SERVICE DELIVERY SURVEY:
HEALTH AND AGRICULTURE SERVICES

NEPAL MULTIPLE INDICATOR SURVEILLANCE
SIXTH CYCLE
(November 97 - January 98)

HMG/N - National Planning Commission Secretariat

In Collaboration with UNICEF - Nepal
1998

Preface

Nepal Multipie Indicator Surveillance (NMIS) is being conducted to collect community based information for the monitoring the National Programme of Action for the Children and Development for the 1990s set in line with the World Summit for Children, 1990.

This is the Sixth Cycle report on Service Delivery Survey: Health and Agriculture Services surved 18,770 household and contacted with 108,899 people. It focuses particularly on the delivery of government health and agriculture services. This report provides basic data and analysis of indicators for effective national and local level planning especially in health and agruculture sectors of service delivery system. The field survey was carried out by Central Bureau of Statistics between October and November 1997.

National Planning Commission Secretariat expresses its sincere appreciation to the members of NMIS Steering Committee, members of the Technical Committee for their valuable contributions and to Central Bureau of Statistics for conductiing field work and analysis of findings. We also extend our appreciation to UNICEF/Nepal for its professional facilitation as well as financial support and to CIET International for its technical inputs.

Dr. Bholcf Nath Chalise
Secretary
National Planning Commission
Secretariat
and
Chairperson, NMIS Steering
Committee

Singha Durbar
December 1998.

NMIS STEERING COMMITTEE MEMBERS

Dr. Bhola Nath Chalise Secretary, National Planning Commission Secretariat	-	Chair Person
Mr. Shree Bhagwan Singh Joint Secretary, National Planning Commission Secretariat	-	Member
Representative Ministry of Education	-	Member
Representative Ministry of Local Development	-	Member
	I	
Dr. Chhatra Amatya Joint Secretary, Planning Division Ministry of Health	-	Member
Representative Ministry of Agriculture	-	Member
Mr. Keshav Raj Sharma Director General Central Bureau of Statistics	-	Member
Representative Ministry of Women and Social welfare	-	Member
Representative Ministry of Housing and Physical Planning	-	Member
Mrs. Padma Mathema Under Secretary, Women and Social Welfare Section National Planning Commission Secretariat	-	Member
Mr. Gyanendra K. Shrestha Section Officer National Planning Commission Secretariat	-	Member Secretary

CIET International: (instrument Design)
Dr. Ann Cockroft, Consultant

Central Bureau of Statistics:
Mrs Savitri Singh, Project Director
Mr. Krishna Prasad Shrestha, Project Co-ordinator

UNICEF (Financial Support and Facilitation):
Mr. Stewart McNab, Representative
Mr. Fikre Y. Menkir, Planning Officer

EXECUTIVE SUMMARY

Introduction

This report covers the sixth cycle of the Nepal Multiple Indicator Surveillance (NMIS), a process that began in Nepal in 1994. The on-going NMIS process comprises repeated cycles of data collection, analysis, interpretation, and communication of results to stimulate action. Each cycle focuses on a set of priority issues for the health, well-being and rights population of Nepal, especially women and children. A steering group from the National Planning Commission, Central Bureau of Statistics and relevant line ministries agrees the focus of each cycle, while the Technical Group develops and agrees the cycle plan and instruments of data collection for each cycle, and plays a key role in interpreting NMIS results and ensuring their use.

The five cycles of NMIS that have taken place so far are: Cycle 1 on Health and Nutrition and cycle 2 on Primary Education in 1995; cycle 3 on Diarrhoea, Water and Sanitation and cycle 4 on early childhood feeding, nutrition and development in 1996; and cycle 5 on Care during Pregnancy and Delivery in spring 1997.

The first five cycles of the NMIS demonstrate problems with delivery of public services in Nepal. Access to services is very limited in some parts of the country and the quality of services that are available is often poor. Yet effective provision of key public services is recognised as important for development. Central planning of services, with little reference to local conditions and no reference to the population being 'served', usually has not worked well. New ideas of partnership

with civil society as part of good governance are now gaining wide acceptance. Ideally, public services should be responsive to the needs and wishes of the population, who should have a say in their planning and delivery. This new paradigm means asking the population about their views and experience of present services, and about their suggestions and preferences for services in the future. The limited available budget is a further reason for ensuring that money is spent on services that are acceptable to the intended users and likely to be effective, on the basis of evidence. This implies that planning of services should be based on evidence of impact, coverage and costs. Gathering adequate information about these factors has to include asking the population for whom the services are intended. This is the basis for Service Delivery Surveys; asking the population in a given area about their use, experience and perceptions of services. Such surveys have been carried out in a number of countries, using the method of Sentinel Community Surveillance.

This sixth cycle of the NMIS is a Service Delivery Survey. It focuses particularly on the delivery of government health and agriculture services. These services were chosen as essential basic services in a country whose population are mainly subsistence farmers. Less detailed information about other public services is also collected and the survey also provides information about perceptions and functions of District Administrations and Village Development Committees.

Methods

The NMIS employs Sentinel Community Surveillance (SCS). Features of this method include: the focus of each cycle on a small group of issues; the combination of quantitative and qualitative data from the same communities in a mesoanalysis; data analysis and risk analysis to produce results in a form useful for planning; revisiting of the same sites, making estimation of impact of interventions easier.

In cycle six, 18,770 households were visited. Information was available from 18,580 (99%) households. Only 188 (1%) households had no one at home at the time of the visit and only two households refused to provide information.

108,899 people were included in the survey. The mean average family size is 7.4, and median 6.0.

Household information was collected from:

- 18,580 households
- 108,899 people
- 2,778 people who used government health services in the last month

The instruments used in cycle 6 include a household questionnaire, focus group guides on health and agriculture service, key informant interviews with DDC chairman, DDCs, LDO, DHO, community key informants, and health and agriculture facility institutional reviews.

The Epi Info software package was used for data entry and analysis. The sample sizes in districts are not proportional to the populations of the districts; weights calculated to take this into account were applied when producing national level indicators.

Results and risk analysis

Type of house was used as an indicator of economic status. More than a third (39%) of houses are kachchi, a third (32%)are pakki and a quarter (27%)are mixed. Half of the household heads are literate (able to read and write a simple letter).

Health Services

Only 12% of households reported one or more contacts with government health services in the last month. But nearly a quarter (24%) of households used non-government health services in the last month; a few used both government and non-government services. Nine out of ten users of non-government health services used private clinics and a third used traditional healers. The most common

government health facility used was the health post (48%), with a quarter (25%) using sub health posts and 22% using district hospitals. The reported reasons for using the service are similar for government and non-government health services.

Households in urban areas are *less* likely to have used government health facilities in the last month, reflecting greater access to private clinics and other alternatives. And households of higher economic status (pakki houses) are *less* likely to use government health services, whether in urban or rural areas. Households in communities where the nearest government health facility is less than two hours journey away are more likely to have used the service in the last month.

For nearly all visits (93%) to government health services it is reported that a health worker was available. But this is not so for medicines. The commonest alternative source of medicines is the drug shop (80% of cases).

All medicines required are available in less than a third of visits to government health facilities.

Only 7% of people visiting government health facilities report waiting 2 hours or more. This underestimates the tendency to limit visits to known times of availability and abortive visits when no health worker is seen at all.

All users of government health facilities report paying a small registration fee; about a sixth (17%) report paying for medicines, on average 48 NRS. Many more have to pay for the medicines that are unavailable in the government facility and that they have to buy outside.

Less than one in ten (8%) of households think that government health services are 'good' and a third think they are 'bad'.

The commonest perceived problems with the government health services are lack of medicines (59%), poor condition of the facilities (40%) and bad attitude of the staff (35%). Households would like to see more medicines (57%), more equipment (35%), more staff (34%) and a better attitude of staff (28%) in government health facilities.

More than two thirds of households report willingness to pay for improved government health services, on average 10 NRs for each visit to a facility. Households in urban sites are willing to pay more than those in rural sites. Those households who used government health facilities in the last month are one and a half times more likely to be willing to pay for improved services than households who did not use these facilities in the last month.

Agriculture and livestock services

The occupation of the household head is reported as 'farmer' (including peasant farmers) in two thirds (66%) of the households. In urban areas, less than a quarter of household heads are reported to be farmers. Three quarters of households (76%) report holding some land (owned or rented). A fifth of households holding any land hold less than 5 ropani. The mean land holding is 14 ropani (18 ropani among those holding any land). Households with any land were asked when they last had a visit from an agriculture or livestock extension worker.

Only 3% of households have ever been visited by a government agriculture/livestock extension worker and only 2% by a non-government extension worker

One in ten households with land recall having visited the agriculture/livestock centre for their area at some time.

Households in pakki houses are rather more likely to have been visited by a government extension worker (5% have been visited) than those in other types of houses, but they are less likely to have been visited by a non-government extension worker. There is some evidence that households in communities served by fully staffed agriculture/livestock centres are more likely to be visited by an extension worker. Households in communities within 2 hours of the nearest centre are nearly three times more likely to have visited the centre and twice as likely to have been visited by a JT/JTA than those in communities more remote from the centre.

Of the small number of people reporting contact with agriculture/livestock services, over half paid nothing. Of those who paid something, the mean payment is 95 NRs. Most payments are for materials but a quarter are for advice, which should be given without charge.

Households have a low opinion of government agriculture and livestock services.

Two out of three households think agriculture and livestock services are bad. Less than 3% think they are good.

Households ever visited by an extension worker have a much higher opinion of the service (they are 10 times more likely to rate the service as good). Main problems noted with the services are lack of visits (47%), lack of chemicals and drugs (33%), centres too distant (28%) and bad attitude of staff (24%). Suggestions for improvement relate to these same issues.

Nearly half of households report willingness to pay for better agriculture services, between 10 and 14 NRs for a visit and advice, depending on the sort of advice. Households who have ever been visited and who hold more land are more likely to be willing to pay.

Only a few households holding land (13%) report applying for a loan for agriculture or livestock purposes. Most of those who applied for a loan reported being successful (86%). This suggests that households only formally apply for loans when they are fairly sure of being successful. Loans from government banks account for more than half (52%), with a third (37%) from private merchants. The success rate for applications to government banks is 81%, compared with 94% for application to private merchants. People in pakki houses are less likely to apply for loans. Households who recall being visited by an extension worker are more likely to have applied for an agricultural loan.

Households reported on the sources and availability of a range of farming inputs. Most are said to be available and the commonest source for all items is commercial shops.

Only a quarter of those buying pesticides received at least one piece of safety advice about the use of these hazardous materials.

Governance and local government

The commonest reported source of household information about local government services is neighbours (7!%), followed by radio (35) and the VDC (15%). Households were asked about access to and opinions of a range of basic services. Access varied from 31% (electricity) to 99% (education) and the proportion regarding the service as good varied from 5% (sanitation and roads) to 39% (electricity). These poor opinions of basic services are shared by the DDC chairman and Local Development officers who gave their views. These officials are even more critical of the quality of services than the households. Chairmen of both VDCs and DDCs gave lack of resources as an important difficulty in providing services. Other difficulties mentioned included lack of finance (at VDC level) and poor service from line agencies (at DDC level).

Households and VDC chairmen have some agreement about the role of VDCs, both rating 'construction work' as an important activity. But more than a quarter of households think VDCs do 'nothing'. Asked what VDCs *should* do, almost no households mentioned collection of taxes. This could be an important problem for VDCs who need taxes to fund activities that households would like them to do, including road building and other construction work. Most households reported helping the VDC, mostly through voluntary construction work (85%).

VDC chairmen are evenly split on whether their priorities are reflected in DDC decisions. Many of them want more involvement of VDCs in DDC decision-making and some want DDC members to spend more time visiting communities and VDCs. Nearly a quarter of VDC chairmen complain they receive no support from the DDC. Both VDCs and DDCs rate financial support as the most important form of support they receive, from the DDC or from central government. No VDCs and only 10% of DDCs think they receive really helpful support from the DDC or central government. Both VDCs and DDCs want more support than they presently receive in a number of areas, particularly financial support (VDCs) and project support (DDCs).

Asked about coordinating different services, over half of DDC chairmen and only 16% of VDC chairmen rate this as difficult. This probably reflects their different responsibilities for coordinating services.

VDC chairmen rate knowing the needs of the people as their most important information requirement for planning (43%) and also rate highly the need for technical advice (43%). These same chairmen report their most important information sources for planning to be community meetings (60%), key informants (54%) and 'self' (49%). None reported formal information systems or surveys as sources. LDOs at district level report their sources of data for planning to include VDCs (81%), key informants (59%) and district departments (41%). This suggests an unmet need for good data sources, including the views of the population, for the purposes of planning at both VDC and DDC levels.

CONTENTS

LIST OF TABLES

DEFINITIONS AND ABBREVIATIONS

Abbreviations:

95% CI	95% Confidence Interval
AHW	Auxiliary Health Worker
ANM	Assistant Nurse Midwife
CBS	Central Bureau of Statistics
CEDAW	Convention on Elimination of Discrimination Against Women
FCHV	Female Community Health Worker
CRC	Convention on the Rights of the Child
JT	Junior Technician
JTA	Junior Technical Assistant
NMIS	Nepal Multiple Indicator Surveillance
NPC	National Planning Commission
OR	Odds Ratio: one way of estimating Relative Risk (see below)
Ropani	Measurement of land area
SMS	Subject Matter Specialist
TBA	Traditional birth attendant
WCHW	Women and Child Health Worker
VHW	Village Health Worker
UNICEF	United Nations Children Fund

Statistical and epidemiological terms

This report is deliberately written avoiding too many specialised statistical and epidemiological terms. However, some are unavoidable. A brief explanation of the main terms used in the report is given here; readers who are interested in more detailed explanations could refer to a textbook on modern epidemiological methods.

