	Road Density / 100 Sq. Km.	S.No.	District	Road Density / 100 Sq. Km.
1	Kathmandu	203.54	26	Dang	17.94	51	Achham	4.46
2	Bhaktapur	148.74	27	Baitadi	15.93	52	Sindhuli	3.77
3	Lalitpur	87.79	28	Syangja	15.89	53	Gorkha	3.68
4	Dhanusa	50.59	29	Bardiya	15.06	54	Rolpa	3.35
5	Sarlahi	40.67	30	Gulmi	14.88	55	Bajhang	2.48
6	Mahottari	40.22	31	Banke	14.51	56	Ramechhap	2.20
7	Sunsari	37.47	32	Salyan	14.02	57	Baglung	1.85
8	Jhapa	37.42	33	Surkhet	13.46	58	Darchula	1.72
9	Morang	37.20	34	Makawanpur	13.44	59	Okhaldhunga	1.58
10	Chitwan	35.98	35	Dhading	13.08	60	Jajarkot	1.21
11	Bara	28.15	36	Panchthar	12.73	61	Sankhuwasabha	1.15
12	Kabhrepalanchok	27.58	37	Pyuthan	12.53	62	Taplejung	1.01
13	Siraha	25.25	38	Kailali	11.93	63	Myagdi	0.61
14	Parsa	24.91	39	Kanchanpur	11.49	64	Bajura	0.32
15	Dhankuta	21.66	40	Nawalparasi	11.47	65	Bhojpur	0.20
16	Saptari	21.64	41	Dadeldhura	10.92	66	Dolpa	0.00
17	Nuwakot	21.23	42	Udayapur	9.65	67	Humla	0.00
18	Ilam	21.20	43	Dailekh	9.52	68	Jumla	0.00
19	Palpa	21.12	44	Parbat	8.50	69	Kalikot	0.00
20	Kaski	20.33	45	Sindhupalchok	8.14	70	Khotang	0.00
21	Rautahat	20.07	46	Dolakha	8.12	71	Manang	0.00
22	Rupandehi	19.63	47	Doti	7.36	72	Mugu	0.00
23	Kapilbastu	19.33	48	Terhathum	6.63	73	Mustang	0.00
24	Tanahu	18.43	49	Rasuwa	6.61	74	Rukum	0.00
25	Arghakhanchi	17.94	50	Lamjung	4.79	75	Solukhumbu	0.00

Map 26: Road Density

Sum of different categories of road (in km) per 100 square kilometres of total surface area



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000



CBS/HMGN



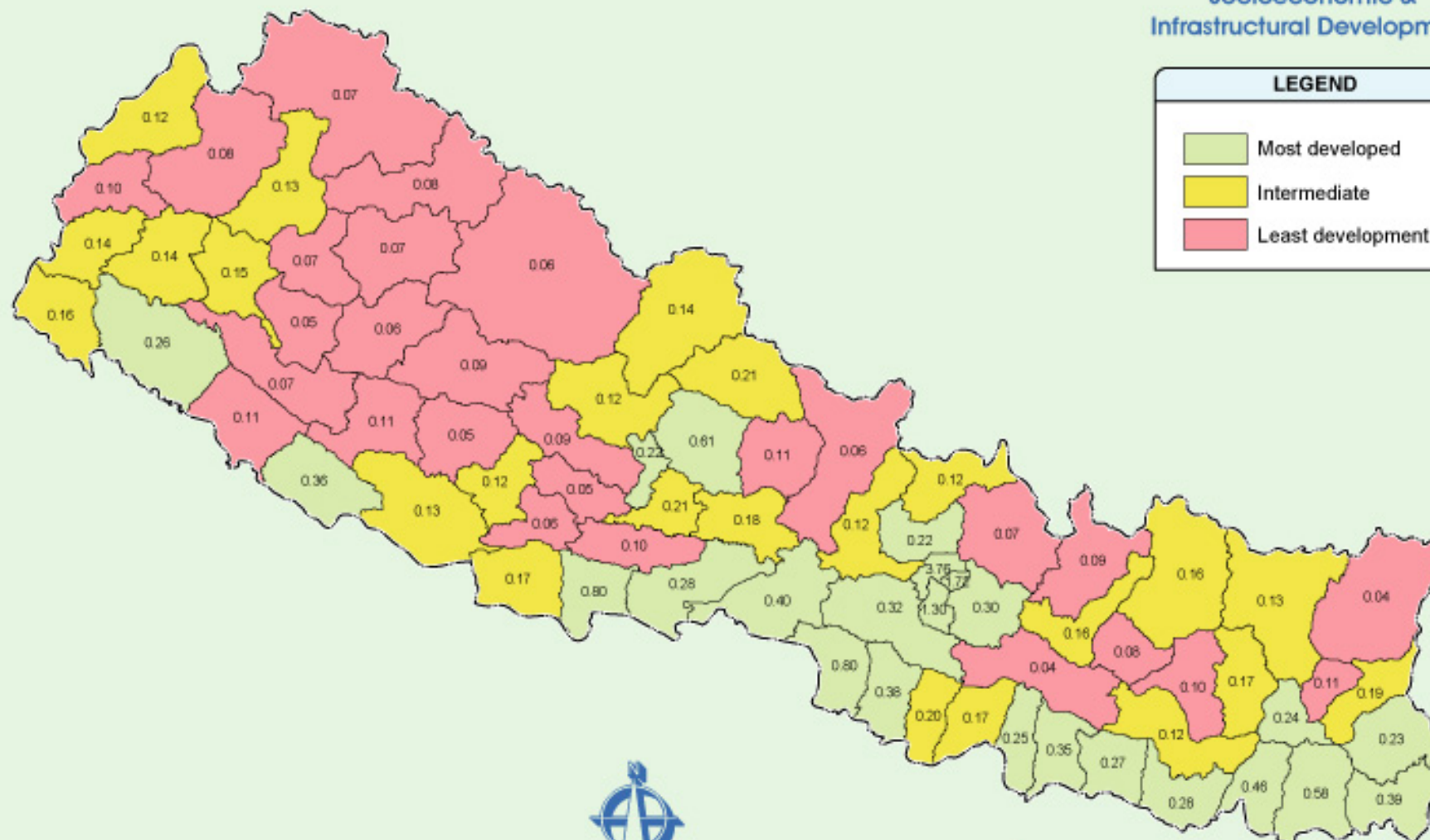
Banks Density - Map 27

Number of banks per 1000 population divided by population distance

Most Developed			Intermediate			Least Developed		
S.No.	District	Bank Density	S.No.	District	Bank Density	S.No.	District	Bank Density
1	Kathmandu	3.76	26	Syangja	0.21	51	Salyan	0.11
2	Bhaktapur	1.72	27	Rautahat	0.20	52	Bardiya	0.11
3	Lalitpur	1.30	28	Panchthar	0.19	53	Baitadi	0.10
4	Parsa	0.80	29	Tanahu	0.18	54	Khotang	0.10
5	Rupandehi	0.80	30	Sarlahi	0.17	55	Palpa	0.10
6	Kaski	0.61	31	Kapilbastu	0.17	56	Dolakha	0.09
7	Morang	0.58	32	Bhojpur	0.17	57	Baglung	0.09
8	Sunsari	0.46	33	Ramechhap	0.16	58	Rukum	0.09
9	Chitwan	0.40	34	Kanchanpur	0.16	59	Bajhang	0.08
10	Jhapa	0.39	35	Solukhumbu	0.16	60	Mugu	0.08
11	Bara	0.38	36	Achham	0.15	61	Okhaldhunga	0.08
12	Banke	0.36	37	Doti	0.14	62	Surkhet	0.07
13	Dhanusa	0.35	38	Dadeldhura	0.14	63	Kalikot	0.07
14	Makawanpur	0.32	39	Mustang	0.14	64	Sindhupalchok	0.07
15	Kabhrepalanchok	0.30	40	Dang	0.13	65	Jumla	0.07
16	Saptari	0.28	41	Bajura	0.13	66	Humla	0.07
17	Nawalparasi	0.28	42	Sankhuwasabha	0.13	67	Dolpa	0.06
18	Siraha	0.27	43	Myagdi	0.12	68	Arghakhanchi	0.06
19	Kailali	0.26	44	Udayapur	0.12	69	Gorkha	0.06
20	Mahottari	0.25	45	Rasuwa	0.12	70	Jajarkot	0.06
21	Dhankuta	0.24	46	Pyuthan	0.12	71	Dailekh	0.05
22	Ilam	0.23	47	Darchula	0.12	72	Gulmi	0.05
23	Parbat	0.22	48	Dhading	0.12	73	Rolpa	0.05
24	Nuwakot	0.22	49	Lamjung	0.11	74	Taplejung	0.04
25	Manang	0.21	50	Terhathum	0.11	75	Sindhuli	0.04

Number of banks per 1000 population divided by population distance

LEGEND



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000



CBS/HMGN



Cooperatives Density - Map 28

Number of cooperatives per 1000 population divided by population distance

Most Developed			Intermediate			Least Developed		
S. No.	District	Cooperatives Density	S. No.	District	Cooperatives Density	S. No.	District	Cooperatives Density
1	Kathmandu	27.69	26	Parsa	4.61	51	Gulmi	1.83
2	Bhaktapur	25.37	27	Nawalparasi	4.45	52	Sindhuli	1.72
3	Lalitpur	23.39	28	Baglung	4.43	53	Doti	1.69
4	Kabhrepalanchok	19.07	29	Surkhet	4.31	54	Kanchanpur	1.48
5	Sarlahi	9.71	30	Panchthar	4.25	55	Kailali	1.30
6	Chitwan	9.37	31	Gorkha	4.24	56	Sankhuwasabha	1.10
7	Rupandehi	8.59	32	Dhading	4.11	57	Salyan	1.07
8	Bara	8.15	33	Syangja	4.08	58	Mustang	0.95
9	Nuwakot	7.71	34	Bardiya	3.97	59	Myagdi	0.92
10	Parbat	7.53	35	Jhapa	3.96	60	Bajhang	0.91
11	Ilam	7.48	36	Rasuwa	3.69	61	Arghakhanchi	0.82
12	Saptari	6.64	37	Sunsari	3.42	62	Rukum	0.81
13	Sindhupalchok	6.54	38	Dadeldhura	3.27	63	Bajura	0.77
14	Dhankuta	6.35	39	Bhojpur	3.18	64	Darchula	0.76
15	Ramechhap	6.35	40	Mahottari	3.11	65	Jajarkot	0.74
16	Dolakha	6.04	41	Tanahu	2.96	66	Khotang	0.67
17	Rautahat	5.98	42	Okhaldhunga	2.75	67	Taplejung	0.67
18	Makawanpur	5.96	43	Jumla	2.70	68	Pyuthan	0.65
19	Morang	5.73	44	Udayapur	2.51	69	Solukhumbu	0.47
20	Dhanusa	5.41	45	Banke	2.47	70	Kalikot	0.29
21	Siraha	5.08	46	Dailekh	2.26	71	Mugu	0.24
22	Lamjung	5.04	47	Baitadi	2.20	72	Dolpa	0.19
23	Kaski	4.85	48	Kapilbastu	2.15	73	Humla	0.13
24	Terhathum	4.75	49	Dang	1.98	74	Rolpa	0.10
25	Palpa	4.65	50	Achham	1.86	75	Manang	0.00