95% confidence interval:
A measure of the accuracy of an estimate, based on the normal distribution curve. The true value is 95% likely to lie between the upper and lower values of the 95% confidence interval.

Standard Deviation:
A measure of the spread of the distribution of a variable, based on the normal distribution curve. 99% of the population will have values within +/- two standard deviations from the mean value of the variable.

Odds Ratio:
One way of estimating Relative Risk. In a 2X2 table, with cells a,b,c,d, the Odds Ratio is calculated by ad/bc.

Relative Risk:
The risk in one group compared with another group (for example the risk of stunting in girls compared with the risk of stunting in boys). When the actual rates in each group are known (for example, the total number and the number with stunting), the relative risk can be estimated either by the Odds Ratio or by the Rate Ratio (the rate in one group divided by the rate in the other group). In a case-referent study, only the Odds Ratio can be calculated. For relatively rare conditions, the two estimates of Relative Risk give a similar answer. There is discussion about which estimate of Relative Risk it is better to use. For further details, a textbook of modern epidemiology should be consulted. In SCS methodology, the Odds Ratio is used as the estimate of Relative Risk.

The Relative Risk or Odds Ratio gives an idea of the risk for an **individual** in one group compared with an individual in another group (for example, a child of a literate mother compared with a child of an illiterate mother). It is therefore most useful when making decisions about the most benefit for an individual child (such as those taken by a mother for her child).

Risk Difference:
The risk in one group minus the risk in another group (for example the risk in children of illiterate mothers minus the risk in children of literate mothers). The risk difference can only be calculated when the rates in both groups are known.

The Risk Difference gives an idea of the risk for a **group** and how this could be changed by an action. It is most useful for planners who are considering how many children could benefit from an intervention.

INTRODUCTION

Nepal Multiple Indicator Surveillance

The Nepal Multiple Indicator Surveillance (NMIS) began in 1994, with a first cycle in early 1995 on Health and Nutrition that covered a number of indicators necessary to assess progress toward development goals[1]. The NMIS was designed as an-ongoing monitoring scheme rather than a one-off survey.

The NMIS process comprises repeated cycles of data collection, analysis, interpretation, and communication of results to stimulate action. Each cycle focuses on a set of priority issues for the health, well-being and rights of children also for the whole population of Nepal. A steering group from the National Planning Commission, Central Bureau of Statistics and relevant line ministries agrees the focus of each cycle. The Steering Group nominates a technical group to develop and agree the cycle plan and instruments of data collection for each cycle as well as to play a key role in interpreting NMIS results and ensuring their use.

The five cycles of NMIS that have taken place so far are: Cycle 1 on Health and Nutrition in early 1995[1]; cycle 2 on Primary Education[2] in spring/summer 1995; cycle 3 on Diarrhoea, Water and Sanitation[3] in the first half of 1996; cycle 4 on early childhood feeding, nutrition and development[4] in the autumn of 1996, and cycle 5 on Care during Pregnancy and Delivery in spring 1997[5]. Reports on these first five cycles are available[1-5].

The findings of the first five cycles of the NMIS incidentally demonstrate that there are problems with delivery of public services in Nepal. Access to services is very limited in some parts of the country and the quality of services that are available is often

poor. For example, access to primary education has been explored in NMIS cycle 2[2] and found to be poor in some areas, especially for girls, and access to and quality of antenatal and delivery services has been shown to be poor in NMIS cycle 5[5].

Service Delivery Surveys

Effective provision of key public services is recognised as an important part of development. The old method of central planning of services, with little reference to local conditions and no reference at all to the population being 'served', has clearly not worked. New ideas of partnership with civil society as part of good governance are gaining wide acceptance as the way forward. Ideally, services should be responsive to the needs and wishes of the population, who should have a say in the planning and delivery of services. This new paradigm means asking the population about their views and experience of present services, and about their suggestions and preferences for services in the future. Of course, the budget for public services is always limited, especially in countries such as Nepal. But this is all the more reason for ensuring that what money there is is spent on services that are acceptable to the intended users and considered likely to be effective, on the basis of evidence. This implies that planning of services should be based on evidence of impact, coverage and costs[6]. Information about these factors has to come from asking the population for whom the services are intended. This is the basis for service delivery surveys, asking the population in a given area about their use, experience and perceptions of services. Such surveys have been carried out in a number of countries, using the method of Sentinel Community Surveillance, and focusing on different key public services[7,8,9].

NMIS cycle 6

While previous cycles of the NMIS gave information about delivery of services as part of their findings, this sixth cycle of the NMIS is specifically a Service Delivery Survey. It focuses particularly on the delivery of government health and agriculture services. These services were chosen as essential basic services in a country whose population are mainly subsistence farmers. It is intended to provide information from the population on their access to, use of, experience of and perceptions of health and agriculture services. Less detailed information about other public services is also collected and the survey also provides information about perceptions and functions of District Administrations and Village Development Committees.

In this sixth report in the NMIS Series the Methods section includes a background to the methodology used in the NMIS, which will be relevant especially for those readers who have not seen the first five reports in the NMIS Series[1-5]. The methods used in the sixth cycle are described, including the instruments used and the sources of data from households, institutions, key informants and focus groups. The Results section gives an analysis of public use, experiences and perceptions of health and agriculture services and brief information about other services. It also includes an analysis of those factors that seem to be associated with use of or different experiences or perceptions of services. In NMIS cycle 6, information has been collected from 6 groups of key informants (among the public and local service providers and administrators) on their views and perceptions, as well as from focus groups in the community. The analysis includes a comparison of their different viewpoints as a starting point for dialogue and planning of future services. Results disaggregated geographically and by ethnic group are given in Annex 5.

This report and the reports of cycles 1, 2, 3,4 and 5 are only a small part of the process of communicating the results of the NMIS to those who need them for planning and development at national, local, community and household levels. The findings of cycles 1-5 have been discussed with decision-makers and planners in a number of different fora, including with Chairmen of District Development Committees (DDCs). For cycle 6 it will be particularly important to discuss the findings with the health and agriculture departments, local government, DDCs and VDCs. Hopefully the information collected from different groups could help the concerned government departments and bodies to improve their current services, in partnership with civil society.

METHODS

BACKGROUND: THE NMIS METHODOLOGY

The NMIS uses a methodology known as Sentinel Community Surveillance (SCS). This is described in detail elsewhere[6,10,11]. It has the underlying aim of 'building the community voice into planning'. SCS can be described as a multi sectoral community-based information management system. There are a number of particular features of the SCS methodology.

- Data are collected from cluster sites, selected to be representative of a district, a region or a country.
- Typically, cluster sites are communities of around 120 households, and all households in the site are included in data collection.
- SCS is a repeated cyclical process, with each cycle including planning and instrument design, data collection, data analysis and interpretation, and communication of results.
- Each cycle focuses on a particular area or problem, rather than trying to collect data on a wide range of problems.
- Quantitative data from household questionnaires are combined with qualitative data from focus groups, key informant interviews and institutional reviews *from the same communities* (that is, the data are coterminous) to allow a better understanding of the quantitative data. This combined analysis is called mesoanalysis[11].
- Data analysis is not only in terms of indicators (for example, rate of childhood diarrhoea) but also in terms of *risk* (for example the risk of diarrhoea in a child with access to safe water compared with a child who does not have access to safe water).
- Data analysis, and especially risk analysis, is intended to produce results in a form that can be useful for planning at household, community, district and national levels.
- The same sites are revisited in subsequent cycles of data collection, allowing easy estimation of changes over time or as a result of intervention.
- Each cycle of data collection and analysis requires a communication strategy to get the information to those who need it for planning.
- Transfer of skills of data collection, analysis and communication over a number of cycles is an explicit aim of the methodology.

A key feature of SCS is the ability to do **risk analysis** to look at causes. In NMIS cycle six the focus is on factors associated with access to and experience and perceptions of health and agriculture services.

SCS is deliberately designed to concentrate data collection efforts: in time (a series of cycles in the sentinel sites, at approximately 6 monthly intervals); in space (representative communities are surveyed rather than collecting data from all communities); and in subject matter (each cycle focuses on one area at a time, rather than trying to collect all possible data on every occasion). SCS employs a type of cluster survey methodology, but the clusters are larger than in many cluster surveys: typically 100-120 households per site, rather than the 10-50 used in most cluster surveys. And in the SCS method, there is no sampling within each site; every household is included. This gives greater statistical power in the data analysis and also allows the linkage of data from the household questionnaires to other, mainly qualitative, data from the same sites. This data relating to the whole site is combined with the household data in a mesoanalysis[11].

A key issue in the SCS methodology and in the NMIS is the selection of sites so as to be representative. In some countries, random sampling is not a possibility because no adequate sampling frame exists. In these situations, purposive selection is used, drawing on local knowledge of conditions to choose sites as representative as possible of the situation in a district, region or country. When possible, random sampling methods are used and this is the case in Nepal, where a reasonably good census sampling frame exists. In both cases, stratification is first used to ensure that certain types of sites are included in proportion to their occurrence in the population. For example, stratification can be by urban and rural sites, or by ecological zones. In the NMIS, the sample sites for the NMIS were drawn by the Central Bureau of Statistics (CBS), after stratification into development regions, ecological zones and urban/rural sites. The details of the sampling method and the selected sites are given in the report of the first NMIS cycle[1] and the annexes to that report.

NMIS SAMPLE SITES

As mentioned above, these are the same sites as for the first five NMIS cycles, selected by a multistage random sampling method. As discussed in the report of the first NMIS cycle, the sites are representative of the country, of the five development regions, of the three ecological zones, of the 15 eco-development regions, and of urban and rural situations. The rural sites were selected primarily to give representation of the 15 eco-development regions but in 18 districts there are sufficient sites (four or more) to ensure reasonable

district representativeness. In a further 19 districts, only 1-2 sites were selected so they cannot be relied upon to be representative of that district. Note that representation of the 15 eco-development regions is among the rural sites only; the urban sites are stratified separately and are not intended to be part of the representation of the different eco-development regions. This reflects the high proportion of the population living in rural communities (around 90%) and the difficulty of having a large enough urban samples to stratify separately among the 15 eco-development regions.

There are a total of 144 sites in the sample: 126 rural and 18 urban. The location of the sites is shown on the map in Annex 1. Annex 1 also gives the names of the districts in the NMIS sample, with the number of sites in each. It also includes a list of all Districts in Nepal grouped into the 15 eco-development regions. This is intended for officials from non-NMIS Districts who read the report to find which results most nearly approximate to their situation (the results for the relevant eco-development region).

THE POPULATION IN NMIS CYCLE 6

18,770 households were visited. Information was available from 18,580 (99%) households. 188 (1%) households had no one at home at the time of the visit and only two households refused to provide information.

108,899 people were included in the survey. The mean average family size is 7.4, and median 6.0. The smallest family had one member, and the largest had 90 people.

Household information was collected from:
- 18,580 households
- 108,899 people
- 2,778 people who used government health services in the last month

INSTRUMENTS

The instruments used in cycle 6 are reproduced in Annex 2. They include a household questionnaire, focus group guides on health and agriculture service, key informant interviews with VDC chairman, DDCs, DAO, LDO, DHO, community key informants, and health and agriculture facility institutional reviews. The instruments were designed with a Technical Group of the NMIS Steering Committee, including the Health Department, Agriculture Department, Ministry of Local Government, university and UNICEF experts in health and agriculture services, and subsequently approved by the Steering Committee.

Instruments used in NMIS cycle 6:
- Household questionnaire
- Health facility institutional review
- Agriculture facility institutional review
- Key informant interview schedules for DHO, DAO, LDO, VDC, DDC, and community key informant
- Focus group guides on health and agriculture services

The household questionnaire has three sections: health services, agriculture services and the role of VDCs. It includes questions about experience of health services, based on family members who used government health services during the month prior to the survey.

A focus group on health services was held in 141 of the 144 communities and on agriculture services in 139 of the communities.

A number of key informants were interviewed at different levels as follows:

Community key informants	142
Village Development Committee Chairmen	138
District Health Officers	35
District Agricultural Officers	39
District Development Committee Chairmen	31
Local Development Officers	34

An institutional review was carried out in 132 health facilities and 115 agricultural/livestock service centres.

Coding sheets and data entry formats were created for each instrument. Data entry was programmed using Epi Info (version 6)[12]. The household data were entered twice and validated using Epi Info. The questionnaires and other data collection instruments, after translation into Nepali, were piloted several times to ensure that they were appropriate to the households, health facility workers and focus groups concerned and that the coding and data entry arrangements were satisfactory.

Training and field work

Field staff were recruited in October 1997. They were recruited from and trained in five regional centres: Kathmandu, Birgunj, Nepalgunj, Pokhara and Sunsari. Twenty-six teams, each containing four or five members, were recruited. The thirty field supervisors were trained in Kathmandu. The field survey was carried out between October and November 1997.

When communities were revisited during cycle 6, the opportunity was taken to give them a summary of the results of cycle 5 and conduct focus groups to discuss the implications of the key findings and the ways in which important messages might best be disseminated.

Data coding and entry began during fieldwork, with messengers bringing back as much data as possible to Kathmandu from each of the field teams. Data entry began in December 1997 and data entry

and cleaning of quantitative data was completed by end of January 1998. Data entry of qualitative data was completed by early April 1998.

Analysis

The analysis had several aims: to produce national indicators on coverage and perceptions of government health and agriculture services, and information about other government services including local government services; to examine variables that might be related to the use of health and agriculture services, and to look for contrasts so as to discover actionable factors that might help to improve the situation.

The analysis was performed using the Epi Info package (version 6)[12]. This public domain computer software package assists with questionnaire creation, data entry and data analysis. SPSS was used to handle data from questions with multiple responses.

The quantitative analysis was supplemented by qualitative data from focus groups, key informants and observation. The records of the focus groups were reviewed to get an overview of the ideas expressed. Each focus group was then coded according to the issues raised by the participants. These codes were then related to information from the household questionnaires from the same community. The focus group themes are shown in annex 3, with the frequency of each one.

Weighting of results to give national indicators.

As explained in the report of the first cycle of the NMIS[1], the sample sizes of Districts were not proportional to the populations of the Districts and weights were calculated to take this into account when producing national indicators. These weights are used when giving national level indicators. The weighted and unweighted values for key indicators are shown in annex 4. The Epi Info programme CSAMPLE was used to calculate weighted values of key indicators. In practice, the weighted values are close to the unweighted values. Unless stated otherwise, values of indicators quoted in the Results section for the whole of Nepal are weighted. Values of indicators at subnational levels (such as eco development regions and in urban and rural sites separately) given in Annex 5 are *not* shown weighted. The weights give the correct balance of individual areas in national figures, for example taking into account the relative over sampling of mountain eco development regions and urban sites.

RESULTS

Demographic information

Type of house

The type of house is used as an indicator of

economic status of the household. House types are divided into four categories (see Table 1). More than a third of the houses are constructed of mud bonded bricks and stones or wood with a straw or thatched roof (kachchi), while about a third are of cement bonded brick or stones with a tile or galvanized sheet roof (pakki), and about a quarter are a mixture between kachchi and pakki. A few are temporary huts or tents.

Table 1. Construction of houses

Type of construction	Number (%)
Kachchi (mud brick with straw/thatch roof)	7176 (39)
Pakki (cement brick with tile/sheet roof)	5903 (32)
Mixture of kachchi and pakki	5031 (27)
Hut / shelter / tent	437 (2)

The construction of houses was documented as part of the Nepal Living Standards Survey 1996 (NLSS)[13]. It is difficult to make direct comparisons between this cycle of the NMIS and the NLSS because in the NLSS the construction of the walls, roof and floor were noted separately. In the NLSS, 52% of the houses were recorded as having mud bonded brick or stone walls, 25% wood walls and 11% cement bonded stone or brick walls. Half had straw or thatched roofs, 28% had tile or slate roofs, and 11% galvanized sheet roofs. The results are probably compatible, depending upon the proportion of houses in the NLSS that were of 'mixed' construction.

Literacy of household head

Half (50% - 9306)of the household heads in NMIS cycle 6 were reported to be able to read and write. This is similar to the proportion found in other cycles of the NMIS. For example, in NMIS cycle 5 the proportion of household heads reported to be literate was 48%[5].

The expected association between literacy of the household head and economic status of the household is found, taking the type of house construction as an index of economic status. In households living in pakki houses, the household head is three times more likely to be literate than in households living in houses of other types of construction. This is shown in Table 2.

Table 2. Type of house construction and literacy of household head

Type of house	Literacy of household head	
	Literate	Illiterate
Pakki (%)	4058 (69)	1840 (31)
Others (%)	5248 (41)	7423 (59)
Odds Ratio 3.12 (95% CI 2.92-3.33)		

Health Services

Use of government health services

The number of household members reported to have used government health services in the last month is shown in Table 3.

Table 3. Number of household members reported to have used government health services in the last month

Number of members using services	Number of households(%)
0	16302 (88)
1	1892 (10)
2	306 (2)
>2	74 (0)
Total	19080

Only 13% of households reported a contact with government health services in the last month.

The percentage of households using government health services is remarkably low. It is much lower, for example, than in a recent similar survey in Uganda, East Africa[8].

The proportion of households using government health services in the last month disaggregated by geographic area and by ethnicity is shown in Annex 5, Tables A5.1 and A5.2, and figure A5.1.

Factors affecting use of government health services

Area of residence

Households in urban areas are *less* likely to have used government health facilities in the last month than those in rural areas (Table 4). This probably reflects greater access to private clinics and other alternatives to government health services in urban areas.

Table 4. Area of residence and use of government health services in the last month

Area of residence	Used government health service	
	Yes	No
Urban (%)	258 (10)	2370 (90)
Rural (%)	2020 (13)	13932 (87)
Odds Ratio 0.75 (95% CI 0.65-0.86)		

Economic status

The type of house is used as an index of the economic status of a household. Households of higher economic status (living in pakki houses) are *less* likely to have used government health services in the last month than those living in other types of houses (Table 5). This is true in both urban and

rural areas. It may be because people who can afford to use private health services do so, rather than using government health services. It could perhaps also reflect better health status of people with higher economic status, although there is no direct evidence of this from this survey.

Table 5. Type of house construction and use of government health services in last month

Type of house	Used government health service	
	Yes	No
Pakki (%)	649(11)	5254 (89)
Others (%)	1627 (13)	11017 (87)
Odds Ratio 0.84 (95% CI 0.76-0.92)		

Literacy of household head

Overall, those households with a literate head are *more* likely to have used government health services in the last month than those with an illiterate head (Table 6a). However, in urban areas, those households with a literate head are *less* likely to have used government health services in the last month (Table 6b). This seems to suggest that households with a literate head use the best available health services: in rural sites they may only have access to government facilities, but in urban sites they may choose available alternative services.

Table 6a. Literacy of household head and use of government health services in the last month (all areas)

Literacy of household head	Used government health service	
	Yes	No
Literate (%)	1225 (13)	8081 (87)
Illiterate (%)	1053 (11)	8210 (89)
Odds Ratio 1.18 (95% CI 1.08-1.29)		

Table 6b. Literacy of household head and use of government health services in the last month (urban areas)

Literacy of household head	Used government health service	
	Yes	No
Literate (%)	176 (9)	1703 (91)
Illiterate (%)	82 (11)	666 (89)
Odds Ratio 0.84 (95% CI 0.63-1.12)		

Distance from government health facilities

The distance from the community (site) to the nearest government health facility was recorded as part of the institutional review of the facility. Households in communities where the nearest health facility is less than two hours journey away are somewhat more likely to have used government health services in the last month. (Table 7).

Table 7. Distance from nearest government health facility and use of government health services in the last month

Journey time to facility	Used government health service	
	Yes	No
Up to 2 hrs (%)	1927 (13)	13222 (87)
> 2 hrs (%)	92 (9)	882 (91)
Odds Ratio 1.40 (95% CI 1.11-1.76)		

Use of other (non-government) health services

Almost a quarter of households (24% - 4428) reported using other, non-government, health services during the last month. This is twice as high as the proportion (12%) using government health services. The two figures are not mutually exclusive and a few households (774) used both government and non-government services in the same period.

The proportion of households using non-government health services in the last month by geographic area and ethnicity are shown in Annex 5, Tables A5.1 and A5.2 and Figure A5.2.

Among the people who used non-government health services, more than 9 out 10 used private clinics. Some people reported using more than one type of non-government health service. The most commonly used service after private clinics is traditional healers. The types of non-government health services used are shown in Table 8.

Table 8. Types of non-government health service used in the last month, among those who used any such service

Type of service	Number of households(%)
Private clinic	4003 (91)
Traditional healer	1584 (36)
NGO health facilities	155 (4)
Private practitioner	132 (3)
Self medication	46 (1)

Some people reported using more than one type of service

Focus groups in each site discussed the types of alternative to government health services used locally. The types of service mentioned are similar to those reported used in the last month by households, but with more emphasis on traditional healers and faith healers. The types of service mentioned are shown in Table 9.

Table 9. Types of non-government health service used locally, as mentioned in community focus groups

Type of service	Number of sites(%)
Traditional healer	124 (88)
Private clinic	98 (70)
Faith healer	54 (38)
Pharmacy/self medication	15 (11)
Friends & neighbours	11 (11)
NGO facility	7 (5)

Up to three responses were coded

Purpose of visiting government and non-government health services

For each reported visit to a government health service in the last month and for up to four visits to non-government health services in the last month, the purpose of the visit was asked. The reported reasons for visiting the service are similar for government and non-government services, as shown in Table 10.

Table 10. Reasons for visiting government and non-government health services during the last month

Reason for visit	Govt. No. (%)	Non-govt. No. (%)
Acute illness (unspecified)	998 (36)	2380 (54)
Fever	658 (24)	1454 (33)
Acute respiratory infection	272 (10)	598 (14)
Chronic illness (unspecified)	144 (5)	384 (9)
Diarrhoea	127 (5)	272 (6)
Accident/injury	123 (4)	142 (3)
Immunisation	106 (4)	7 (0.2)
Pain in body	97 (4)	313 (7)
Delivery	58 (2)	46 (1)
Skin problem	43 (2)	77 (2)
Eye infection	42 (2)	100 (2)
Antenatal care	38 (1)	26 (0.5)
Tuberculosis	35 (1)	35 (1)
Other	30 (1)	73 (1)

As shown in Table 10, the main reasons for visiting health services are acute illnesses, including fever and acute respiratory illness. The pattern of reasons for using the government and non-government services is not markedly different. This suggests that the choice of one type of service over the other is not primarily based on the kind of problem but rather relates to issues of convenience, access, cost and quality. Government health services are apparently used more often then non-government services for immunisations (see Table 10).

Focus group discussions shed more light on the types of alternative health services used and the reasons for their use. It seems that traditional healers are favoured for certain kinds of illnesses, while private clinics are used (by those who can afford them) because of convenience and quality. People also report trying several different services until they get satisfactory treatment for their problem.

"Poor and uneducated people mostly consult with faith healers. But if the case is deteriorating then they sell their farmland for the treatment of illnesses in the hospitals."
-A literate Brahmin woman aged 40 years, Morang district.

"I went to the jungle to collect firewood. In the evening there were many pimples and bubbles on my arms. When I consulted a faith healer; he said it was because of a mute witch of the jungle. He asked me for a fish as his fee. I gave him Rs. 20 to buy a fish. But his treatment did not work. So yesterday I went to the nearest health post for the treatment. Still it did not work. Today I am thinking of going to Janakpur hospital."
-A literate Lama woman, Siraha district.

"I go to the medical shop directly to get medical advice and medicines. It saves time."
-A 39 year old Yadhav woman, Siraha district.

"For immediate consultation and treatment, we go directly to a doctor's private clinic. We do no rely on government health institutions. For certain cases, like giddyness and trembling fever we consult faith healers."
-A Blacksmith woman aged 17 years, Morang district.

Experience of government health services

Additional information was sought about visits by any member of a household to government health services during the last month.

Characteristics of service users

Among the people who used the government health services during the month prior to the survey, 47% are males and 53% are females. Their mean age is 25 years (median 21 years).

Government facilities visited

The type of government health facility visited is shown in Table 11. Nearly half the reported visits were to health posts.

Table 11. Type of government health facility visited during the last month(among those who visited any)

Type of facility	Number (%)

Health post	1326 (48)
Sub health post	689 (25)
District hospital	620 (22)
Other hospital	67 (2)
Primary health care centre	60 (2)
Mobile clinic	5(0)

Availability of health workers and medicine

For nearly all visits (93% - 2584) to government health facilities it was reported that a health worker was available. The variation in this figure by geographic area and by ethnicity is shown in Annex 5, Tables A5.1 and A5.2 and Figure A5.5.

However, the situation was much less good for availability of the medicines needed. In less than a third of reported visits were all the medicines required available. The reported availability of medicines is shown in table 12.

Table 12. Reported availability of required medicines in visits to government health facilities

Availability of medicines	No. (%) of visits
All available	844 (30)
Some available	1103 (40)
None available	821 (30)

All required medicines are available in less than a third of visits to government health facilities

The variation in availability of medicines by geographic area and by ethnicity of the respondent is shown in Annex 5, Tables A5.1 and A5.2 and Figure A5.4

Alternative sources of medicines

Since most patients do not receive all the medicines needed for their treatment from the government health facilities, many patients have to get the required medicines from other sources. The alternative sources used for getting medicines not available in government health facilities are shown in table 13.

Table 13. Sources of medicines not available from government health facilities

Source	Number (%)
Drug shop	1409 (80)
Private clinic	203 (11)
Pharmacy	124 (7)
Neighbours/friends	46 (3)

Waiting time

Most (83%) people visiting a government health facility report waiting one hour or less before seeing a health worker. Only 7% report waiting 2 hours or more. This probably reflects local knowledge of when there is likely to be a health worker available, so that people time their visits to coincide with the presence of a health worker. It probably also underestimates the number of abortive visits, where there is no health worker present and a second or third visit is needed before being seen. And it does not reflect the fact that many people choose to use other services rather than government health services, perhaps because they have had bad reports of the government service.

Payment for government health services

People who used government health facilities during the month prior to the survey were asked how much they had to pay for different items. Almost every body has to pay the fixed fee for registration. However, most people, (83%) do not pay anything extra for medicines. This is perhaps not surprising in view of the low availability of medicines in government health facilities. The payments made are summarised in table 14.