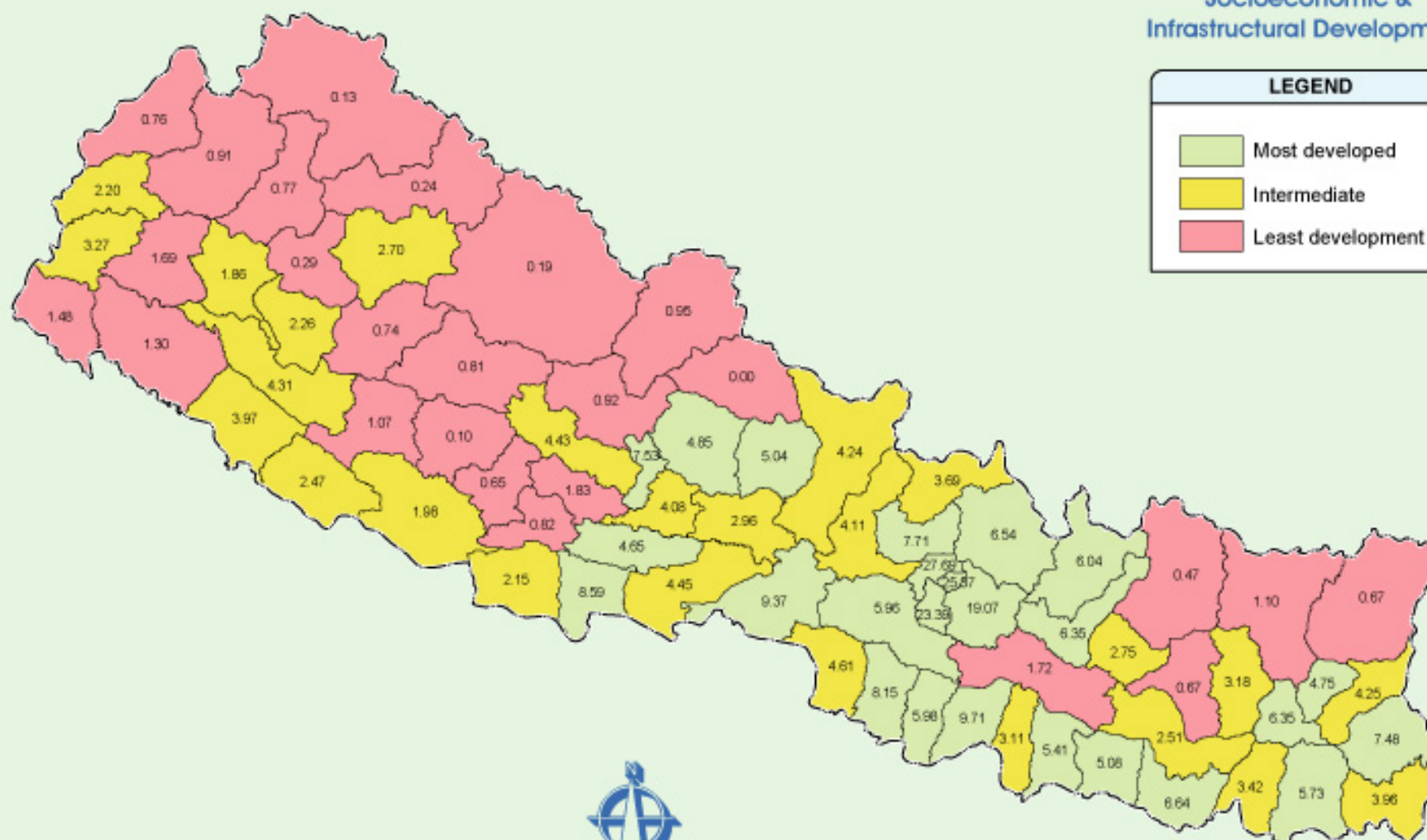
Map 28: Cooperatives Density

Number of cooperatives per 1000 population divided by population distance

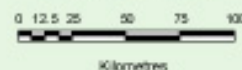
Socioeconomic & Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least development



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMGN



Health Institutions Density - Map 29

Number of health institutions per 1000 population divided by population distance

Most Developed			Intermediate			Least Developed		
S.No.	District	Health Institution Density	S.No.	District	Health Institution Density	S.No.	District	Health Institution Density
1	Parbat	6.23	26	Dhankuta	3.12	51	Sindhuli	2.08
2	Gulmi	4.39	27	Ramechhap	3.04	52	Dhading	2.04
3	Okhaldhunga	4.32	28	Manang	3.02	53	Bajhang	2.01
4	Bhaktapur	4.25	29	Pyuthan	2.94	54	Jumla	1.99
5	Siraha	4.22	30	Sindhupalchok	2.83	55	Jajarkot	1.96
6	Saptari	4.16	31	Baglung	2.83	56	Surkhet	1.96
7	Kabhpelanchok	4.05	32	Salyan	2.72	57	Udayapur	1.93
8	Khotang	3.96	33	Kapilbastu	2.69	58	Sunsari	1.89
9	Rautahat	3.96	34	Arghakhanchi	2.66	59	Rukum	1.89
10	Bara	3.84	35	Panchthar	2.65	60	Dadeldhura	1.87
11	Achham	3.80	36	Rolpa	2.62	61	Solukhumbu	1.85
12	Lalitpur	3.77	37	Dolakha	2.60	62	Bajura	1.81
13	Nuwakot	3.73	38	Doti	2.54	63	Humla	1.78
14	Dhanusa	3.66	39	Darchula	2.50	64	Kaski	1.73
15	Bhojpur	3.66	40	Myagdi	2.47	65	Morang	1.72
16	Terhathum	3.65	41	Taplejung	2.44	66	Sankhuwasabha	1.66
17	Baitadi	3.60	42	Mustang	2.32	67	Banke	1.57
18	Syangja	3.54	43	Rupandehi	2.29	68	Jhapa	1.53
19	Sarlahi	3.53	44	Rasuwa	2.29	69	Dolpa	1.51
20	Lamjung	3.52	45	Ilam	2.23	70	Makawanpur	1.46
21	Kathmandu	3.48	46	Kalikot	2.21	71	Chitwan	1.27
22	Palpa	3.44	47	Nawalparasi	2.21	72	Bardiya	1.22
23	Mahottari	3.27	48	Gorkha	2.14	73	Dang	1.11
24	Dailekh	3.26	49	Tanahu	2.13	74	Kailali	0.99
25	Parsa	3.24	50	Mugu	2.09	75	Kanchanpur	0.89

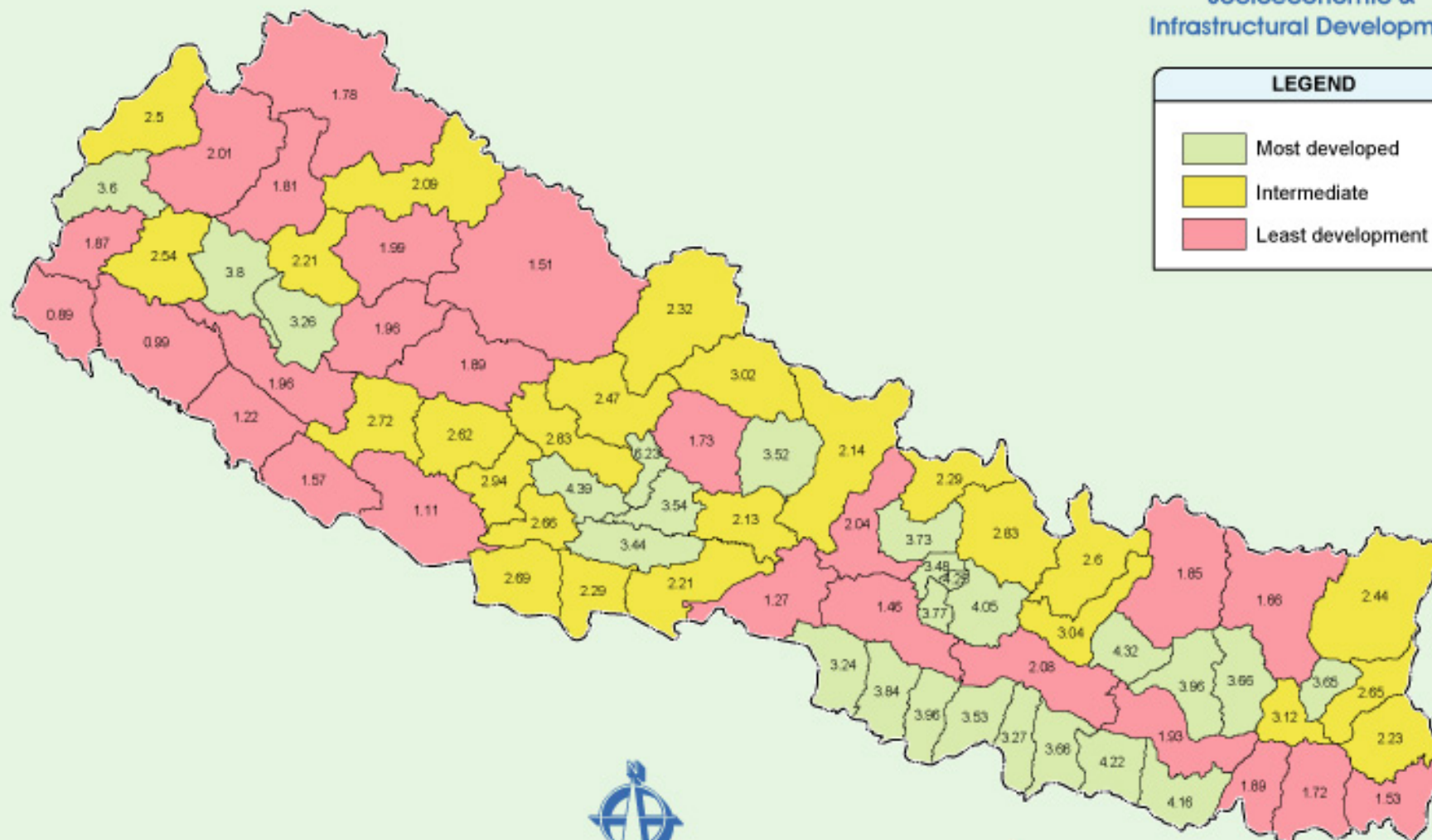
Map 29: Health Institutions Density

Number of health institutions per 1000 population divided by population distance

Socioeconomic &
Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least development



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



Post Office Density - Map 30

Number of post offices per 1000 population divided by population distance

Most Developed			Intermediate			Least Developed		
S.No.	District	Post Office Density	S.No.	District	Post Office Density	S.No.	District	Post Office Density
1	Parbat	6.18	26	Dhankuta	3.01	51	Sindhuli	2.06
2	Okhaldhunga	4.28	27	Ramechhap	3.01	52	Mugu	1.99
3	Bhaktapur	4.20	28	Pyuthan	2.91	53	Jumla	1.97
4	Gulmi	4.08	29	Panchthar	2.88	54	Bajhang	1.95
5	Lalitpur	3.99	30	Sindhupalchok	2.81	55	Dhading	1.94
6	Khotang	3.93	31	Baglung	2.80	56	Sunsari	1.94
7	Saptari	3.87	32	Arghakhanchi	2.64	57	Udayapur	1.91
8	Terhathum	3.73	33	Salyan	2.63	58	Surkhet	1.90
9	Siraha	3.72	34	Doti	2.56	59	Rukum	1.83
10	Achham	3.62	35	Rolpa	2.54	60	Kaski	1.82
11	Bhojpur	3.58	36	Darchula	2.53	61	Solukhumbu	1.79
12	Baitadi	3.57	37	Dolakha	2.53	62	Humla	1.76
13	Nuwakot	3.52	38	Kapilbastu	2.49	63	Bajura	1.73
14	Kathmandu	3.52	39	Myagdi	2.45	64	Morang	1.73
15	Kabhrepalanchok	3.50	40	Ilam	2.34	65	Jajarkot	1.71
16	Lamjung	3.49	41	Tanahu	2.33	66	Jhapa	1.64
17	Syangja	3.41	42	Manang	2.33	67	Sankhuwasabha	1.60
18	Palpa	3.41	43	Taplejung	2.28	68	Banke	1.55
19	Rautahat	3.39	44	Dadeldhura	2.20	69	Dolpa	1.49
20	Sarlahi	3.28	45	Rupandehi	2.19	70	Makawanpur	1.47
21	Bara	3.22	46	Kalikot	2.19	71	Dang	1.20
22	Dhanusa	3.13	47	Mustang	2.17	72	Chitwan	1.19
23	Mahottari	3.11	48	Rasuwa	2.14	73	Bardiya	1.17
24	Parsa	3.08	49	Gorkha	2.12	74	Kailali	1.04
25	Dailekh	3.01	50	Nawalparasi	2.10	75	Kanchanpur	0.92