Table 14. Mean payment for different items to government health facilities and proportion of people paying for these items

Item	Mean (NRs)	Median (NRS)	No. (%) who paid
Fixed fee	4	2	1805 (100)
Medicines	38	0	315 (17)
Total payment	58	2	1835 (100)

Views about government health services

All households were asked what they thought about government health services, what they thought the main problems with the service were and how they thought the services could be improved.

Overall opinion of services

Only one out of thirteen households (8%) consider the health services provided by the government are good. A third of them think the services are bad, and nearly 60% of them think the services are neither good nor bad. The opinions about government health services are shown in Table 15.

Table 15. Opinions about government health services

Perception of service	Number (%)
Good	1355 (8)
Neither good nor bad	10631 (59)
Bad	5920 (33)

The proportion of households rating government health services as ‘good’ in different geographic areas and among different ethnic groups is shown in

Annex 5, Tables A5.1 and A5.2 and Figure A5.3.

Perceived problems with government health services

The most common problems complained of by household respondents are lack of medicine, bad attitude of workers and poor physical condition of facilities.

> "The doctor does not examine seriously in the hospital, but the same doctor is very serious when I went to his private clinic."
> -A literate Brahmin woman aged 20 years, Morang district.
>
> "Health Workers are always absent in our health post. If they are there, they do not provide medicines, only prescribe medicines to purchase from outside."
> -A Yadav woman aged 30 years, Siraha district.
>
> "Health post staff do not give us medicines. But if we give money in addition to registration fee (Rs. 2), then they give medicines."
> -A Mahato woman aged 35 years, Siraha district.
>
> "Our health post is good for nothing actually. The building is nice only to look at. So we go to the health centre of Bahuni VDC."
> -An illiterate Blacksmith woman aged 17 years, Morang district.

A number of the problems with government health services mentioned by households are mirrored in the views of health workers interviewed in the health facilities. Table 16 summarises the problems mentioned by the households and health workers.

Table 16. Perceived problems with government health services

Problem	Households No. (%)	H workers No. (%)
Lack of medicines	9339 (59)	108 (84)
Poor condition of facilities	6402 (40)	78 (61)
Bad attitude of staff	5622 (35)	-
Lack of staff	1777 (11)	82 (64)
Facility too far away	1447 (9)	-
Lack of equipment	895 (6)	-
Too expensive	659 (4)	-
No female staff	315 (2)	-
Lack of community support	-	17 (13)
No problems	1045 (7)	-

Up to 3 answers were allowed

It is not surprising that health workers did not mention some of the problems important to households, such as 'bad attitude of staff'. However, in the institutional review, about two thirds (65%) of health workers said that they had received complaints about the service of their facility from the community.

Suggestions for improving government health services

The suggestions from households about how to improve government health services are shown in Table 17. Most suggestions are about providing 'more' of various items, with more medicines being top of this list. The suggestions are basically for what would be a better service from the point of view of the user. They do not address what would need to be done to achieve these changes (mainly increases) in service.

Table 17. Suggestions from households for improving government health services

Suggestion	Number (%)
Provide more medicines	8901 (57)
Provide more equipment	5409 (35)
Improve staff attitudes	4322 (28)
Provide more doctors	4279 (27)
Provide free service	2882 (18)
Provide more health posts	1342 (9)
Provide more health workers	817 (5)
Provide female staff	603 (4)
Provide health education	80 (1)

As well as the household respondents, focus groups discussed their ideas for improving government health services. Like households, they expressed a desire for more medicines and facilities. They wanted doctors to treat rich and poor patients alike. They also wanted clarity about what services can be expected from government clinics (along the lines of Patient Charters being introduced in a number of countries) and more community involvement of health care workers. And the issue of providing health education was raised more frequently than by the individual households. The proportions of focus groups raising different themes are shown in Annex 3.

"There should be transparency about what health post staff need to do for our health and which medicines are freely available for us at our health post."
-A Kurmi woman aged 35 years, Siraha district.

"The doctor should behave equally towards rich and poor patients. The Ministry of Health should supply medicines to the community level HP for the treatment of snake bite."
- A Brahmin woman aged 21 years, Morang district.

"Female Community Health Workers should visit houses of all ethnic groups including low caste."
-A Sundi woman aged 25 years, Siraha district.

"Health post staff should make visits in the villages at least for providing health education to illiterate people."
-A Yadav woman aged 25 years, Siraha district.

Willingness to pay for improved health services

Respondents were asked if they would be willing to pay

for improved government health services. More than two thirds (69% - 12,596) are willing to pay more for an improved service.

More than two thirds (69%) of households are willing to pay for improved health services.

Among those who are willing to pay more, on average they are willing to pay 10 Rupees for each visit to a health facility. The urban population are willing to pay more compared with the rural population. The amounts people are willing to pay in different geographic areas and in different ethnic groups are shown in Annex 5, Tables A5.1 and A5.2 and Figure A5.6.

It seems likely that an official policy of cost sharing, probably as a fixed fee for attendance at a health facility, would find favor with many people in Nepal. However, this would only be widely acceptable if the level of the fee is modest and if the payments led to some tangible improvements in the service the people received. Setting user fees too high and not accompanying them with efforts to improve the service delivered would probably lead to even more people using alternative sources of health service and failure to collect fees.

Households who reported using Government health service in the last month are one and a half times more likely to say they are willing to pay for improved health services than households who have not used Government health services in the last month (Table 18). This is still true when literacy of the household head is taken into account.

Table 18. Willingness to pay for improved government health services and use of services in the last month

Used govt health service in last month	Willing to pay for improved service	
	Yes	No
Yes (%)	1717 (76)	537 (24)
No (%)	10879 (68)	5159 (32)
Odds Ratio 1.52 (95% CI 1.37-1.68)		

Sources of health information

Focus groups were asked what sort of information people like them would like about staying healthy and what source would be best to get the information from. Table 19 shows the sources of information mentioned by the focus groups. The most popular were radio, health facilities and female health workers.

Table 19. Preferred sources of health information mentioned by focus groups

Source of information	Number (%)
Radio (and TV)	93 (67)
Health facilities	73 (53)
Female health workers	73 (53)
Other individuals	57 (41)
Community leaders	36 (26)
Newspapers	31 (22)
Trained health workers	27 (19)
Local government	20 (14)
Family members	19 (14)
Self	16 (12)
Traditional healer	1 (1)

Up to 3 answers were coded

Agriculture and Livestock Services

Occupation of household head

Among the total of 18,549 households surveyed, 12,300 (66%) reported the occupation of the household head as 'farmer' (including peasant farmers). The proportion of households with a farmer as household head is highest in the mountains, followed by the hills and terai. In the urban areas, less than a quarter of the household heads are farmers. This is shown in table 20. More detail of the occupation of household head by geographic area and ethnicity is shown in Annex 5, Tables A5.3 and A5.5 and Figure A5.7.

Table 20. Farmer as household head in different areas

Households headed by farmer	Number (%)

Terai	4560 (61)
Hills	5662 (82)
Mountain	1456 (89)
All rural areas	11678 (73)
Urban areas	622 (24)

Ownership of land

Households were asked how much agricultural land they had, either owned or rented. Three quarters of households (76%) hold some land. The amount may be small; a fifth (21%) of those holding any land hold less than 5 ropani.

The average area of agricultural land held, among all households and among households owning any land is shown in table 21. The mean land total land holding among all households is 14 ropani, with a mean of 18 ropani among those holding any land.

The average area of agricultural land held per household varies by ethnicity and geographic location. This is shown in Annex 5, Tables A5.3 and A5.5 and Figure A5.8.

Table 21. Average land holdings in ropani

Type of land	Average area held, in ropani			
	In all households		In households holding land	
	Mean	Median	Mean	Median
Khet	9.0	3.0	11.7	5.0
Bhari	3.4	0.7	4.5	2.0
Other land	1.1	0	1.5	0
Total land	14.1	7.0	18.4	11

Note: These figures are shown unweighted. The weighted figure for total land held in all households is 13.8 ropani (see Annex 4)

Contact with agriculture and livestock services

Respondents who had any land (owned or rented) were asked when they last had a visit from an agriculture or livestock extension worker (either from the government or from a non-government agency), and when they had last visited the agriculture/livestock service centre for that area.

Very few households can recall ever being visited by an agriculture or livestock extension worker of any sort (Table 22).

Only 3% of households have ever been visited by a government agriculture/livestock extension worker and only 2% by a non-government extension worker.

The variation in proportion of households ever visited by government and non-government extension workers by geography and ethnicity is shown in Annex 5, Tables A5.4 and A5.6 and Figure A5.10 and A5.11.

Slightly more (one in ten) households recall having visited the agriculture/livestock service centre for their area at some time (Table 22). Variation in households visiting centres by geography and ethnicity is shown in Annex 5, Tables A5.4 and A5.6 and Figure A5.12.

Table 22. Contacts with agriculture/livestock services

Type of contact	Number households (%)
Visit from JT/JTA	481 (3)
Visit by non-government extension worker	258 (2)
Visit to agriculture/livestock centre	1334 (10)

Factors affecting likelihood of contacts with agriculture and livestock services

Economic status

People living in pakki houses are somewhat more likely to have been visited by a government agriculture/livestock extension worker than people living in other types of houses (Table 23). This suggests some bias in favour of households with a higher economic status. Nevertheless, the proportion of pakki dwelling households visited is only 5%.

Table 23. Type of house and visits from government agriculture/livestock extension worker

Type of house	Ever visited by JT/JTA	
	Yes	No
Pakki (%)	200 (5)	4191 (95)
Other (%)	278 (3)	9400 (97)
Odds Ratio 1.61 (95% CI 1.33-1.95)		

On the other hand, the chance of being visited by a non-government extension worker was slightly lower among pakki dwelling households than among households living in other types of houses (Table 24). This may suggest different targeting by non-government services but the numbers concerned are small.

Table 24. Type of house and visits from non-government agriculture/livestock extension worker

Type of house	Ever visited by non-government extension worker	
	Yes	No
Pakki (%)	61 (1)	4327 (99)
Other (%)	197 (2)	9458 (98)
Odds Ratio 0.68 (95% CI 0.50-0.91)		

Presence of extension workers in the center

An agriculture centre near 115 of the 144 sites

was visited and the workers there interviewed. The number of JT/JTA posts sanctioned was noted and the number actually present was also noted. Information about the number of JT/JTA posts sanctioned was available from 94 centres and about the number of JT/JTAs at work that day from only 87 centres. The missing information limits the analysis of these data. There is some evidence of an effect of the presence of JT/JTAs in the nearby centre. Households in communities where the correct number of JT/JTAs were at work on the day of the survey visit in the nearby centre are slightly more likely to report that they have been visited by a JT/JTA, compared with households in communities where the full complement of JT/JTAs were not at work on the day of the survey. This is shown in Table 25.

Table 25. Presence of full number of JT/JTAs in agriculture centre and household visits by JT/JTAs

Full number of JT/JTAs at work	Households ever visited by JT/JTA	
	Yes	No
Yes (%)	190 (4)	4572 (96)
No (%)	101 (3)	3727 (97)
Odds Ratio 1.53 (95% CI 1.19-1.98)		

Distance between agriculture centre and community

The distance between the local agriculture/livestock centre and the community it serves apparently makes a difference to whether people visit the centre or not. The information about distance of the centre from the community concerned was recorded for 97 centres. Among these, when a centre is within 2 hours of travel or less, households are nearly three times more likely to have visited the centre, compared with centres further away. This is shown in table 26.

Table 26. Distance of agriculture centre from community and household visits to centre

Time to reach centre	Households ever visited centre	
	Yes	No
Up to 2 hrs (%)	725 (12)	5541 (88)
> 2 hrs (%)	154 (4)	3379 (96)
Odds Ratio 2.87 (95% CI 2.39-3.45)		

Similarly, when the centre is within 2 hours or less of the community, households in the community are twice as likely to have been visited by a JT/JTA. This is shown in Table 27.

Table 27. Distance of agriculture centre from community and visits of JT/JTAs to households

Time to reach centre	Households ever visited by JT/JTA	
	Yes	No
Up to 2 hrs (%)	264 (4)	6003 (96)
> 2 hrs (%)	74 (2)	3457 (98)
Odds Ratio 2.05 (95% CI 1.57-2.70)		

Quality of agricultural services

Because of the small number of visits from extension workers, the analysis of the quality of these visits is limited. No analysis of the timing of the last visit has been made.

Those respondents ever visited by a government extension worker (or who had visited the area agriculture/livestock centre) were asked if they were able to get the agriculture or livestock service they needed. Four out of five (80% -1171/1467) reported they were able to get the service or information they needed. This suggests that the quality of the few contacts that do happen is reasonably good.

Payment for agriculture/livestock service

Respondents who reported any contact with government agriculture/livestock services were asked how much they paid in their last contact with the service (either when visited by a JT/JTA or when they visited the centre). More than half 58% (822/1411) of them paid nothing. Among those who paid, the mean payment was 95 rupees (median 20 rupees). Most commonly payments are for materials for either agriculture or live stock, but a quarter of payments are for advice, which should be available free of charge. A small proportion are more openly acknowledged as unofficial payments (bribes or 'tea'). The proportion of payments by item and the average amounts are shown in Table 28.

Table 28. Payments for agriculture/livestock services, among service users who paid anything

Item	No. households (%)	Mean (Rs)	Median (Rs)
Materials	395 (73)	112	25
Advice	137 (25)	47	5
'Tea'	11 (2)	62	10

Respondents were further asked to whom any payments were made. More than half of payments (55%) are made directly to the JT/JTA. The proportion of payments to different recipients (right hand column), and the breakdown of the items paid for to each recipient (rows), are shown in Table 29.