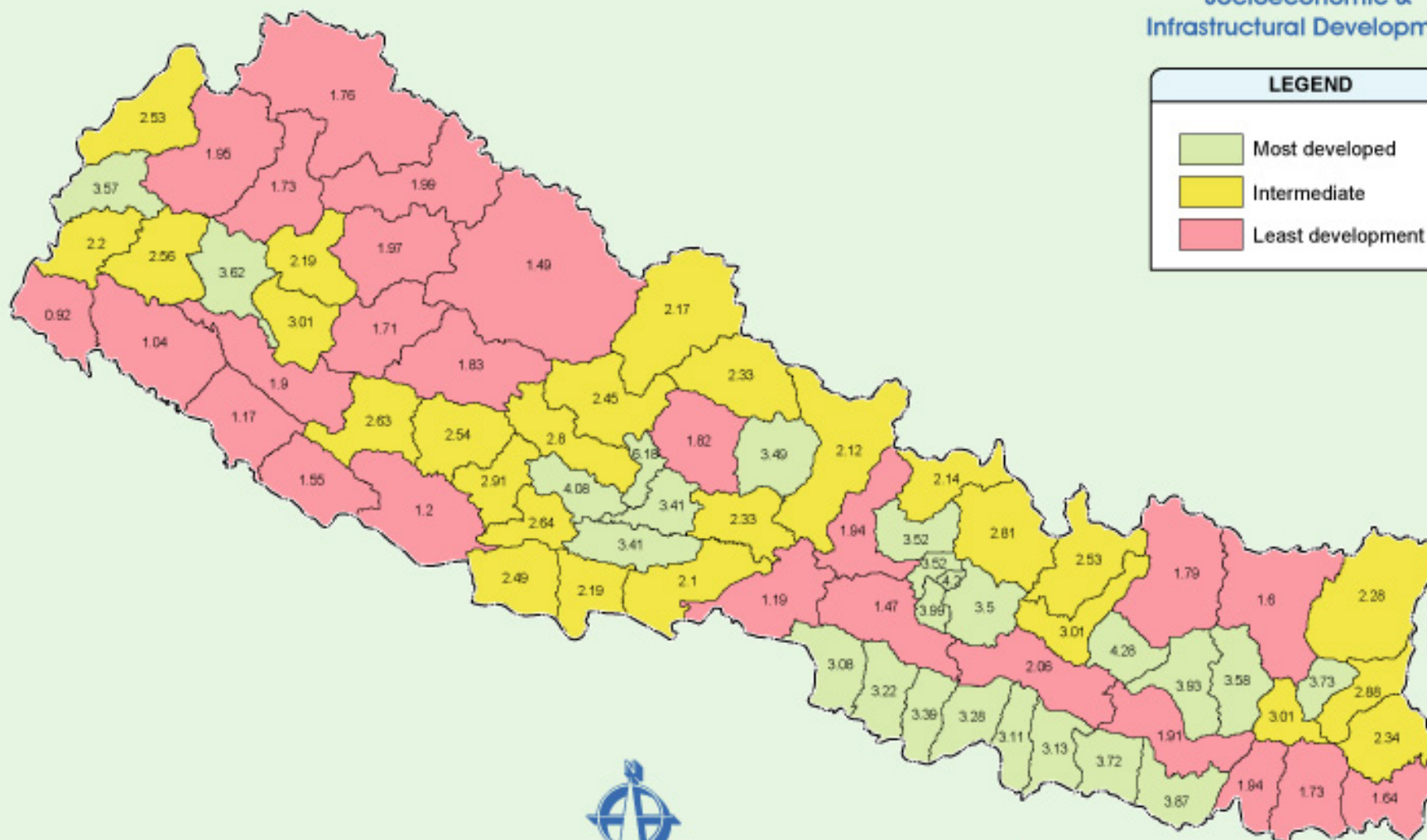
Map 30: Post Office Density

Number of post offices per 1000 population divided by population distance

Socioeconomic &
Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least development



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMGN



Percentage of Forest User Households - Map 31

*Percentage of total households who are members of Forest User Groups

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Rasuwa	123.14	26	Mugu	62.52	51	Taplejung	20.47
2	Myagdi	113.92	27	Baglung	62.30	52	Rupandehi	19.64
3	Bajura	113.46	28	Khotang	59.20	53	Bhaktapur	17.37
4	Terhathum	101.11	29	Kalikot	59.06	54	Lalitpur	15.33
5	Dhankuta	97.59	30	Manang	59.03	55	Salyan	14.96
6	Dadeldhura	93.26	31	Bajhang	54.60	56	Bardiya	13.92
7	Okhaldhunga	90.77	32	Syangja	54.46	57	Kanchanpur	13.76
8	Bhojpur	87.05	33	Arghakhanchi	54.40	58	Jhapa	11.36
9	Dolakha	86.70	34	Gulmi	53.24	59	Saptari	11.06
10	Pyuthan	85.25	35	Dailekh	51.55	60	Mahottari	10.87
11	Parbat	84.82	36	Rolpa	50.76	61	Chitwan	9.19
12	Ramechhap	75.65	37	Lamjung	50.49	62	Banke	8.58
13	Achham	73.87	38	Nuwakot	50.23	63	Siraha	8.36
14	Sindhupalchok	71.49	39	Jumla	47.71	64	Kailali	7.54
15	Dolpa	69.94	40	Makawanpur	47.19	65	Kathmandu	6.37
16	Sankhuwasabha	68.39	41	Doti	47.16	66	Nawalparasi	5.42
17	Dhading	68.07	42	Humla	47.03	67	Sarlahi	4.62
18	Solukhumbu	67.86	43	Kabhrepalanchok	46.17	68	Bara	4.49
19	Baitadi	67.66	44	Surkhet	45.13	69	Kapilbastu	4.34
20	Dang	66.40	45	Tanahu	44.43	70	Parsa	3.96
21	Jajarkot	65.53	46	Ilam	44.28	71	Sunsari	2.27
22	Darchula	63.94	47	Udayapur	41.17	72	Dhanusa	2.00
23	Gorkha	63.63	48	Sindhuli	36.26	73	Rautahat	2.00
24	Palpa	63.45	49	Kaski	34.15	74	Morang	1.22
25	Rukum	62.78	50	Panchthar	30.96	75	Mustang	0.00

* Since a household can be member of more than one forest user groups, there can be double counting of same households. In some districts, the 'percentage' of forest user group households is greater than 100.

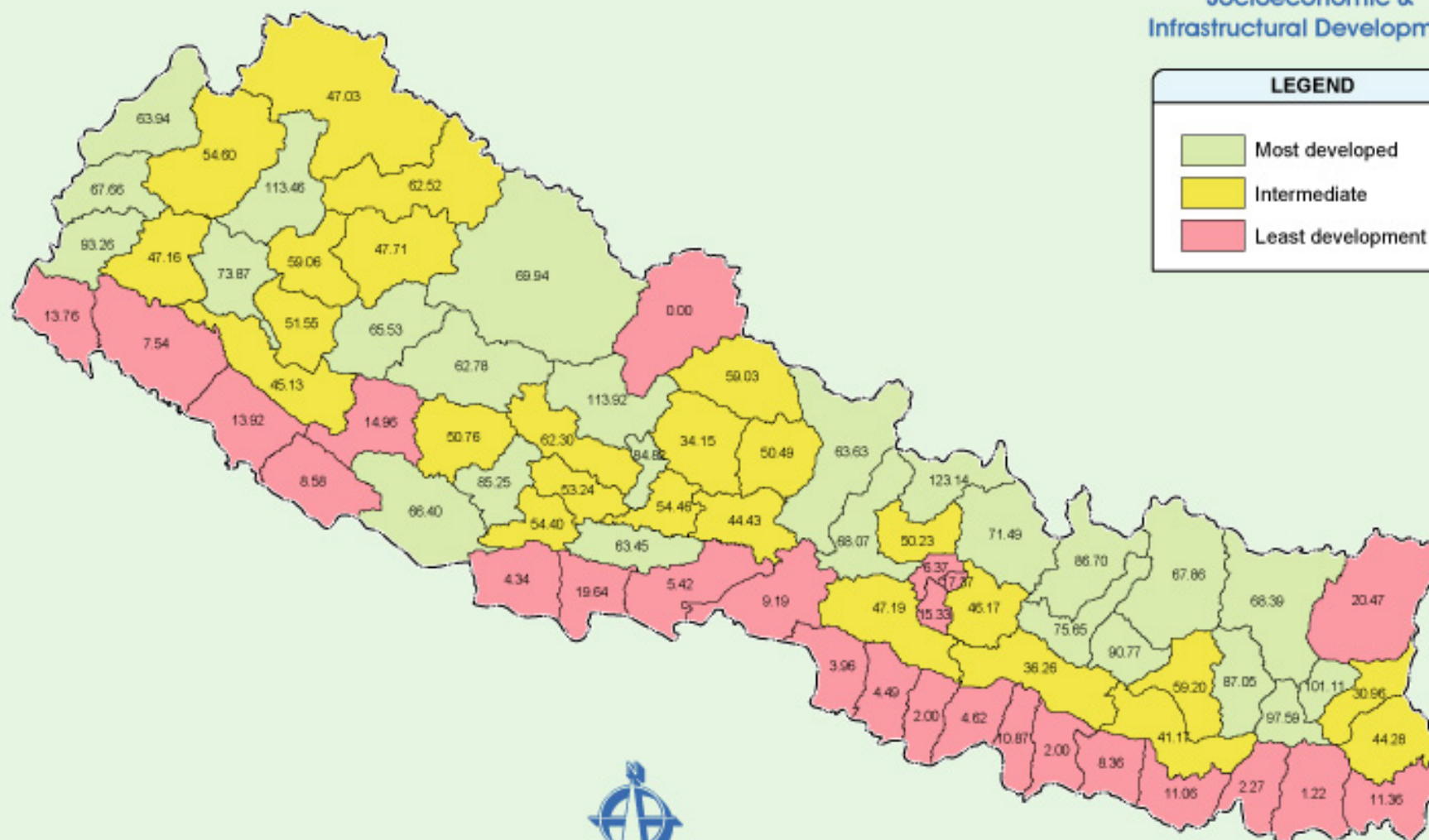
Map 31: Percentage of Forest User Households

Percentage of total households who are members of Forest User Groups

Socioeconomic &
Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least development