Table 29. Payments for agriculture/livestock services, by recipient and item

Recipient	Number (%)			
	Material	Advice	Tea	Total
JT/JTA	215(71)	80 (27)	6 (2)	301(55)
Other staff	79 (70)	31 (27)	3 (3)	113(21)
Clerk	54 (96)	2 (4)	0	56 (10)
Agriculture Corporation	32 (60)	21 (40)	0	53 (10)
Shop	13 (77)	3 (18)	1 (6)	17 (3)
Middleman	2 (67)	0	1 (33)	3 (1)
Total	395(73)	137(25)	11 (2)	543(100)

It is not easy to tell from these data what proportion of payments for agriculture/livestock services are unofficial or bribes. Probably quite a high proportion of direct payments to extension workers for advice are unofficial, since advice should be provided free of charge.

Opinion of agriculture/livestock services

The overall opinions of household respondents about the agriculture and livestock services in their area are shown in Table 31. There is little difference between the two services and opinions are generally poor.

The variation in opinions of the agriculture services by geography and ethnicity is shown in Annex 5, Tables A5.4 and A5.6 and Figures A5.13 and A5.14.

Table 30. Overall opinions about agriculture and livestock services

Opinion of service	Number (%)	
	Agriculture	Livestock
Good	317 (2)	370 (3)
Neither good nor bad	3773 (29)	4457 (34)
Bad	8935 (69)	8161 (63)

Two out of three households think agriculture and livestock services are bad. Less than 3% think they are good.

The poor opinion of agriculture and livestock services is at least partly based on experience of not having a service (for example, not being visited by extension workers). Households that have ever had a visit from an extension worker are more than 10 times more likely to consider the agriculture service as good, compared with households that have never had a visit. This is shown in table 31.

Table 31. Visits by extension workers and opinion of agriculture service

Ever visited by JT/JTA	Opinion of agriculture service	
	Good	Neither good nor bad / bad
Yes	82 (17)	391 (83)
No	232 (2)	12261 (98)
Odds Ratio 11.08 (95% CI 8.35-14.70)		

Similarly, households that have been visited of an extension worker are 6 times more likely to think the livestock service is good, compared with households that have never been visited. This is shown in Table 32.

Table 32. Visits by extension workers and opinion of livestock service

Ever visited by JT/JTA	Opinion of livestock service	
	Good	Neither good nor bad / bad
Yes	64 (14)	403 (86)
No	303 (2)	12160 (98)
Odds Ratio 6.37 (95% CI 4.72-8.60)		

Perceived problems with agriculture and livestock services

The problems with the agriculture and livestock services reported by household respondents and by workers interviewed in service centres are listed in Table 33.

Table 33. Problems with agriculture and livestock services as reported by households and agriculture service centres

Problem	Households No. (%)	Service centres No. (%)

Extension workers do not visit community	5021 (47)	20 (35)
Lack of drugs/chemicals	3584 (33)	35 (61)
Centre too far away	3052 (28)	
Bad attitude of staff	2587 (24)	
Lack of seeds	1607 (15)	28 (48)
No training/instruction from service workers	813 (8)	
Lack of service staff	632 (6)	3 (5)
Service too expensive	501 (5)	5 (9)
No problem	288 (3)	

Up to 3 answers were coded

The most common complaint from households (47%) is that the agriculture extension workers do not visit the communities. The same problem was noted by more than a third (35%) of workers interviewed in service centres. There was also some agreement between households and service workers about the problem of lack of drugs and chemicals. A third of households and two thirds of service workers mentioned this issues. Some of the problems mentioned by households were not raised by service workers, such as bad attitude of staff.

When District Agriculture Officers (DAOs) were interviewed, they were asked which aspects of the agricultural service in their districts they were most satisfied with. Perhaps surprisingly, nearly half of the interviewed DAOs (49%) are most satisfied with the agriculture/livestock extension services (see annex 2). This gap in perception between DAOs and households suggests that services planned at district level may never reach the intended beneficiaries. It also suggests the need for an improved dialogue between service planners, service providers and intended service users.

Suggestions for improving agriculture and livestock services

Suggestion from households and workers in agriculture/livestock service centres about how to improve agriculture and livestock services are shown in Table 34.

Household respondents and staff of agriculture/livestock centers make a number of suggestions in common, concerned with providing more materials, training extension workers and ensuring more frequent visits to communities (see Table 34).

Table 34. Suggestions for improving agriculture and livestock services as reported by households and agriculture service centres

Suggestion	Households No. (%)	Service centres No. (%)
Extension workers to visit communities more often	6088 (55)	10 (10)
Provide more materials	3853 (35)	32 (33)
Provide more service centres	2980 (27)	8 (8)
Provide seeds	2277 (20)	
Improve staff attitudes	2086 (19)	
Provide service free	763 (7)	
Train extension workers	737 (7)	37 (39)
Provide more staff	420 (4)	32 (33)
Provide more equipment	240 (2)	
Provide more resources for service		50 (52)

Up to 3 answers were coded

In the community focus group discussions about agricultural services, participants were asked who should be responsible for taking action to improve the agriculture and livestock service. Half the groups (70/139) mentioned the government responsibility, about a third noted the VDC and DDC responsibility; and about a fifth talked about responsibility of the community for action. These views expressed in the focus groups are shown in Table 35.

Table 35. Body who should be responsible for improving agriculture/livestock services, as suggested by 139 focus groups

Responsible body	Number groups (%)
Central government	70 (50)
VDC/DDC	52 (37)
Community itself	27 (19)
NGOs	4 (3)

Willingness to pay for improved agriculture and livestock services

Household respondents were asked if people in the community would be willing to pay for visits of the JT/JTA in order to get an improved service. Those who expressed willingness to pay were asked how much they would be willing to pay for advice on different aspects of agriculture. Nearly half (48% - 6,628/13,943) of households say they are willing to pay for better agricultural services. Table 36 shows the average amounts households are willing to pay for a visit from a JT/JTA to give advice on different aspects of agriculture.

Table 36. Amounts households are willing to pay for advice on different aspects of agriculture

Type of advice	Payment per visit JT/JTA (Rs)	
	Mean	Median
Livestock	14	10
Fishery	14	10
General agriculture	12	8
Horticulture	10	5

Households recalling any visit from a government agriculture extension worker are more likely to be willing to pay for agriculture services (Table 37).

Table 37. Visits by government extension workers and willingness to pay for improved service

Ever visited by JT/JTA	Willing to pay for service	
	Yes	No
Yes	289 (60)	190 (40)
No	6315 (47)	7072 (53)
Odds Ratio 1.70 (95% CI 1.41-2.06)		

This is perhaps not surprising since better off households are more likely to have been visited (see Table 23) and households who have been visited have better opinions of government agriculture and livestock services (see Tables 31 and 32).

Households holding more land are more likely to be willing to pay for an improved agricultural extension service, compared with households holding less land. This is shown in Table 38.

Table 38. Area of land held and willingness to pay for improved agricultural services

Area of land held	Willing to pay for service	
	Yes	No
>10 ropani (%)	3663 (51)	3526 (49)
Up to 10 ropani (%)	6315 (47)	7072 (53)
Odds Ratio 1.33 (95% CI 1.23-1.43)		

The proportion of households willing to pay for improved agricultural services (about half) is less than the proportion of households willing to pay for improved health services (two thirds). But only households holding land were asked about willingness to pay for agricultural services. When only those households holding land are considered, the proportion willing to pay for improved government health services is 71%, slightly higher than the proportion among all households willing to pay for health services (69%). The amount households are willing to pay for a visit from a JT/JTA is at least as high as they are willing to pay for a visit to a health centre, but both sums are modest at around 10-20 Rs.

It may be possible to introduce fees for visits of agriculture and livestock extension workers to help fund the service. But amounts would have to be small and may not be enough to contribute significantly to running the service. Large land holders perhaps could pay more.

Agricultural loans

Only a small proportion (13% -1828) of the households reported having tried to get a loan for agricultural or livestock purposes. Of those who applied, most (86% -1,555) were successful. Since the question about loans was only asked of households who own or rent land, the proportion who report trying to get a loan is small. This suggests that households only apply formally for loans when they have a good expectation of being successful. Informal enquiries may lead others not to apply formally, as they have little chance of success.

Loans from government banks account for more than half (52%) of the total loans. In Nepal, government loans have a lower interest rate than loans from commercial sources. Therefore people tend to apply for government loans first, although the process is lengthy. Loans from private merchants account for about a third (37%) of the total loans. The proportion of loan applications to different bodies is shown in Table 39.

Table 39. Agricultural loan applications to different lenders

Lender	Number applications (%)
Government bank	939 (52)
Merchant	668 (37)
Local credit group	181 (10)
Neighbours	29 (2)

The success rate of loan applications to different lenders is shown in Table 40.

Table 40. Success of agricultural loan applications to different lenders

Lender	Number (%)successful
Government bank	748 (81)
Merchant	628 (94)
Local credit group	151 (84)
Neighbours	27 (93

Note: There were some loan applications where the success was unknown at the time of the survey

The variation in proportion of households who applied for agricultural loans by geography and ethnicity is shown in Annex 5, Tables A5.3 and A5.5 and Figure A5.9.

Factors affecting applying for loans

Type of house

People living in pakki houses are somewhat less likely to apply for agricultural loans than people living in other types of houses (Table 41). This

could be because people living in pakki houses have less need for loans, being financially stronger themselves.

Table 41. Type of house and applying for an agricultural loan

Type of house	Applied for loan	
	Yes	No
Pakki (%)	415 (10)	3968 (90)
Other types (%)	1413 (15)	8278 (85)
Odds Ratio 0.61 (95% CI 0.54-0.69)		

Visits of agriculture extension workers

Households who recall a visit from an agricultural extension worker, whether government or non-government, are more likely to also report applying for an agricultural loan. The relationship between being visited and application for a loan is shown in Tables 42 and 43, for JT/JTA visits and non-government worker visits respectively. If anything, the association is stronger for visits from non-government extension workers. This association could be because the possibility of applying for a loan is discussed when the extension worker visits and some NGOs also offer loan services. It could also be that more prosperous households are both more likely to be visited and more likely to apply for loans.

Table 42. Visit of JT/JTA and applying for an agricultural loan

Ever visited by JT/JTA	Applied for loan	
	Yes	No
Yes (%)	101 (21)	373 (79)
No (%)	1719 (13)	11802 (87)
Odds Ratio 1.86 (95% CI 1.47-2.35)		

Table 43. Visit of non-government extension worker and applying for an agricultural loan

Ever visited by non-government extension worker	Applied for loan	
	Yes	No
Yes (%)	73 (29)	182 (71)
No (%)	1739 (13)	11977 (87)
Odds Ratio 2.76 (95% CI 2.07-3.68)		

However, there is no association between having a visit from an agriculture extension worker success of a loan application.

Supplies of essential agriculture and livestock materials

Land holding households were asked where they had tried to buy a range of necessary inputs for agriculture and livestock purposes, and if they were available. Fertilizers and agriculture tools are the most common items sought by households, followed by seeds, veterinary medicines, pesticides, fingerlings and animal feed. Most of these materials were available when sought, as shown in Table 44.

Table 44. Proportion of households buying various inputs for agriculture and livestock and their availability

Item	No. (%) of households seeking	No. (%) available
Fertilizer	9657 (68)	8090 (84)
Agricultural tools	7179 (51)	7038 (98)
Seeds	4481 (32)	4310 (96)
Veterinary medicine	3504 (25)	3352 (96)
Pesticide	3280 (23)	3185 (97)
Fingerlings	1906 (16)	1846 (97)
Animal feed	989 (7)	956 (97)

The sources from which different farming inputs are purchased are shown in Table 45. The most popular source for all items is shops.

Table 45. Sources of different materials for agriculture and livestock

Materials	Pesticide	Fertilizer	Seeds	Fingerlings	Animal feed	Vet medicine	Agriculture tools
Cooperatives	416 (13)	3240 (34)	544 (12)	48 (3)	41 (4)	121 (4)	43 (1)
Shops	2882 (86)	6319 (65)	3350 (75)	977 (51)	723 (73)	3196 (90)	5431 (76)
Individuals	5 (0)	23 (0)	341 (8)	657 (35)	172 (17)	31 (1)	1488 (21)
DAO office	32 (1)	30 (0)	60 (1)	5 (0)	3 (0)	118 (3)	4 (0)
Others	5 (0)	45 (1)	186 (4)	219 (12)	50 (5)	38 (1)	213 (3)
Total	3280 (100)	9657 (100)	4481 (100)	1906 (100)	989 (100)	3504 (100)	7179 (100)

Respondents were asked about the advice they received when they bought pesticides. A quarter did not receive any advice. More than half the advice given related to the quantity to use, and about a third related to safety precautions when using and storing these toxic chemicals (Table 46).

Table 46. Advice received when buying pesticides

Advice	Number (%)
Dosage	1536 (54)
No advice	714 (25)
*Wear protective clothing	533 (18)
*Keep away from children	278 (10)
Timing of use	255 (9)
*Avoid exposure	242 (9)

*This counts as safety advice. Up to three answers about advice could be given.

Since up to three pieces of advice were recorded per purchase of pesticides, some of the safety advice was given together. Of the total of purchases of pesticides reported, only about a quarter (26%) were accompanied by at least one piece of safety advice.

Governance and local government

This survey, as well as focusing particularly on health and agriculture services, sought information about household perceptions of other government services. It also considered some aspects of the operation of local government at different levels. The aspects considered include coordination between different levels, perceptions of information needs for planning, perceived problems with local services and infrastructure, and suggestions for how to improve matters. As well as household interviews, information about aspects of local government was sought from community focus groups and from officials at different levels, including VDC chairmen, DDC chairmen, DHOs, DAOs and LDOs. Details of the interview responses of officials at different levels are given in Annex 3, but some key points are summarised in the following sections.

Source of information about government services

Households were asked where they get their information about government services available locally. Their responses are shown in Table 47.

Table 47. Households sources of information about government services available locally

Information source	Number households (%)
Neighbours	12253 (71)
Radio	6040 (35)
VDC	2451 (15)
Posters	1499 (9)
Written materials	1163 (7)
Television	912 (5)
Family members	678 (4)
FCHV	639 (4)
Other service staff	462 (3)
Schools	326 (2)
Street drama	5 (0)
Nowhere	287 (2)

Up to three answers could be given.

By far the main sources mentioned are neighbours and radio. Information from the VDC is also relatively important, with around one in seven households using this as a source of information about local services.

Opinions about basic services

Household respondents were asked about the availability and quality of basic services in their area. A high proportion of households have access to some sort of service in most sectors (except telephone and electricity services), but only low proportions who have these services rank them as 'good'. This is shown in Table 48.

Table 48. Access to basic services and perceptions of quality of services available

Service	No. (%) of households with access	No. (%) with access ranking service as 'good'
Education	18411 (99)	3850 (21)
Water	15891 (86)	2890 (18)
Sanitation	13066 (71)	653 (5)
Post	16321 (89)	3569 (22)
Telephone	7881 (43)	1961 (25)
Roads	3837 (75)	722 (5)
Electricity	5686 (31)	2221 (39)

This perception by households of the quality of basic services, when they are available, is poor indeed. Yet it is similar to the views expressed by District Development Committee (DDC) Chairmen and Local Development Officers, when asked what they thought of the government services provided in the area (Table 49).

Table 49. DDCC and LDO perceptions of quality of basic government services in their area

Service	No. (%) thinking service 'good'	
	DDCCs	LDOs
Education	4 (15)	7 (21)
Water	0	9 (27)
Sanitation	0	1 (3)
Post	9 (33)	16 (49)
Telephone	4 (15)	12 (35)
Roads	0	1 (3)
Electricity	0	7 (21)

Some of the responses of the DDCCs and LDOs could have been influenced by low availability of a service (such as electricity). Households could give

a response of 'not available at all' for service quality but the other interviewees gave a response about quality in all cases, so they would presumably rate quality as very poor if the service was not available at all.

Difficulties of providing public services

DDCC and VDCC were asked about the difficulties they face in providing services at district and village levels. The main difficulties mentioned by VDCC are lack of resources and finance, lack of community support and political interference. Key problems for DDCC are lack of resources, poor awareness and bad service delivery from government line agencies. This is shown in Table 50.

Table 50. Main difficulties in providing services mentioned by DDCC and VDCC

Difficulty	No. (%) mentioning difficulty	
	DDCC	VDCC
Lack of resources	16 (59)	55 (40)
Bad service delivery of line agencies	15 (56)	
Lack of information	10 (38)	19 (14)
Lack of VDC or community support	5 (19)	44 (32)
Political interference	3 (11)	30 (22)
Lack of time	1 (4)	2 (2)
Lack of awareness		
Lack technical knowledge		11 (11)
Lack of finance		80 (59)

Up to 3 responses could be given

Role of VDCs

Respondents were asked about the role of VDCs during the household interview. Their responses about what they think VDCs currently do are shown in Table 51.

Table 51 Household perceptions of activities of VDCs

Activity	Number (%) households
Construction work	9216 (57)
Nothing	4449 (28)
Coordinate activities	3445 (21)
Sanitation work	1773 (11)
Registration	854 (5)
Collect Tax	477 (3)
Fund teachers	463 (3)
Security	162 (1)
Kill dogs /control animals	20 (0)
Spray insecticide	24 (0)

Up to 3 answers were allowed.

VDC chairmen were similarly asked to about the activities carried out by the VDCs (Table 52).

Table 52. VDC chairmen perceptions of activities of VDCs

Activity	No. (%) chairmen
Construction work	120 (88)
Social development	55 (40)
Daily issues	23 (17)
Financial issues	22 (16)
Set up community groups	14 (10)
Look after old people	5 (4)
Nothing	2 (2)

Up to 3 answers were allowed.

Households and VDC chairmen agree that construction work is a major part of the activities of the VDC. The VDC chairmen give broader descriptions of the work of VDCs, while households mention specific activities.

Household views on activities that *should* be carried out by VDCs are shown in Table 53. Their priorities - sanitation work, road building and provision of electricity - reflect the services with low access and poor quality at present (see Table 48).

Table 53. Household suggestions for activities that should be carried out by VDCS

Activity	No. (%) households
Build roads	9790 (58)
Sanitation work	9326 (55)
Provide electricity	4255 (25)
Build irrigation	3504 (21)
Coordinate activities	3290 (19)
Construction work	2459 (14)
Fund teachers	1132 (7)
Connect telephone	799 (5)
Arrange health	787 (5)
Security	124 (1)
Spray insecticide	102 (1)
Registration	60 (0)
Kill dogs/ control	34 (0)
Collect Tax	12 (0)

Up to 3 answers were allowed

Perhaps it is not surprising that collecting taxes is at the bottom of the list of things that households think VDCs should do. But this poses a problem for VDCs, who need to fund the list of activities, some very expensive, that their communities would like them to do, as shown in Table 53. Clearly some

dialogue is needed between VDCs and households in communities about prioritisation of activities and budget setting for the different activities.

Households were asked what they do to help and support the activities of their VDC. Responses are shown in Table 54.

Table 54. Household reports of ways in which they help VDC activities

Activity to help VDC	No. (%) households
Voluntary construction work	13983 (85)
Financial support	5883 (40)
Miscellaneous	1780 (11)
Voluntary teaching	870 (5)
Registration	60 (0)
Security	12 (0)

Up to 3 answers were allowed.

By far the most common way in which community members report they help the VDC is through voluntary construction; more than 4 out of five households say they help in this way.

Priorities at different levels and support between levels

Just under half (43%-59) VDC chairmen said that VDC priorities had been reflected in the DDC's decisions. However, a similar proportion (47% -65) did not think their priorities were properly reflected.

The VDC chairmen were asked how they thought coordination could be improved in order to have local priorities better reflected at district level. More than half of them (62% - 48), suggested that VDCs should be more involved in the DDC decision making process, and 21%(16) of them suggested that DDC members should visit communities and VDCs more.

Support from central to district and to village level

The DDCCs and VDCCs interviewed were asked about that kind of support they receive from the central government and DDCs respectively.

Nearly a quarter of the VDCs reported that they did not receive *any* support from DDCs. Many of the types of support reported as coming from DDCs to VDCs are distinct from the types of support reported from the centre to DDCs. However, in both cases financial support was rated as important, not surprisingly. Responses about this issue are shown in Table 55.

Table 55. Types of support reported by VDC and DDC chairmen

Type of support	From centre to DDC (%)	From DDC to VDC (%)
Financial	20 (74)	69 (51)
Planning	15 (56)	
Policy	6 (22)	
Projects	6 (22)	8 (6)
Training	2 (7)	4 (3)
Supervision	1 (4)	5 (4)
Technical assistance		36 (27)
Materials		36(27)
Political support		2 (2)
No support	1 (4)	30 (22)

Up to 3 answers were allowed.

Opinions about support received

DDC chairmen were asked for their views on the support they received from the central government. Not one of them rated the support as really helpful. About a third of them thought the support was not helpful and 63% of them rated the support as average Their ratings are shown in Table 56. Similarly, VDC chairmen were asked to rate the support they received from DDCs. About 1 in 10 of them rated the support was helpful, but a quarter of them rated it as not helpful (Table 56).

Table 56. Opinions about support received by DDCs and VDCs

Support from:	No. (%) chairmen rating support:		
	Helpful	Average	Not helpful
Centre to DDC	-	17 (63)	10 (37)
DDC to VDC	13 (10)	91 (67)	32(24)

Up to 3 answers were allowed.

Gaps between support received and support needed

Services supported in districts by central government fall short of the services that DDC chairmen would like to see supported. The supported services and those felt to need support (or additional support) are shown in Table 57.

Table 57. Services supported by central government and services needing further support, in view of DDC chairmen

Service/activities	No. (%) DDC chairmen reporting:	
	Support received	More support needed
Finance	20 (74)	13 (48)
Planning	15 (56)	12 (44)
Policy	6 (22)	8 (30)
Projects	6 (22)	23 (85)
Training	2 (8)	-
Supervision	1 (4)	3 (11)
Create awareness	-	5 (19)

Up to 3 answers were allowed.

Mainly the DDC chairmen want further support for activities already supported. However, they particularly want more support for development projects and they also seek support for 'creating awareness' or public education, which is not supported at all at present.

The support perceived as received by VDCs from DCCs and that perceived as further needed by VDCs are shown in table 58.

Table 58. Services supported by DDCs and services needing further support, in view of VDC chairmen

Service/activities	No. (%) VDC chairmen reporting:	
	Support received	More support needed
Finance	80 (60)	69 (51)
Technical assistance	60 (45)	36 (27)
Consultation	53 (40)	12 (10)
Supervision	17 (13)	5 (4)
Projects	14 (10)	8 (6)
Political support	8 (6)	2 (2)
Training	7 (50	4 (3)
Materials	2 (2)	36 (27)

Up to 3 answers were allowed.

VDCs seem to want more support with capacity building, such as technical assistance, and consultation, as well as finance.

Coordination

LDOs and DDC chairmen were asked if it is easy or difficult to coordinate the activities of different line departments in the district. Their responses are shown in Table 59.

Table 59. Opinions of LDOs and DDC chairmen about coordination of line departments in districts

Person:	No. (%) considering coordination:		
	Easy	Average	Difficult
DDC chairmen	4 (15)	9 (33)	14 (52)
LDOs	9 (28)	18 (54)	5(16)

Up to 3 answers were allowed.

Clearly, DDC chairmen rate the task of coordination as more difficult than do the LDOs. Perhaps this is because they have more direct responsibility for this sort of coordination of line departments at district level.

Information needed for planning

Information needed

The VDC chairmen were asked what kind information they needed for planning activities in their community. They rated their top requirements as being knowing about the needs of people in the community and having access to technical advice. They also mentioned the need for locally relevant (area) statistics. (Table 60).

Table 60. Information needed by VDCs for planning purposes, in view of VDC chairmen

Type of information	No. (%) VDC chairmen
Needs of the people	56 (43)
Technical advice	56 (43)
Area statistics	38 (29)
Population data	23 (18)
Data on income levels	14 (11)
Data on literacy	2 (2)
Production/livestock data	2 (2)
Health data	2 (2)
Data on children	2(2)
Data on women	1 (1)

Up to 3 answers were allowed.

Sources of information

LDOs and VDC chairmen were asked where they presently get information for planning purposes. Community meetings, key informants and self are the three most common information sources at the VDC level. LDOs mostly get information from VDCs, key informants, and line departments at the district level. The information sources are shown in Table 61.

Table 61. Information sources for planning, as used by LDOs and VDC chairmen

Source of information	No (%) of respondents: LDOs	VDC chairmen
Community meetings	-	81 (60)
Key informants	19(59)	73 (54)
Self	-	67 (49)
Informal contacts	-	37 (27)
VDCs	26 (81)	-
District departments	18 (41)	1 (1)
From 'people'	9 (28)	-
From NGOs	7 (22)	-
From district profile	5 (16)	-
From the media	4 (13)	-
From women's groups	-	3 (2)

Up to 3 answers were allowed.

From Table 61 it can be seen that VDCs most commonly get their information for planning from community meetings and key informants, neither of which necessarily provide reliable information on the 'needs of the people' that VDCs recognise as necessary information for planning (Table 60). There is a need to help VDCs develop sustainable ways of collecting the information from communities they need for planning. Similarly, LDOs rely heavily on VDCs and key informants for their information for planning, and would benefit from the development of systems to provide good community-based data for planning.

References

1. National Planning Commission, HMG Nepal and UNICEF Nepal. Nepal Multiple Indicator Surveillance: Cycle 1, Health and Nutrition, 1995.(NMIS Report Series, number 1) Kathmandu, March 1996.

2. National Planning Commission, HMG Nepal and UNICEF Nepal. Nepal Multiple Indicator Surveillance: Cycle 2, Primary Education, 1995. (NMIS Report Series, number 2). Kathmandu, November 1996.

3. National Planning Commission, HMG Nepal and UNICEF Nepal. Nepal Multiple Indicator Surveillance: Cycle 3, Diarrhoea, Water and Sanitation, 1996. (NMIS Report Series, number 3). Kathmandu, June 1997

4. National Planning Commission, HMG Nepal and UNICEF Nepal. Nepal Multiple Indicator Surveillance: Cycle 4, Early childhood feeding, nutrition and development, 1996. (NMIS Report Series, number 4). Kathmandu, November 1997.

5. CIETinternational. Nepal Multiple Indicator Surveillance, Cycle 5. Final report submitted to UNICEF Nepal, April 1998.

6. Andersson N. Impact, coverage and costs: An operational framework for monitoring child survival and development emerging from two UNICEF projects in Central America. UNICEF: Guatemala, September 1985

7. Goerzen J (ed). Service Delivery Surveys: Applying the Sentinel Community Surveillance methodology. Country overviews. CIETinternational/EDI of World Bank: Washington, 1996.