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMGN



Per Capita Regular Budget Expenditure - Map 32

Total regular budget expenditure in NRs divided by total population

Most Developed			Intermediate			Least Developed		
S.No.	District	Expenditure in Rs.	S.No.	District	Expenditure in Rs.	S.No.	District	Expenditure in Rs.
1	Kathmandu	20537	26	Bajura	1212	51	Gulmi	910
2	Mustang	9427	27	Okhaldhunga	1206	52	Udayapur	882
3	Manang	7054	28	Dadeldhura	1205	53	Sunsari	882
4	Dolpa	5242	29	Rukum	1200	54	Dhading	862
5	Rasuwa	3661	30	Sankhuwasabha	1194	55	Kabhrepalanchok	782
6	Mugu	2990	31	Dolakha	1182	56	Achham	776
7	Humla	2671	32	Bajhang	1161	57	Sindhuli	735
8	Jumla	2023	33	Gorkha	1144	58	Rupandehi	733
9	Dhankuta	1790	34	Bhojpur	1135	59	Parsa	724
10	Doti	1766	35	Chitwan	1092	60	Jhapa	715
11	Kaski	1748	36	Rolpa	1081	61	Dang	713
12	Solukhumbu	1714	37	Baglung	1076	62	Dailekh	713
13	Darchula	1703	38	Tanahu	1072	63	Kanchanpur	709
14	Kalikot	1701	39	Panchthar	1048	64	Nawalparasi	696
15	Makawanpur	1608	40	Palpa	1036	65	Morang	672
16	Taplejung	1509	41	Khotang	998	66	Saptari	619
17	Lalitpur	1500	42	Syangja	983	67	Kailali	616
18	Banke	1415	43	Nuwakot	980	68	Mahottari	595
19	Jajarkot	1337	44	Ilam	971	69	Bardiya	593
20	Lamjung	1301	45	Baitadi	939	70	Dhanusa	547
21	Terhathum	1294	46	Ramechhap	924	71	Siraha	545
22	Bhaktapur	1278	47	Pyuthan	921	72	Kapilbastu	532
23	Parbat	1273	48	Sindhupalchok	919	73	Bara	469
24	Surkhet	1244	49	Salyan	911	74	Rautahat	455
25	Myagdi	1218	50	Arghakhanchi	910	75	Sarlahi	428

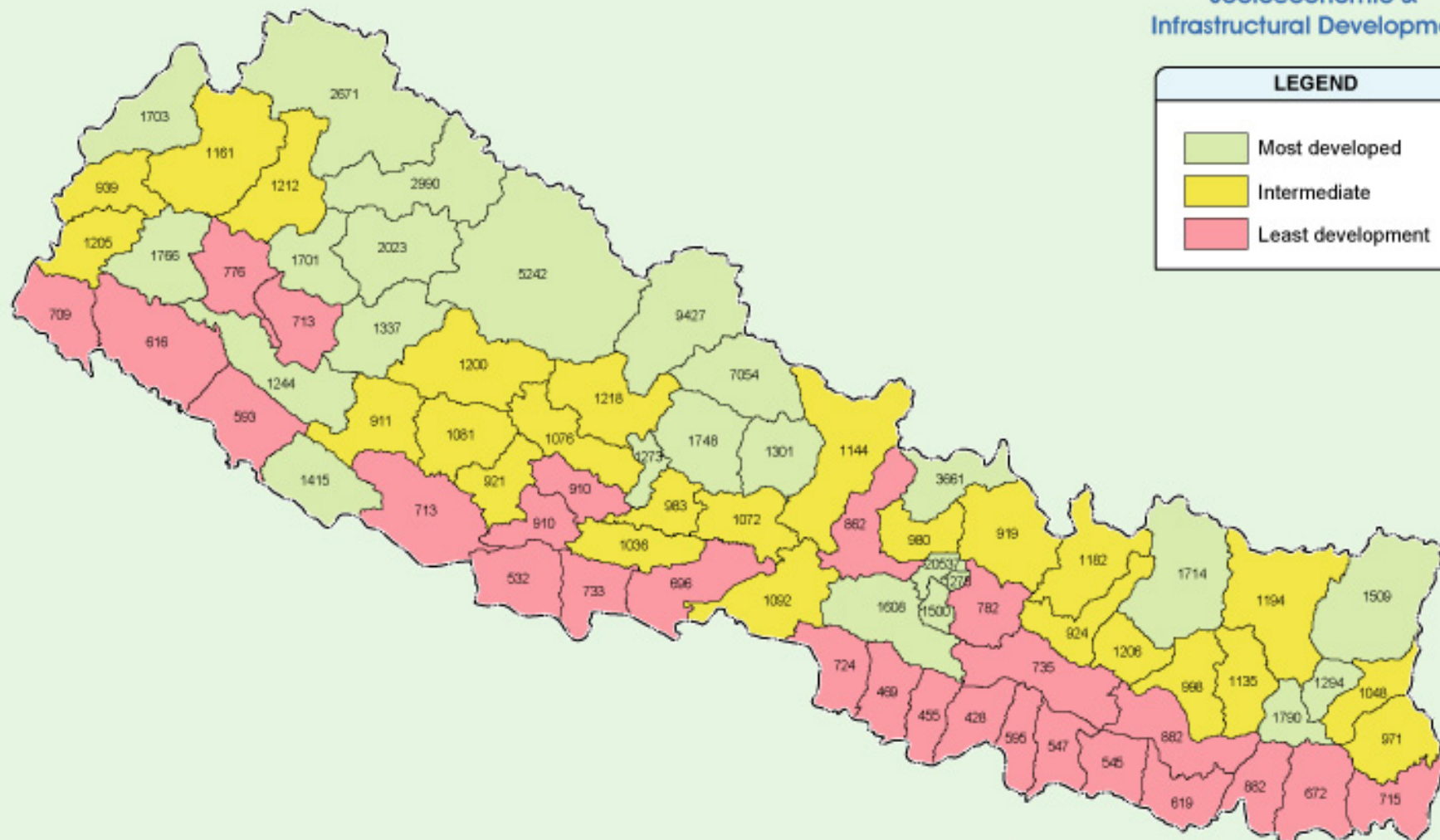
Map 32: Per Capita Regular Budget Expenditure

Total regular budget expenditure in NRs divided by total population

Socioeconomic &
Infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least development



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000
0 12.5 25 50 75 100
Kilometres



Per Capita Development Budget Expenditure - Map 33

Total development budget expenditure in NRs divided by total population

Most Developed			Intermediate			Least Developed		
S.No.	District	Expenditure in Rs.	S.No.	District	Expenditure in Rs.	S.No.	District	Expenditure in Rs.
1	Kathmandu	16532	26	Bajhang	913	51	Sankhuwasabha	622
2	Bhaktapur	4871	27	Solukhumbu	904	52	Gorkha	622
3	Manang	4796	28	Kaski	899	53	Panchthar	617
4	Mustang	4772	29	Arghakhanchi	899	54	Khotang	611
5	Lalitpur	4238	30	Lamjung	895	55	Syangja	582
6	Dolpa	2724	31	Kanchanpur	877	56	Ramechhap	577
7	Humla	2347	32	Kalikot	861	57	Dailekh	571
8	Morang	2051	33	Dang	849	58	Bhojpur	569
9	Surkhet	1910	34	Doti	834	59	Kapilbastu	558
10	Mugu	1800	35	Terhathum	831	60	Sindhupalchok	553
11	Darchula	1597	36	Palpa	817	61	Siraha	552
12	Rasuwa	1473	37	Pyuthan	816	62	Jajarkot	543
13	Dhading	1300	38	Kabhrepalanchok	807	63	Rolpa	538
14	Sarlahi	1256	39	Chitwan	797	64	Gulmi	535
15	Achham	1254	40	Banke	780	65	Parsa	518
16	Baglung	1105	41	Myagdi	758	66	Salyan	515
17	Dhankuta	1086	42	Makawanpur	745	67	Kailali	500
18	Dadeldhura	1059	43	Ilam	732	68	Saptari	475
19	Tanahu	1045	44	Dhanusa	706	69	Sindhuli	473
20	Bajura	1007	45	Rupandehi	699	70	Mahottari	407
21	Jumla	999	46	Taplejung	683	71	Rautahat	391
22	Dolakha	976	47	Bardiya	676	72	Nawalparasi	388
23	Parbat	957	48	Nuwakot	661	73	Jhapa	386
24	Baitadi	922	49	Rukum	629	74	Sunsari	311
25	Okhaldhunga	919	50	Udayapur	624	75	Bara	307

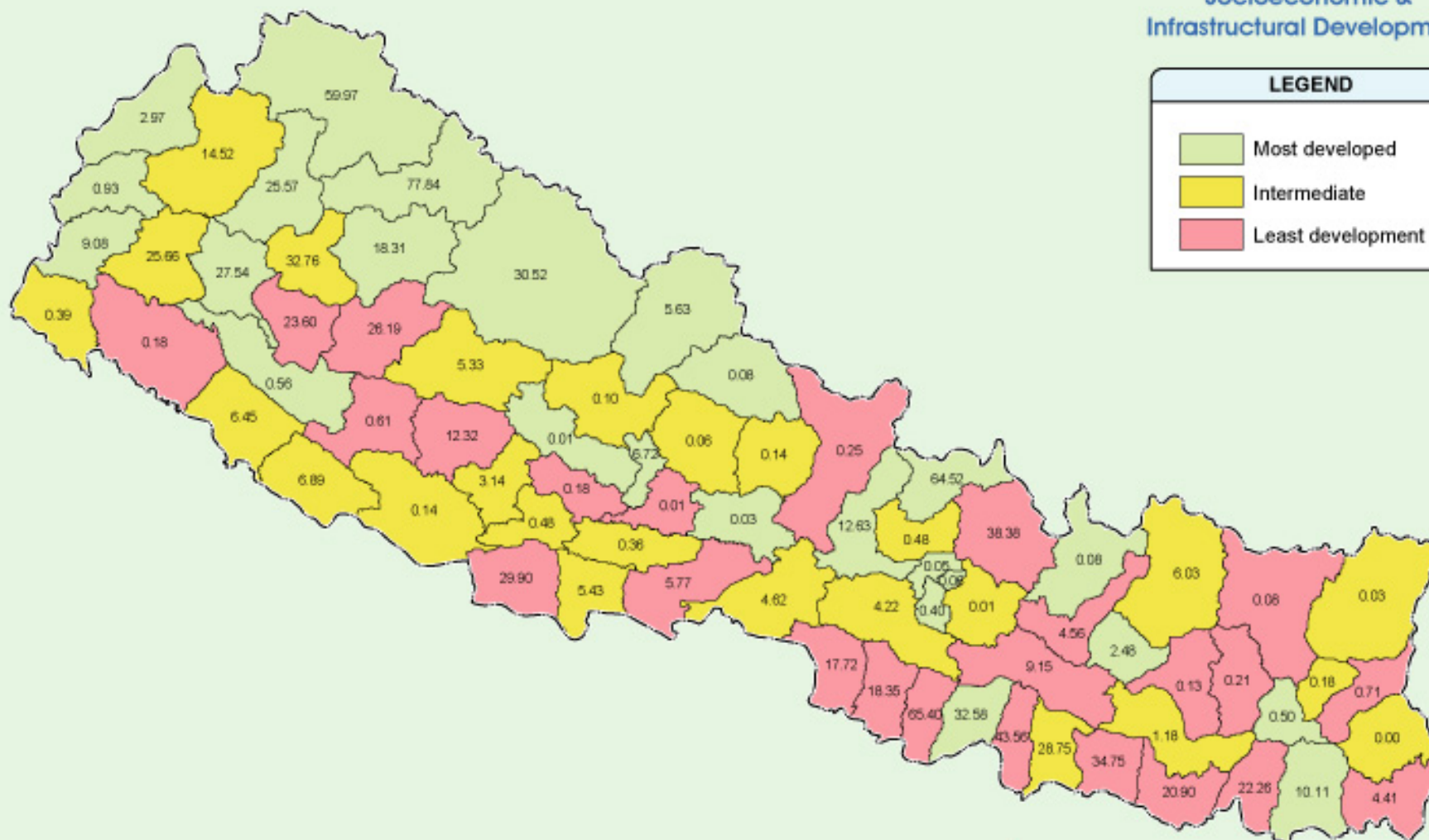
Map 33: Per Capita Development Budget Expenditure

Total development budget expenditure in NRs divided by total population

Socioeconomic &
Infrastructural Development

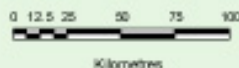
LEGEND

- Most developed
- Intermediate
- Least development



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000



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ICIMOD
MENRIS 2003

Overall Literacy Rate - Map 34

Literate Population 6 years and above as a percent of the total population in the same age group

Most Developed			Intermediate			Least Developed		
S.No.	District	Overall Literacy Rate	S.No.	District	Overall Literacy Rate	S.No.	District	Overall Literacy Rate
1	Kathmandu	77.21	26	Lamjung	56.89	51	Solukhumbu	45.92
2	Kaski	72.13	27	Arghakhanchi	56.11	52	Bardiya	45.73
3	Chitwan	71.08	28	Myagdi	56.03	53	Dhading	43.71
4	Lalitpur	70.92	29	Panchthar	55.42	54	Doti	43.68
5	Bhaktapur	70.57	30	Bhojpur	54.82	55	Bara	42.66
6	Jhapa	67.14	31	Gorkha	54.34	56	Parsa	42.59
7	Syangja	66.71	32	Sankhuwasabha	54.17	57	Kapilbastu	41.78
8	Ilam	66.53	33	Udayapur	53.63	58	Siraha	40.75
9	Rupandehi	66.24	34	Nawalparasi	53.25	59	Sindhupalchok	40.62
10	Palpa	66.22	35	Taplejung	52.61	60	Rukum	40.27
11	Dhankuta	64.33	36	Kailali	52.60	61	Jajarkot	39.52
12	Kabhrepalanchok	63.98	37	Mustang	52.08	62	Ramechhap	39.38
13	Makawanpur	63.36	38	Baitadi	51.91	63	Kalikot	38.47
14	Surkhet	62.69	39	Dadeldhura	51.91	64	Rolpa	37.52
15	Tanahu	62.05	40	Nuwakot	51.41	65	Sarlahi	36.53
16	Baglung	61.67	41	Dolakha	51.12	66	Bajhang	35.54
17	Sunsari	60.65	42	Sindhuli	50.49	67	Dolpa	34.98
18	Manang	60.45	43	Khotang	50.16	68	Mahottari	34.68
19	Kanchanpur	60.12	44	Saptari	49.64	69	Rasuwa	34.25
20	Terhathum	59.33	45	Darchula	49.50	70	Bajura	34.14
21	Dang	57.99	46	Okhaldhunga	49.34	71	Achham	33.79
22	Banke	57.84	47	Dhanusa	48.73	72	Rautahat	32.74
23	Gulmi	57.80	48	Salyan	48.48	73	Jumla	32.52
24	Parbat	57.03	49	Dailekh	48.04	74	Mugu	28.00
25	Morang	57.00	50	Pyuthan	46.91	75	Humla	27.09

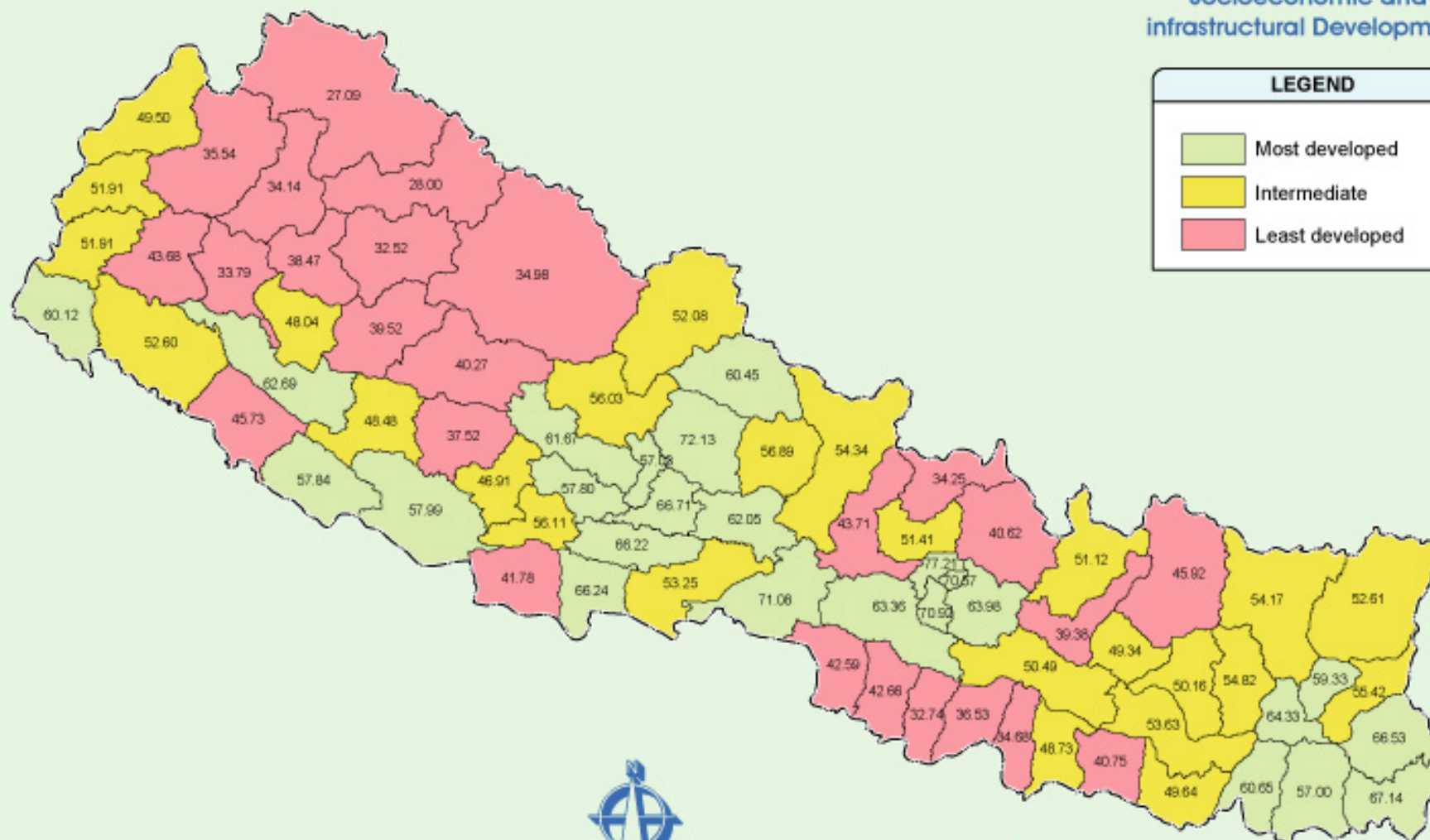
Map 34: Overall Literacy Rate

Literate Population 6 years and above as a percent of the total population in the same age group

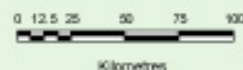
Socioeconomic and
infrastructural Development

LEGEND

- Most developed
- Intermediate
- Least developed



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMG



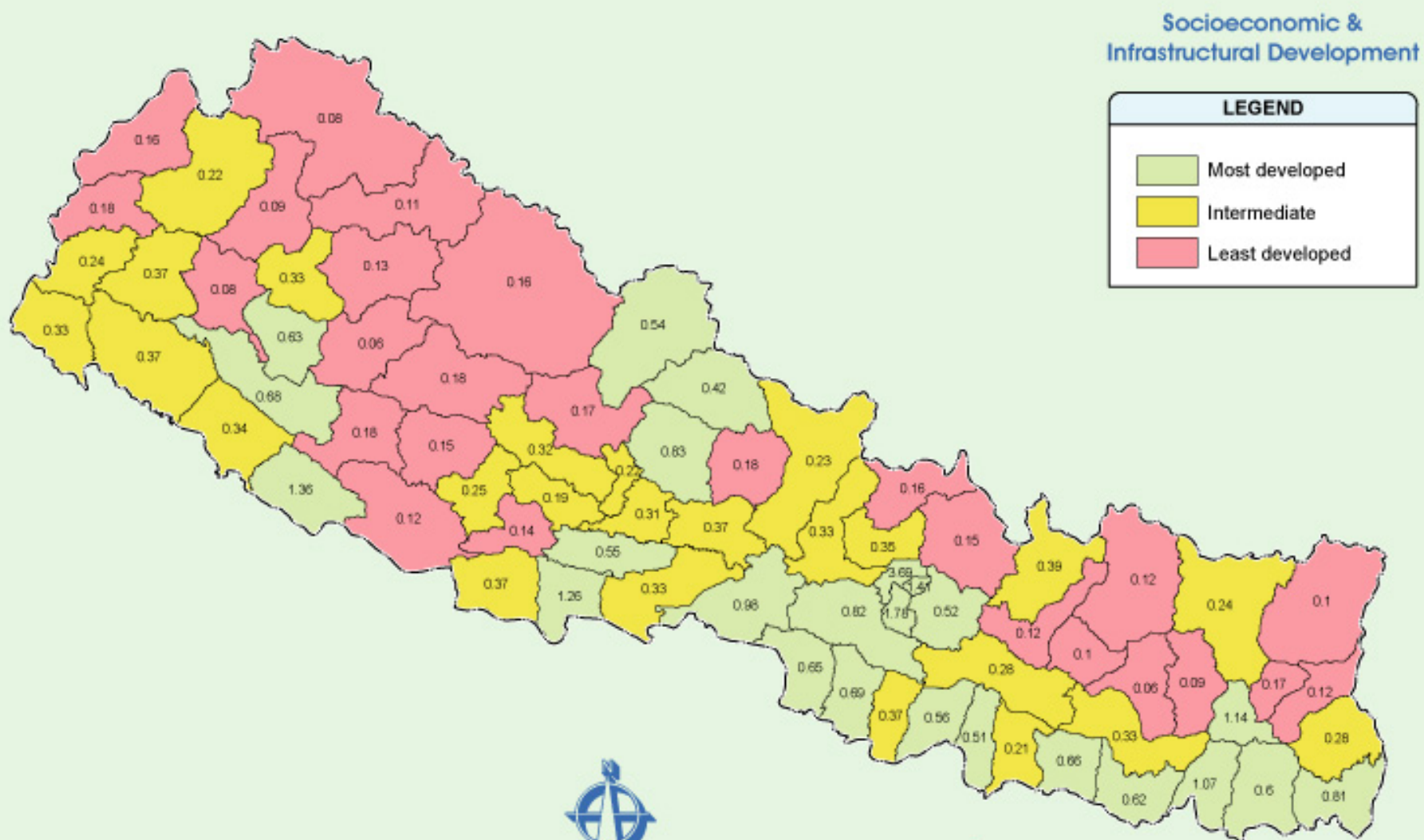
Broad Occupational Structure - Map 35

Ratio of labour force (economically active population aged 15 + years)
engaged in non-agricultural occupations to those engaged in agriculture as a major occupation