8. Cockcroft A. Performance and perceptions of health and agricultural services in Uganda: a report based on the findings of the baseline service delivery survey, December 1995. CIETinternational/EDI World Bank, Washington 1996

9. Presidential commission of enquiry against corruption. Service delivery survey: corruption in the police, judiciary, revenue and lands services. Dar es Salaam, July 1996

10. Andersson N, Martinez E, Cerrato F, Morales E, Ledogar RJ. The use of community-base data in health planning in Mexico and Central America. Health Policy and Planning 1989; 4(3): 197-206

11. Andersson N. Evidence-based planning: the philosophy and methods of sentinel community surveillance. CIETinternational/EDI World Bank: Washington, 1996

12. Epi Info. A word-processing, database and statistics system for epidemiology of microcomputers. Epidemiology program office, Centers for Disease Control and Prevention, Atlanta, Georgia, USA. Version 6, 1994

13. HMG Nepal, Central Bureau of Statistics, National Planning Commission Secretariat. Nepal Living Standards Survey Report 1996; Main Findings Volume One. Kathmandu, December 1996
** Check**

ANNEX 1. SITES IN THE NMIS SAMPLE

Table A1.1 Districts in the NMIS sample, with number of sites.

Eco-region	District	Rural sites	Urban sites
Eastern - Hills	Ilam	3	
	Bhojpur	3	
	Udayapur	4	
Eastern -Terai	Morang	10	1
	Siraha	8	1
	Saptari		1
	Jhapa		1
	Sunsari		1
Eastern - Mountains	Sankhuwasabha	3	
Central - Hills	Kathmandu	5	4
	Dhading	5	
	Lalitpur		1
	Kavrepalanchok		1
	Makwanpur		1
	Ramenchhap	4	
Central - Terai	Dhanusha	11	
	Parsa		1
	Rautahat	9	
Central - Mountains	Sindhupalchok	4	
Western - Hills	Gorkha	5	
	Syangja	5	
	Myagdi	2	
	Gulmi	5	
	Kaski		1
	Palpa		1
Western -Terai	Rupandehi	8	
	Kapilvastu		1
Western - Mountains	Mustang	2	
Mid West - Hills	Dailekh	4	
	Rolpa	4	
Mid West - Terai	Bardiya	6	
	Banke		1
Mid West - Mountains	Jumla	2	
	Kalikot	2	
Far West - Hills	Achham	5	
Far West - Terai	Kailali	4	1
Far West - Mountains	Darchula	3	

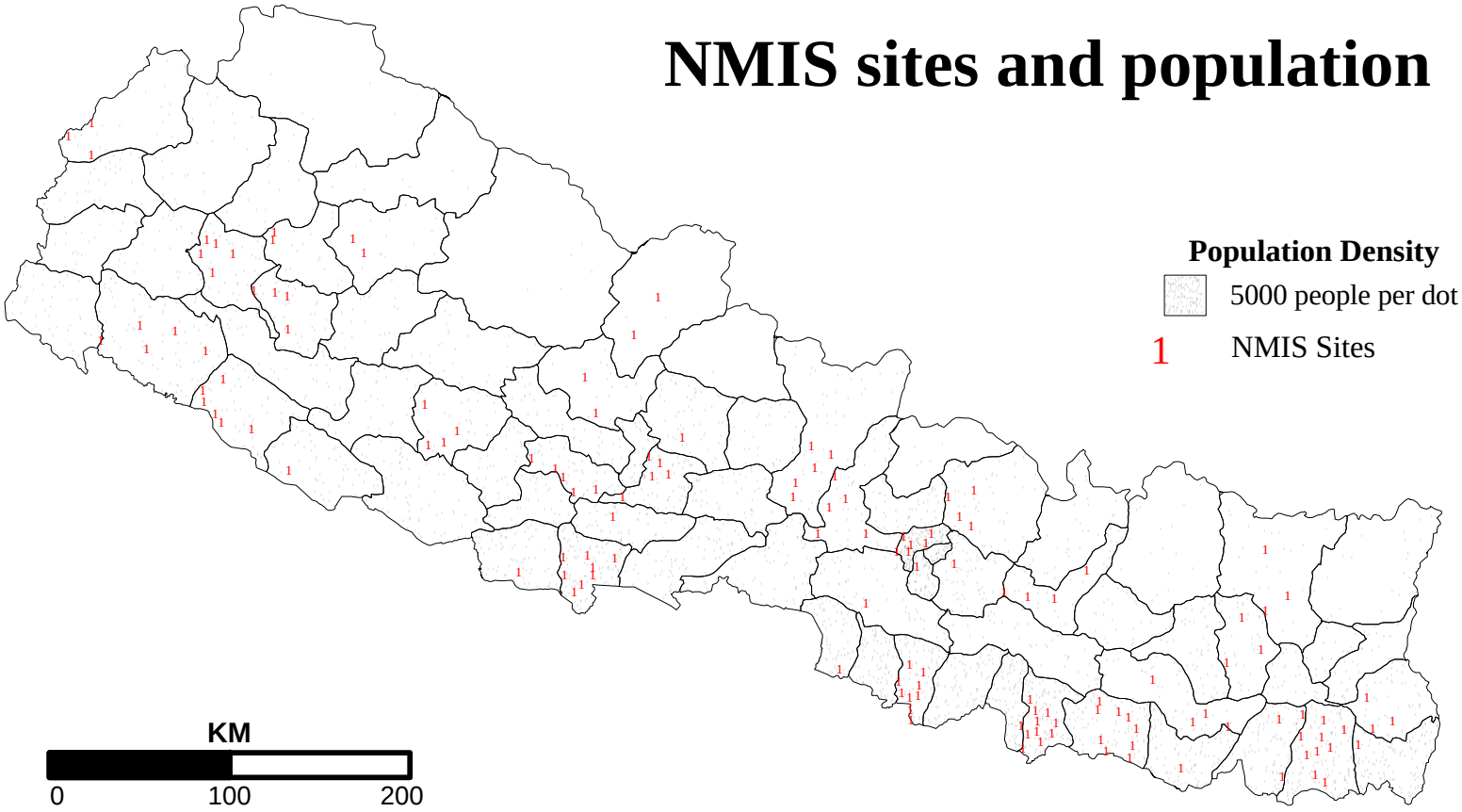
Table A1.2 Districts in Nepal by ecozones and eco-development regions

Region	Terai		Hills		Mountains
Eastern (16 districts)	**Jhapa** **Sunsari** **Siraha**	**Morang** **Saptari**	**Ilam** Tehrathum **Bhojpur** Khotang	Panchthar Dhankuta **Udayapur** Okhaldhunga	Taplejung **Sankhuwasabha** Solukhumbu
Central (19 districts)	**Dhanusha** Mahottari **Rautahat** **Parsa**	Sarlahi Bara Chitwan	Sindhuli **Kavrepalanchok** **Makwanpur** **Lalitpur** Nuwakot	**Ramenchhap** **Kathmandu** Bhaktapur **Dhading**	Dolakha **Sindhupalchok** Rasuwa
Western (16 districts)	Nawalparasi **Rupandehi** **Kapilvastu**		**Gorkha** Tanahu **Syangja** Parbat **Gulmi** **Myagdi**	Lamjung **Kaski** **Palpa** Argakhachi Baglung	Manang **Mustang**

Mid West (15 districts)	Dang **Banke** **Bardiya**	Pyuthan Salyan **Dailekh** Rukum	**Rolpa** Surkhet Jajarkot	Dolpa Humla **Kalikot** Mugu **Jumla**
Far West (9 districts)	**Kailali** Kanchanpur	**Achham** Dadeldhura	Doti Baitadi	**Darchula** Bajhang Bajura

NMIS districts are shown in **bold type**.

NMIS sites and population



Annex 2: Instruments

1. Household questionnaire
2. Focus group discussion guide--health
3. Focus group discussion guide--agriculture
4. Health facility review schedule
5. Agriculture facility review schedule
6. Community key informant interview guide
7.VDC chairman interview guide
8. DDC chairman interview guide
9. DHO interview guide
10. DAO interview guide
11. LDO interview guide

Annex 2.1

HOUSEHOLD QUESTIONNAIRE

1. What is the sex of the respondent and the relationship of the respondent to the household head?

2. What is the sex and age of the head of the household? <eg 45M, 50F>

3. What is the literacy of the head of the household?

4. What is the occupation of the head of the household?

5. What type of house is it? <kachi, Paki, mixed, hut>

6. How many people are there altogether in the household?

7. Note sex and age of each one, starting with the oldest. <eg 45M, 30M, 3F>

8. How many members of this household have used the government Health Services in the last month?

   <If any member used any government service, for each contact use one separate page for question 9-16. If none, skip to question 17>

9. What is the sex and age of the person? <eg 7F>

10. Where did they/you go to get the service? <type of health facility>

11. What was the purpose of using the service?<eg immunisation>

12. Was there a health worker who attended to (examined) you the first time you went there?

13. How long did they/you have to wait for the service? <write down exact waiting time include figures and units>

14. Were the medicines and other materials that were needed available?

15.1 How much did you have to pay for the fixed fee? <Rs; if nothing write 0 >

15.2 How much did you have to pay for medicines? <Rs; if nothing write 0>

15.3 How much did you have to pay in total? <Rs; if nothing write 0>

16. <If not all medicines and materials available from govt health facility> Where did you get them from?

17. What do you think of the government health services provided in this area? <good, average, bad>

18. What do you think are the main problems (if any) with the government Health Services in this area? <write up to 3 answers>

19. What do you think could be done to improve the government Health Services in this area? <write up to 3 answers>

20. 1 Do you think people here would be prepared to pay to get improved government Health Services?

20.2 If yes, how much for a single visit to a government health centre? <write amount in Rs>

21. How many members of this household have used any other kind of health care or treatment service in the last
month, including traditional services or 'self-treatment'?
<Note sex and age of person, type of service used, and purpose of using for each one>

22.1 How much land, if any, does your household hold (own or rent):

22.2 Khet <write amount in ropani or local measure; if none write 0>

22.3 Bari <write amount in ropani or local measure; if none write 0>

22.4 Other <write amount in ropani or local measure; if none write 0>
<If household holds no land, skip to Q35>

23. When did you last have a professional visit from a JT/JTA? <write number of months ago; if never, write 'never'>

24. When did you last have a professional visit from a non-government agricultural adviser? <write number of months ago; if never, write 'never'>

25. When did you last visit the Agricultural/Livestock Service Centre (or sub-centre) for this area? <write number of months; if never, write ‘never’>
<If ‘never’ to Q23 and Q25, skip to Q28>

26.1 Were you able to get all the service that you needed from the JT/JTA or the Service Centre?
<if not>

26.2 what kind of service were you *not* able to get? <up to 3 answers>

27.1 For this last agricultural service, how much did you pay? <write amount in Rs, if nothing write 0>
<If paid something>
27.2 What was the payment for?
27.3 Who did you pay?

28.1 What do you think of the Agricultural Service in this area? <good, average, bad>
28.2 What do you think of the Livestock Service in this area? <good, average, bad>

29. What do you think are the main problems (if any) with the Agricultural/Livestock Service in this area? <write up to 3 answers>

30. How do you think the Agricultural/Livestock Service could be improved? <write up to 3 answers>

31. 1 Do you think people here would be prepared to pay for visits from the JT/JTA to get an improved service?
If yes, how much per visit

31.2 for livestock advice? <Rs>
31.3 for fisheries advice? <Rs>
31.4 for general agricultural advice? <Rs>
31.5 for horticultural advice? <Rs>

32.1 Have you tried to get credit for agricultural/livestock purposes in the last year?
<If Yes>
32.2 Where did you approach for the loan?
32.3 Were you successful?

For the following farming inputs, where did you last go to buy them and were they available?
33.1 pesticides?
33.2 fertilizers?
33.3 Seeds, saplings?
33.4 Fingerlings, new breeds?
33.5 Animal feed?
33.6 Veterinary medicines?
33.7 Agriculture tools

34. When you last bought pesticide, what advice were you given about how to use it? <write up to 3 answers>

35. How do you get information about government services available in your area? <write up to 3 answers>

36. What do you think of the following government services as they operate in your area?
<for each one, rate as good, average or bad or 'none' if does not operate at all>
36.1 Education
36.2 water
36.3 sanitation
36.4 postal service
36.5 telephone service
36.6 roads provision and maintenance
36.7 electricity

37. What does the VDC of this community do? <write up to 3 answers>

38. What do you think the VDC *should* do? <write up to 3 answers>

39. What activities do you help the VDC to carry out? <write up to 3 answers>

Annex 2.2

FOCUS GROUP GUIDE - HEALTH SERVICES

This is intended to be a group of 6-8 women from the community.

Warm up

Introduce the moderator and recorder. Explain that this meeting is to discuss issues about the government and other health services provided here.

Ask participants to introduce themselves and give their age and level of education.

Discussion guide

1. What problems are there with the government health services available near to this community?

2. What sort of alternatives to the government health services do people here use?

3. What do you think could be done to improve the government health services in this area and who would need to do this?

4. Are people here able to get information about how to be healthy and what sort of information would you like to get?

Annex 2.3
FOCUS GROUP GUIDE - AGRICULTURAL/LIVESTOCK SERVICES

This is intended to be a group of 6-8 farmers (mainly men) from the community, reasonably homogeneous in terms social standing.