Most Developed			Intermediate			Least Developed		
S.No.	District	Ratio	S.No.	District	Ratio	S.No.	District	Ratio
1	Kathmandu	3.69	26	Kapilbastu	0.37	51	Lamjung	0.18
2	Lalitpur	1.78	27	Rautahat	0.37	52	Rukum	0.18
3	Bhaktapur	1.41	28	Kailali	0.37	53	Baitadi	0.18
4	Banke	1.36	29	Tanahu	0.37	54	Terhathum	0.17
5	Rupandehi	1.26	30	Doti	0.37	55	Myagdi	0.17
6	Dhanusa	1.14	31	Nuwakot	0.35	56	Dolpa	0.16
7	Sunsari	1.07	32	Bardiya	0.34	57	Dhading	0.16
8	Chitwan	0.98	33	Nawalparasi	0.33	58	Rasuwa	0.16
9	Kaski	0.83	34	Kalikot	0.33	59	Rolpa	0.15
10	Makawanpur	0.82	35	Udayapur	0.33	60	Sindhupalchok	0.15
11	Jhapa	0.81	36	Dhankuta	0.33	61	Arghakhanchi	0.14
12	Bara	0.69	37	Kanchanpur	0.33	62	Jumla	0.13
13	Surkhet	0.68	38	Baglung	0.32	63	Ramechhap	0.12
14	Siraha	0.66	39	Syangja	0.31	64	Darchula	0.12
15	Parsa	0.65	40	Sindhuli	0.28	65	Panchthar	0.12
16	Dang	0.63	41	Ilam	0.28	66	Solukhumbu	0.12
17	Saptari	0.62	42	Pyuthan	0.25	67	Mugu	0.11
18	Morang	0.60	43	Sankhuwasabha	0.24	68	Taplejung	0.10
19	Sarlahi	0.56	44	Dadeldhura	0.24	69	Okhaldhunga	0.10
20	Palpa	0.55	45	Gorkha	0.23	70	Bhojpur	0.09
21	Mustang	0.54	46	Bajhang	0.22	71	Bajura	0.09
22	Kabhrepalanchok	0.52	47	Parbat	0.22	72	Achham	0.08
23	Mahottari	0.51	48	Dailekh	0.21	73	Humla	0.08
24	Manang	0.42	49	Gulmi	0.19	74	Khotang	0.06
25	Dolakha	0.39	50	Salyan	0.18	75	Jajarkot	0.06

Map 35: Broad Occupational Structure

Ratio of labour force (economically active population aged 15 + years) engaged in non-agricultural occupations to those engaged in agriculture as a major occupation



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000



CBS/HMGN



Contributing Indices and Indicators

Women's Empowerment Index

Percentage Share of Females in Literacy - Map 36

Literate female population of 10+ years as a percentage of the total literate population in the same age group

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Syangja	48.10	26	Bhaktapur	40.70	51	Jajarkot	33.49
2	Palpa	47.29	27	Banke	40.54	52	Saptari	33.47
3	Gulmi	46.56	28	Morang	40.28	53	Rukum	32.98
4	Baglung	46.11	29	Sunsari	40.27	54	Dailekh	32.93
5	Tanahu	45.74	30	Manang	40.06	55	Kapilbastu	32.62
6	Parbat	45.46	31	Dang	40.04	56	Baitadi	32.35
7	Arghakhanchi	45.27	32	Kathmandu	39.35	57	Rasuwa	31.90
8	Gorkha	44.73	33	Khotang	38.77	58	Darchula	31.48
9	Chitwan	44.21	34	Udayapur	38.70	59	Dadeldhura	31.41
10	Myagdi	43.72	35	Dhading	38.66	60	Sarlahi	31.35
11	Kaski	43.66	36	Pyuthan	38.56	61	Bara	31.13
12	Jhapa	43.58	37	Nuwakot	38.46	62	Siraha	30.35
13	Ilam	43.01	38	Solukhumbu	38.28	63	Rolpa	30.16
14	Lamjung	42.63	39	Bardiya	38.15	64	Rautahat	30.05
15	Dhankuta	42.39	40	Nawalparasi	38.02	65	Parsa	29.83
16	Sankhuwasabha	42.20	41	Kanchanpur	37.72	66	Mahottari	29.31
17	Bhojpur	41.42	42	Kailali	37.51	67	Doti	27.11
18	Panchthar	41.35	43	Dolakha	37.38	68	Dolpa	25.04
19	Terhathum	41.14	44	Okhaldhunga	37.37	69	Achham	23.12
20	Kabhrepalanchok	41.05	45	Sindhuli	36.67	70	Bajura	23.01
21	Makawanpur	40.91	46	Sindhupalchok	34.83	71	Jumla	21.86
22	Lalitpur	40.84	47	Salyan	34.68	72	Bajhang	20.12
23	Taplejung	40.77	48	Ramechhap	34.45	73	Kalikot	18.42
24	Rupandehi	40.76	49	Mustang	34.33	74	Humla	18.25
25	Surkhet	40.71	50	Dhanusa	34.18	75	Mugu	13.83

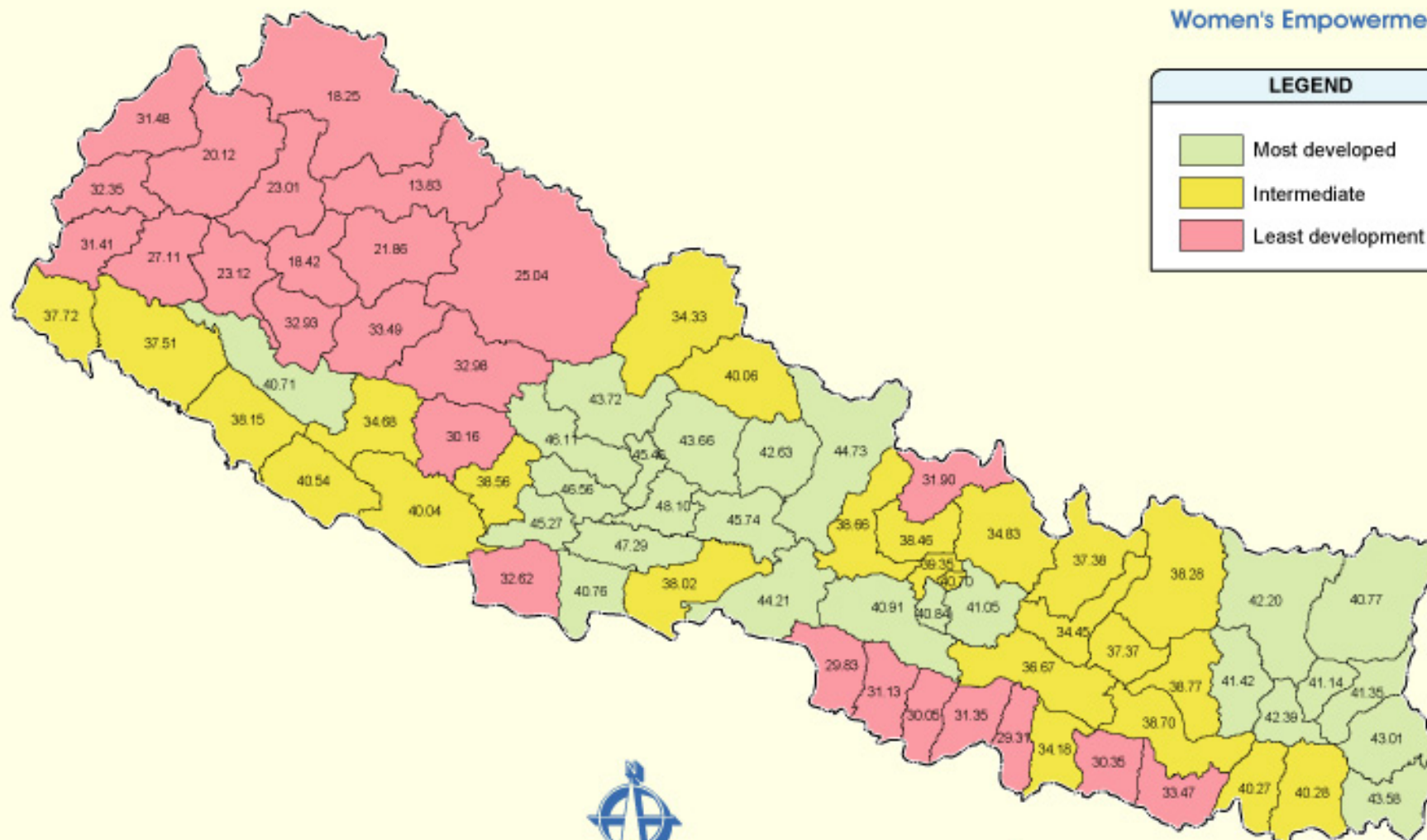
Map 36: Percentage Share of Females in Literacy

Literate female population of 10+ years as a percentage of the total literate population in the same age group

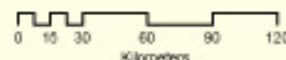
Women's Empowerment

LEGEND

- Most developed
- Intermediate
- Least development



Scale 1:3,500,000



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



CBS/HMG



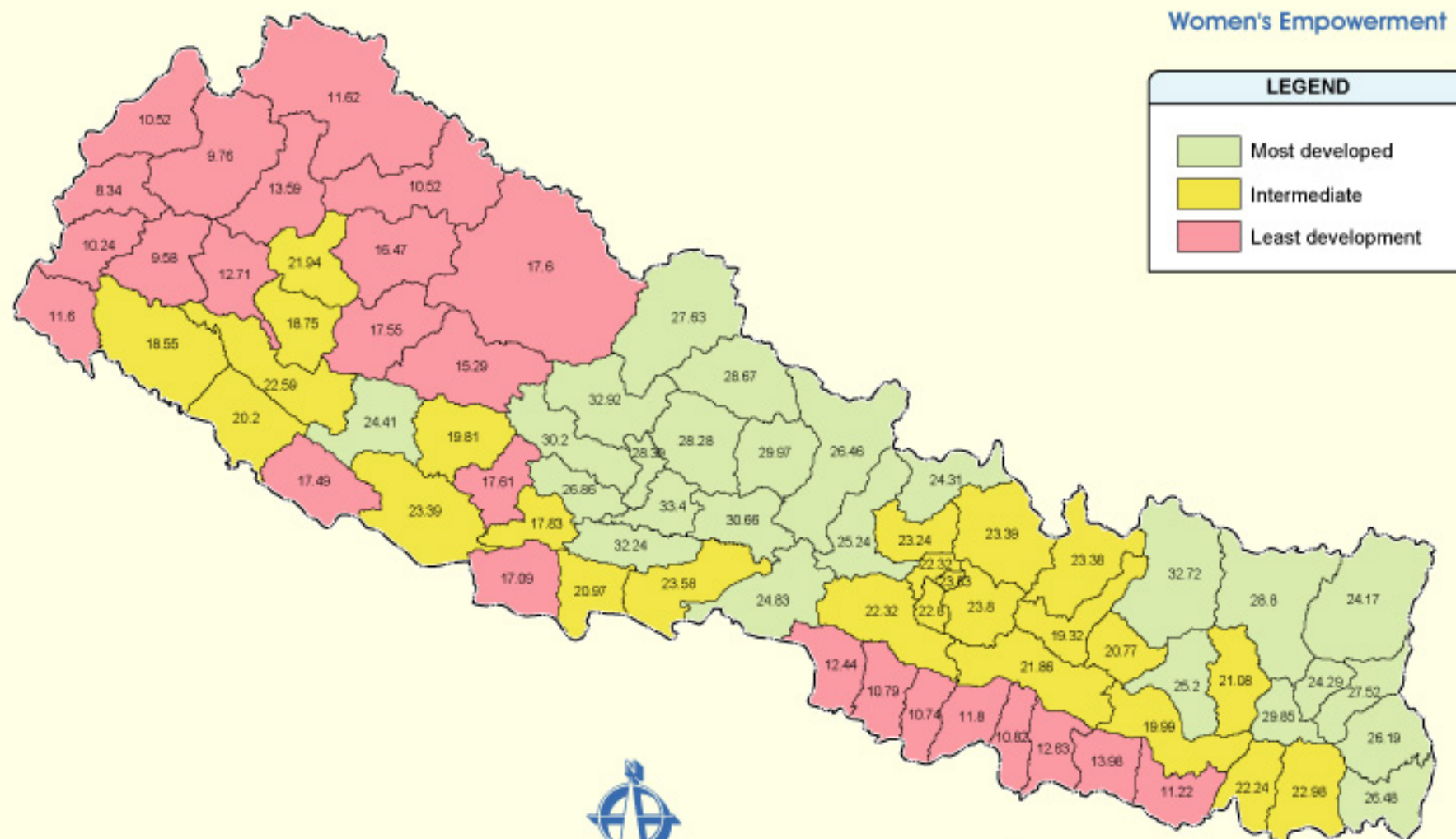
Percentage Share of Females in Non-agricultural Occupations - Map 37

Female population aged 15 and above engaged in non-agricultural occupations as a percentage of the total population in the same age group engaged in the same activities.

Most Developed			Intermediate			Least Developed		
S.No.	District	Ratio	S.No.	District	Ratio	S.No.	District	Ratio
1	Syangja	33.40	26	Bhaktapur	23.83	51	Pyuthan	17.61
2	Myagdi	32.92	27	Kabhrepalanchok	23.80	52	Dolpa	17.60
3	Solukhumbu	32.72	28	Nawalparasi	23.58	53	Jajarkot	17.55
4	Palpa	32.24	29	Dang	23.39	54	Banke	17.49
5	Tanahu	30.66	30	Sindhupalchok	23.39	55	Kapilbastu	17.09
6	Baglung	30.20	31	Dolakha	23.38	56	Jumla	16.47
7	Lamjung	29.97	32	Nuwakot	23.24	57	Rukum	15.29
8	Dhankuta	29.85	33	Morang	22.98	58	Siraha	13.98
9	Sankhuwasabha	28.80	34	Lalitpur	22.80	59	Bajura	13.59
10	Manang	28.67	35	Surkhet	22.59	60	Achham	12.71
11	Parbat	28.39	36	Makawanpur	22.32	61	Dhanusa	12.63
12	Kaski	28.28	37	Kathmandu	22.32	62	Parsa	12.44
13	Mustang	27.63	38	Sunsari	22.24	63	Sarlahi	11.80
14	Panchthar	27.52	39	Kalikot	21.94	64	Humla	11.62
15	Gulmi	26.86	40	Sindhuli	21.86	65	Kanchanpur	11.60
16	Jhapa	26.48	41	Bhojpur	21.08	66	Saptari	11.22
17	Gorkha	26.46	42	Rupandehi	20.97	67	Mahottari	10.82
18	Ilam	26.19	43	Okhaldhunga	20.77	68	Bara	10.79
19	Dhading	25.24	44	Bardiya	20.20	69	Rautahat	10.74
20	Khotang	25.20	45	Udayapur	19.99	70	Darchula	10.52
21	Chitwan	24.83	46	Rolpa	19.81	71	Mugu	10.52
22	Salyan	24.41	47	Ramechhap	19.32	72	Dadeldhura	10.24
23	Rasuwa	24.31	48	Dailekh	18.75	73	Bajhang	9.76
24	Terhathum	24.29	49	Kailali	18.55	74	Doti	9.58
25	Taplejung	24.17	50	Arghakhanchi	17.83	75	Baitadi	8.34

Map 37: Percentage Share of Females in Non-agricultural Occupations

Female population aged 15 and above engaged in non-agricultural occupations as a percentage of the total population in the same age group engaged in the same activities



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001

Scale 1:3,500,000
0 15 30 60 90 120
Kilometers

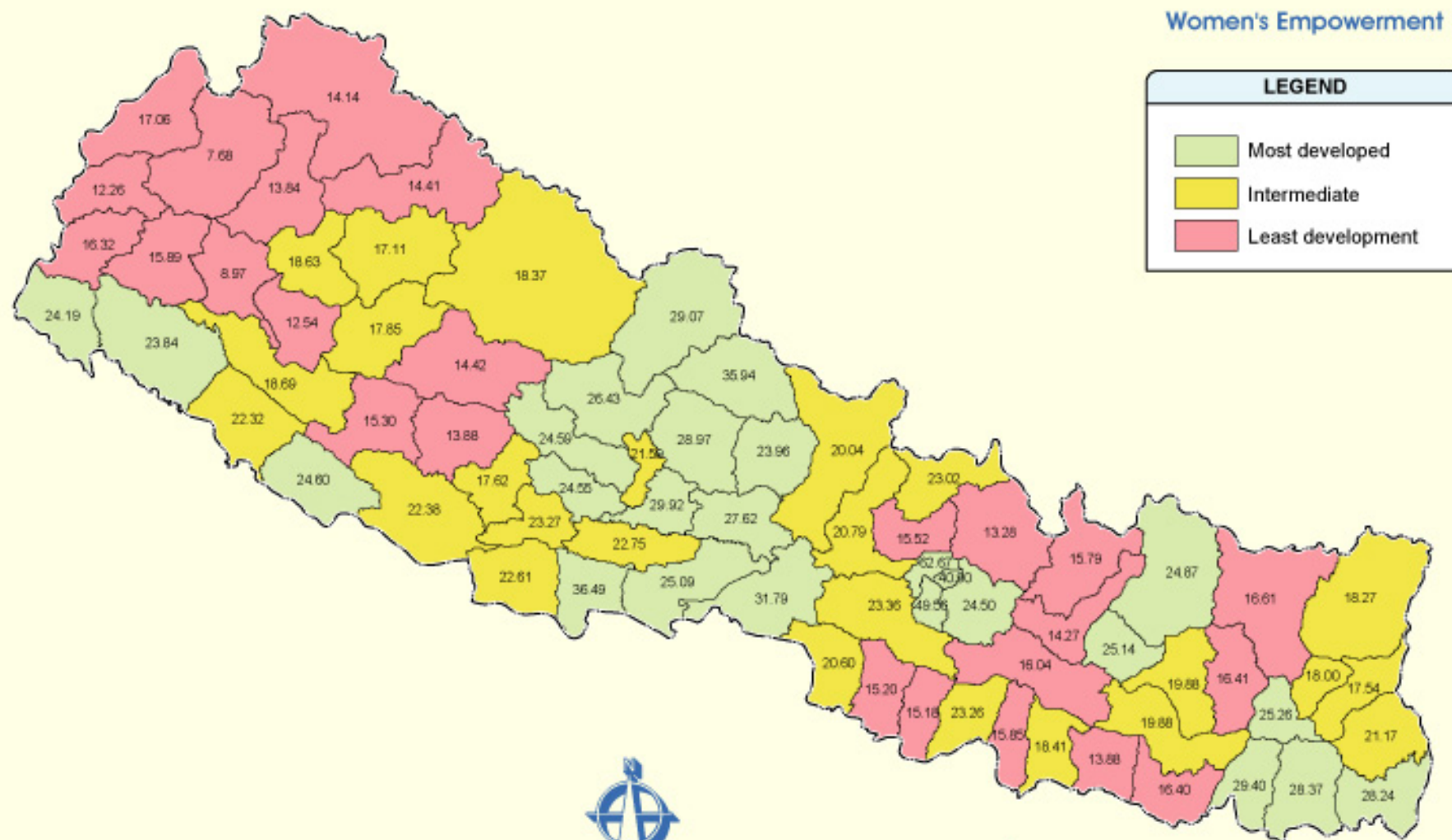


Percentage Share of Female Teachers at Primary Level - Map 38
Number of female teachers in primary schools as a percent of the total number of primary teachers

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Kathmandu	62.67	26	Makawanpur	23.36	51	Darchula	17.06
2	Lalitpur	49.56	27	Arghakhanchi	23.27	52	Sankhuwasabha	16.61
3	Bhaktapur	40.90	28	Sarlahi	23.26	53	Bhojpur	16.41
4	Rupandehi	36.49	29	Rasuwa	23.02	54	Saptari	16.40
5	Manang	35.94	30	Palpa	22.75	55	Dadeldhura	16.32
6	Chitwan	31.79	31	Kapilbastu	22.61	56	Sindhuli	16.04
7	Syangja	29.92	32	Dang	22.38	57	Doti	15.89
8	Sunsari	29.40	33	Bardiya	22.32	58	Mahottari	15.85
9	Mustang	29.07	34	Parbat	21.59	59	Dolakha	15.79
10	Kaski	28.97	35	Ilam	21.17	60	Nuwakot	15.52
11	Morang	28.37	36	Dhading	20.79	61	Salyan	15.30
12	Jhapa	28.24	37	Parsa	20.60	62	Bara	15.20
13	Tanahu	27.62	38	Gorkha	20.04	63	Rautahat	15.18
14	Myagdi	26.43	39	Udayapur	19.88	64	Rukum	14.42
15	Dhankuta	25.26	40	Khotang	19.88	65	Mugu	14.41
16	Okhaldhunga	25.14	41	Surkhet	18.69	66	Ramechhap	14.27
17	Nawalparasi	25.09	42	Kalikot	18.63	67	Humla	14.14
18	Solukhumbu	24.87	43	Dhanusa	18.41	68	Rolpa	13.88
19	Banke	24.60	44	Dolpa	18.37	69	Siraha	13.88
20	Baglung	24.59	45	Taplejung	18.27	70	Bajura	13.84
21	Gulmi	24.55	46	Terhathum	18.00	71	Sindhupalchok	13.28
22	Kabhrepalanchok	24.50	47	Jajarkot	17.85	72	Dailekh	12.54
23	Kanchanpur	24.19	48	Pyuthan	17.62	73	Baitadi	12.26
24	Lamjung	23.96	49	Panchthar	17.54	74	Achham	8.97
25	Kailali	23.84	50	Jumla	17.11	75	Bajhang	7.68

Map 38: Percentage Share of Female Teachers at Primary Level

Number of female teachers in primary schools as a percent of the total number of primary teachers



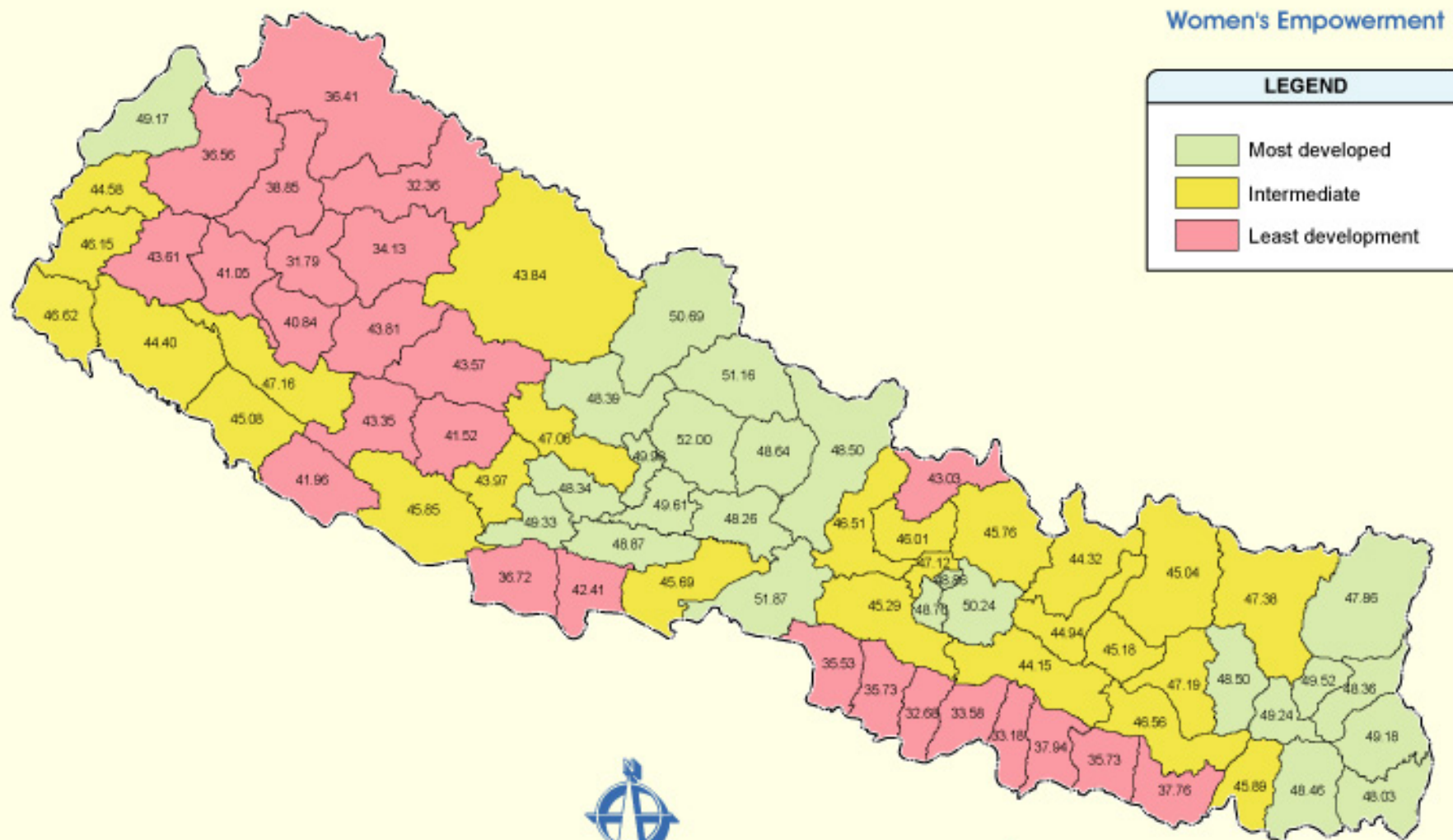
Percentage Share of Girls Enrolled at Primary Level - Map 39

Number of girls enrolled as a percentage of the total enrollment at primary level

Most Developed			Intermediate			Least Developed		
S.No.	District	%	S.No.	District	%	S.No.	District	%
1	Kaski	52.00	26	Sankhuwasabha	47.38	51	Jajarkot	43.81
2	Chitwan	51.87	27	Khotang	47.19	52	Doti	43.61
3	Manang	51.16	28	Surkhet	47.16	53	Rukum	43.57
4	Mustang	50.69	29	Kathmandu	47.12	54	Salyan	43.35
5	Kabhrepalanchok	50.24	30	Baglung	47.06	55	Rasuwa	43.03
6	Parbat	49.98	31	Kanchanpur	46.62	56	Rupandehi	42.41
7	Syangja	49.61	32	Udayapur	46.56	57	Banke	41.96
8	Terhathum	49.52	33	Dhading	46.51	58	Rolpa	41.52
9	Arghakhanchi	49.33	34	Dadeldhura	46.15	59	Achham	41.05
10	Dhankuta	49.24	35	Nuwakot	46.01	60	Dailekh	40.84
11	Ilam	49.18	36	Sunsari	45.89	61	Bajura	38.85
12	Darchula	49.17	37	Dang	45.85	62	Dhanusa	37.94
13	Palpa	48.87	38	Sindhupalchok	45.76	63	Saptari	37.76
14	Bhaktapur	48.86	39	Nawalparasi	45.69	64	Kapilbastu	36.72
15	Lalitpur	48.76	40	Makawanpur	45.29	65	Bajhang	36.56
16	Lamjung	48.64	41	Okhaldhunga	45.18	66	Humla	36.41
17	Bhojpur	48.50	42	Bardiya	45.08	67	Bara	35.73
18	Gorkha	48.50	43	Solukhumbu	45.04	68	Siraha	35.73
19	Morang	48.46	44	Ramechhap	44.94	69	Parsa	35.53
20	Myagdi	48.39	45	Baitadi	44.58	70	Jumla	34.13
21	Panchthar	48.36	46	Kailali	44.40	71	Sarlahi	33.58
22	Gulmi	48.34	47	Dolakha	44.32	72	Mahottari	33.18
23	Tanahu	48.26	48	Sindhuli	44.15	73	Rautahat	32.68
24	Jhapa	48.03	49	Pyuthan	43.97	74	Mugu	32.36
25	Taplejung	47.86	50	Dolpa	43.84	75	Kalikot	31.79

Map 39: Percentage Share of Girls Enrolled at Primary Level

Number of girls enrolled as a percentage of the total enrollment at primary level



Base Map: Topographical Zonal Map (1:250,000),
Department of Survey, 1988
Data Source: National Population Census 2001



Annex 1: Zero-to-one scoring transformation

For the purpose of aggregation, indicators were classified into two groups: Group A and Group B (Table). Group A consists of indicators with values that increase with a decrease (from more developed to less developed) in the level of performance among the districts. Group B consists of indicators with values that increase with increase (from less developed to more developed) in the level of performance among the districts. In order to aggregate the indicators of these two groups, it is essential to transform each indicator's values into scores/ranks in such a way that each indicator has the following common property: an increase in scores of an indicator corresponds to an increase in performance among districts. In this study, the zero-to-one scoring transformation was used.

Table: Indicators classified as Group A or Group B

Group A		Group B	
The higher the value of the indicator the less-developed the district $d_{ij} = (\max_i - x_{ij})/(\max_i - \min_i)$		The higher the value of the indicator the more developed the district $d_{ij} = (x_{ij} - \min_i)/(\max_i - \min_i)$	
Child illiteracy rate	5CILR	Adult gender imbalance ratio in literacy status	GIRLR
Child economic activity rate	CLABR	Adult gender imbalance ratio in non-agricultural occupations	GIRE
Proportion of child marriage	CMMAR	Per capita food production	PCFA
Percentage of educationally disadvantaged population	PEDEGP	Contraceptive prevalence rate	CPR
Percentage of marginal farm households	PLM	Drinking water coverage	WATER
		Toilet facility	TOILET
		Agricultural credit	ACREDIT
		Farm size	FARMSIZE
		Livestock per farm household	LIVE
		Percentage of irrigated area	IAPAA
		Road density	ROAD
		Bank density	BANK
		Cooperatives density	COOP
		Health institutions density	PHI
		Post office density	PPO
		Percentage of forest user households	FORESTHH
		Per capita regular budget expenditure	PCREXP
		Per capita development budget expenditure	PCDEXP
		Overall literacy rate	LR
		Broad occupational structure	EMPS
		Percentage share of females in literacy	FLR
		Percentage share of females in non-agricultural occupations	PWNAG
		Percentage share of females teachers at primary level	F_TEACH
		Percentage share of girls enrolled at primary level	G_ENR

Zero-to-one scoring transformation: The original 75 values of each indicator were transformed into 75 scores by a rule that depends on whether the indicator belongs to Group A or Group B.

Let x_{ij} be the value of the j^{th} indicator in the i^{th} district.

Let $\max_j = \max\{x_{ij}\}$ and $\min_j = \min\{x_{ij}\}$ correspondingly denote the maximum and minimum values over 75 district of the j^{th} indicator.

Each indicator's values for Group A are transformed by the following rule.

$$d_{ij} = (\max_j - x_{ij}) / (\max_j - \min_j)$$

where d_{ij} is the score corresponding to x_{ij} .

This rule maps the smallest value of the indicator to one and the largest value to zero, and other values to between zero and one, preserving the ordering in reverse order (increase in value implies decrease in score).

Each indicator's values for Group B are transformed by the following rule.

$$d_{ij} = (x_{ij} - \min_j) / (\max_j - \min_j)$$

where d_{ij} is the score corresponding to x_{ij} .

This rule maps the smallest value of the indicator to zero and the largest value to one, and other values to between zero and one, preserving the ordering in the same order (increase in value implies increase in score).

All scores are free from a unit of measurement, and vary from zero to one.

Weighted indicators: In this study, the following nine indices or weighted indicators were constructed by aggregating or, equivalently, summing the weighted scores of appropriate basic indicators.

Child Deprivation Index (CDI)

Gender Discrimination Index (GDI)

Health and Development Index (HDI)

Primary Sector Development Index (PSDI)

Infrastructural Development Index (IDI)

Poverty and Deprivation Index (POVDEPI)

Socioeconomic and Infrastructural Development Index (SEIDI)

Women's Empowerment Index (WEI)

Overall Composite Index (OCI)

The weighted indicators were constructed by aggregating the scores of basic indicators or indices in the following manner.

$$\text{CDI} = \frac{5\text{CILR} + \text{CLABR} + \text{CMMAR}}{3}$$

$$\text{GDI} = \frac{\text{GIRLR} + \text{GIRE}}{2}$$

$$\text{HDI} = \frac{\text{CPR} + \text{WATER} + \text{TOILET}}{3}$$

$$\text{PSDI} = \frac{\text{ACREDIT} + \text{FARMSIZE} + \text{LIVE} + \text{IAPAA}}{4}$$

$$\text{IDI} = \frac{\text{ROAD} + \text{BANK} + \text{COOP} + \text{PHI} + \text{PPO} + \text{FORESTHH} + \text{PCREXP} + \text{PCDEXP}}{8}$$

$$\text{POVDEPI} = \frac{\text{CDI} + \text{GDI} + \text{PEDEGP} + \text{PLM} + \text{PCFA}}{5}$$

$$\text{SEIDI} = \frac{\text{HDI} + \text{PSDI} + \text{IDI} + \text{LR} + \text{EMPS}}{5}$$

CDI = **Child Deprivation Index**
 5CILR = Child Illiteracy Rate
 CLABR = Child Economic Activity Rate
 CMMAR = Proportion of Child Marriage

GDI = **Gender Discrimination Index**
 GIRLR = Adult Gender Imbalance Ratio in Literacy
 GIRE = Adult Gender Imbalance Ratio in Non-agricultural Occupations

HDI = **Health And Development Index**
 CPR = Contraceptive Prevalence Rate
 WATER = Drinking Water Coverage
 TOILET = Toilet Facilities

PSDI = **Primary Sector Development Index**
 ACREDIT = Agricultural Credit
 FARMSIZE = Farm Size
 LIVE = Livestock per Farm Household
 IAPAA = Percentage of Irrigated Area

IDI = **Infrastructure Development Index**
 ROAD = Road Density
 BANK = Bank Density
 COOP = Cooperatives Density
 PHI = Health Institutions Density
 PPO = Post Office Density
 FORESTHH = Forest User Households
 PCREXP = Per Capita Regular Budget Expenditure
 PCDEXP = Per Capita Development Budget Expenditure

POVDEPI = **Poverty and Deprivation Index**
 CDI = Child Deprivation Index
 GDI = Gender Discrimination Index
 PEDEGP = Educationally Disadvantaged Population
 PLM = Marginal Farm Households
 PCFA = Per Capita Food Production

SEIDI = **Socioeconomic and Infrastructural Development Index**
 HDI = Health and Development Index
 PSDI = Primary Sector Development Index
 IDI = Infrastructure Development Index
 LR = Overall Literacy Rate
 EMPS = Broad Occupational Structure

$$\text{WEI} = \frac{\text{FLR} + \text{PWNAG} + \text{F_TEACH} + \text{G_ENR}}{4}$$

$$\text{OCI} = \frac{\text{POVDEPI} + \text{SEIDI} + \text{WEI}}{3}$$

WEI = **Women's Empowerment Index**

FLR = Share of Females in Literacy

PWNAG = Share of Females in Non-agricultural Occupations

F_TEACH = Share of Female Teachers at Primary Level

G_ENR = Share of Girls' Enrolment at Primary Level

OCI = **Overall Composite Index**

POVDEPI = Poverty and Deprivation Index

SEIDI = Socioeconomic and Infrastructural Development Index

WEI = Women's Empowerment Index