Warm up

Introduce the moderator and recorder. Explain that this meeting is to discuss issues about the agricultural extension services provided here.

Ask participants to introduce themselves and give their age and level of education.

Discussion guide

1. How often do JT/JAS visit here and how often do people from here visit the Agricultural/Livestock Centre (or sub-centre) for this area?

2. What are the main problems with the agricultural service?

3. What are the main problems with the livestock service?

4. Do people here have any difficulty getting the materials they need for farming?

5. How easy is it to get loans for agricultural schemes here?

Annex 2.4

INSTITUTIONAL REVIEW OF GOVERNMENT HEALTH FACILITY

Visiting team to note facilities and interview the officer in charge.

District: VDC: Ward: Cluster no.:

Name of Health Facility:

Type of health facility:

Note date, day and time of visit:

1. How far is this Health Institution from the centre of the community? (In time)

2. We want to know about the opening times of this Health Facility:

   2.1 How many hours/day?

   2.2 Number of days/week:

3. Is it always open during these times?

4. What is the staffing?

Staff type	*No. Posts*	*No. Present today*

5. What is the clinical area like? <observe>

   5.1 Size? <very small, small, reasonable size, good size>

   5.2 Is it separated from other areas in some way? <yes, no>

   5.3 What is the state of cleanliness? <dirty, reasonable, clean>

6. Is there any area for storage of drugs and other supplies?

   Is it stocked with: <check>
   6.1 Antibiotic (eg penicillin)?
   6.2 Antipyretic (eg aspirin)?
   6.3 Sedative (eg diazepam)?

7. Is there a fridge for vaccines etc?

7.1 If yes, Is it working?

7.2 If not working, when was it last working?

Other questions for the officer in charge:

8. Where does this Health Institute get its vaccines from?

9. Do you keep records of your service activities?

   9.1 Please show us the report or last week or last month:
   <write if report is missing, incomplete, apparently complete>

10. What do you do with the reports of your service activities?

11. Do you use the records of your service activities locally to monitor or improve your service?

    11.1 If YES, please describe in what way:

12. Do you receive feedback on your monthly reports?

13. What is the average number of patients seen per day in this Health Facility?
    <Check daily register for the last week>

14. Do you make charges for services from this Health Institute?

    If Yes,

    14.1 How much per visit?

    14.2 How much per activity (eg vaccination)

15. Are the community active in the management committee of this facility?

16. What are the main problems you have in providing a service?

17. What services do you receive from the District Health Office?
    <write up to three>

18. When did you last get a supervision visit from the DHO's office?
    <how many months ago>

19. How do you find the support given to you by the DHO's office?
    <good, average, bad>

20. Do you hear complaints from the local community about your services?

    20.1 If yes, what are their main complaints?

<write up to three>

21. What do you think could be done to improve your services?
<write up to 3 answers>

Annex 2.5

INSTITUTIONAL REVIEW OF AGRICULTURAL /LIVESTOCK SERVICE CENTRE (OR SUB-CENTRE)

Visiting team to note facilities (if appropriate) and interview an agricultural extension worker.

Community: <write name and code number>

Location of Centre or sub-centre:

Note date, day and time of visit:

1. How far is this office from the centre of the community? (In time)

2. What is the staffing of this office?

Name of the post	no.post sanctioned	no. Present today
JT/JTAs	<number>	
SMSs	<number>	

Other questions for the officer in charge:

3. What are the main challenges you face in providing a service?

4. What services do you provide for the local community?

5. What charges do you make to farmers for your services?
   Fixed fee - how much?
   Other charges for services

6. What services do you receive from the District Agricultural/Livestock Development Office?

7. When did you last get support supervision from the DADO/DLDO office?

8.. How do you find the service given to you by the DADO/DLDO office?
   <good, average, bad>

9. Do you hear complaints from the local community about your services?
   <if yes> what are their main complaints?

10. What do you think could be done to improve your services?

Annex 2.6

INTERVIEW WITH COMMUNITY KEY INFORMANT

1. What government health facilities are available locally?
2. How far away is each one from the centre of the community?
   How long does it take to reach it from the community ?
3. What are the opening hours of each one: official?
   practice?
4. How much are the official charges per visit for each one?
   Fixed fee?
   Other charges?
5. How often are the drugs needed available in the government health facilities ?
6. If not available from the health facility, where do people go to get them ?
7. Is there a medical shop in the community ?
8. What other health facilities are available locally (eg run by NGOs) ?
9. What is the main type of farming here?
10. Where do people here mainly go to get their supply of farming chemicals, fertilizers and veterinary drugs ?
11. What are the prices of these materials?
    Price per 50 Kg bag of fertilizer urea? <Rs>
    Price per Kg of cow/buffalo feed? <Rs>
    Price per Kg of chicken feed?
12. What has happened to the prices of chemicals, fertilizer and veterinary drugs over the last year ?
13. Is there a library in this community ?
    If so, what are the opening times ?
14. Is there a public telephone} in this community ?
    Is the phone in working order <observe>
15. Is there a post office in this community ?
    If Yes, what are the usual post opening hours ?
16. Can people here receive mail from other places in the district ?
    From outside the district ?
17. How long does it usually take for mail to reach here from Kathmandu ?

Annex 2.7

INTERVIEW WITH VDC CHAIRMAN

1. What does the VDC do for the community ?
2. What difficulties do you encounter in serving the community ?
3. What services and support do you receive from the DDC ?
4. What services/support do you think you *should* get from the DDC ?
5. What do you think of the service/support you receive from the DDC ?
   <good, average, bad>
6. How do you get information about the needs of the community you serve ?
7. What information do you think you need to help you plan your services to your community ?
8. Do you think VDC priorities are reflected in DDC (Council) decisions ?
9. If not, how could this situation be changed ?

Annex 2.8

INTERVIEW WITH DDC CHAIRMAN

1. What do you think of the government services provided in this district?
   <good, average, bad>
   Health
   Agriculture
   Education
   Water
   Sanitation
   Postal service
   Telephone service
   Roads provision and maintenance
   Electricity

2. What are the difficulties of providing public services in this district ?
3. What services and support do you receive from the central government ?
4. What services/support do you think you *should* get from central government ?
5. What do you think of the service/support received from the central government ?
6. How could your service to the district be improved ?
7. How could the service you receive from the central government be improved ?
8. How do you get information about the needs of the district you serve ?
9. What information do you think you need to help you plan your services to your district?
10. Is it easy to co-ordinate the activities of different line ministries in the district?
11. How are VDC priorities reflected in the DDC's plans ?
12. How are DDC priorities reflected in VDC plans in this district ?

Annex 2.9

INTERVIEW WITH DISTRICT HEALTH OFFICER

1. What are the main challenges facing your service in this District ?
2. When did you last have direct contact with the central Ministry of Health ?
3. How does the ministry of health keep you informed about matters of importance ? Does this system work well?
4. What services do you receive from the central ministry of health?
5. What do you think of the service you receive from the Ministry of health <good, average, bad>
6. Which of the services you receive from the central ministry of health (apart from financial support) is of most use to you?
   - 6.1 in the last fiscal year, how much medicine and goods were received in Rs?
   - 6.2 in the last fiscal year, how much good in Rs were received?
   - 6.3 in the last fiscal year, how much cash (in Rs) were received? how much did you allocate the distribute the resources?
   - 6.4 to hospital?
   - 6.5 to phc?
   - 6.6 to hp?
   - 6.7 to shp?
   - 6.8 to others (specify)?

7. Which of the services is of least use to you?
8. What do you suggest for improving the service you receive from the central ministry of health?
9. Which aspects of the health services in this District are you most satisfied with? Why?
10. Which aspects are you least satisfied with ? Why?
11. How could you improve the delivery of health services in this district ?

Annex 2.10

INTERVIEW WITH DISTRICT AGRICULTURAL DEVELOPMENT OFFICER OR DISTRICT LIVESTOCK DEVELOPMENT OFFICER (to answer on behalf of both services)

1. What are the main challenges facing your service in this District ?
2. How many SMSs do you have (livestock and agricultural)
   How many {JT/JTAs} do you have (livestock and agricultural)
3. When did you last have direct contact with the central Ministry and Departments of Agriculture?
4. How does the Ministry and departments of Agriculture keep you informed about matters of importance ?
   Does this system work well?
5. What services do you receive from the central ministry and departments of Agriculture?
6. What do you think of the service you receive from the central ministry and departments? <good, average, bad>
7. Which of the services you receive from the central ministry and departments of agriculture (apart from financial support) is of most use to you?
8. Which of the services is of least use to you ?
9. What do you suggest for improving the service you receive from the central Ministry and departments of Agriculture ?
10. Which aspects of agricultural services in this District are you most satisfied with? Why??
11. Which aspects are you least satisfied with? Why?
12. How do you think you could improve delivery of agricultural and livestock services in this district?

Annex 2.11

NMIS CYCLE 6 (SDS) - INTERVIEW WITH LOCAL DEVELOPMENT OFFICER

1. What do you think of the government services provided in this district?
   <good, average, bad>
   Health
   Agriculture
   Education
   Water
   Sanitation
   Postal service
   Telephone service
   Roads provision and maintenance
   Electricity
2. What are the difficulties of providing public services in this district ?
3. What services and support do you receive from the central government ?
4. What services/support do you think you *should* get from central government ?
5. What do you think of the service/support you receive from the central government ?
6. How could your service to the district be improved ?
7. How could the service you receive from the central government be improved ?
8. How do you get information about the needs of the district you serve ?
9. What information do you think you need to help you plan services to your district?
10. Is it easy to co-ordinate the activities of different line ministries in this district ?
11. How are VDC priorities reflected in the DDC's plans ?
12. How are DDC priorities reflected in VDC plans in this district ?

Annex 3. Information from focus groups, institutional reviews and key informants.

Annex 3.1
Results of health focus group discussion

Note: more than three answers are allowed for some of the questions.

1.What are the main problems with the government health service?

1. Too far away	46 (32.6)
2. Too expensive	11 (7.8)
3. No staff	19 (13.5)
4. No medicine/supply	69 (48.9)
5. Bad attitude	97 (68.8)
6. No female staff	23 (16.3)
7. Bad condition	42 (29.8)
8. Long waiting time	16 (11.3)
9. No trained staff	27 (19.7)
10. Lack good medicine	31 (22.0)
11. Too few facilities	22 (15.6)

2. What alternatives do people use in additional to the local available government health services?

1. Faith healer	54 (38.3)
2. Traditional healer	124 (87.9)
3. Private clinic	98 (69.5)
4. NGO clinic	7 (5.0)
5. Friends/neighbours	15 (10.6)
6. Pharmacy	15 (10.6)
7. Hospital	43 (30.5)
8. SHP/HP/PH.C.	19 (13.3)

3. How to improve the government health service?

1. No suggestion	31 (22.0)
2. More facilities	20 (14.2)
3. More staff	33 (23.4)
4. Female staff	8 (5.7)
5. Better attitude	58 (41.4)
6. Better condition	76 (53.9)
7. More medicine	66 (46.8)
8. Trained HMP	61 (36.2)
9. Free service	32 (22.7)
10. Better medicine	15 (10.6)
11. Health education	12 (8.5)

4. Who should be responsible to improve the health service?

1. HMG	68 (61.3)
2. VDC/DDC	65 (58.6)
3. Community	49 (44.1)
4. NGOs	2 (1.8)
5. Health workers	12 (10.8)

5. Are people here able to get information on health care?

1.	Yes	139 (100)

6. What media people prefer to get information on health?

1. Radio/TV	93 (66.9)
2. Newspaper	31 (22.3)
3. Health facilities	73 (52.5)
4. Female health workers	73 (52.5)
5. Community leaders	36 (25.9)
6. Local government	20 (14.4)
7. Traditional healer	1 (0.7)
8. Trained health workers	27 (19.4)
9. Family members	19 (13.7)
10. Self	16 (11.5)
11. Others individuals	57 (41.0)

Annex 3.2

Results of agriculture focus group discussion

139 focus group discussions on agriculture and livestock service were carried out. Some questions have multiple responses.

1. How often do JT/JAS visit here and how often do people from here visit the Agricultural/Livestock Centre (or sub-centre) for this area?

1. Never	111 (79.9)
2. Infrequently	28 (20.1)

1.1 How often do people visit the agriculture or livestock centers?

1. Never	34 (25.2)
2. Whenever needed	31 (23.0)
3. Every month	2 (1.5)
4. Every year	4 (3.0)
5. Seasonal	4 (3.0)
6. Infrequently	60 (44.4)

1.2 Why people visit the centers?

1. For technical advice	38 (40.4)
2. For fertilizer	9 (9.6)
3. For seeds	19 (20.2)
4. For pesticide	27 (28.7)
5. For livestock	48 (51.1)

2. What are the main problems with the agriculturel service?

1. JT/JTA never visit	37 (26.6)
2. Too expensive	14 (10.1)
3. Center too far	12 (9.4)
4. Bad attitude	11 (7.9)
5. Lack of hybrid seed	64 (46.0)
6. Lack of fertilizer	56 (40.3)
7. Lack of pesticide	47 (33.8)
8. Lack of training	36 (25.9)
9. Lack modern equipment	10 (7.2)
10. Lack irrigation	69 (49.6)
11. Lack of marketing	23 (16.5)

2.1 How to improve the situation?

1. More JT/JTA visit	59 (42.4)
2. Center nearby	23 (16.5)
3. Training farmers	48 (34.5)
4. Mobile team	2 (1.4)
5. More equipment	51 (36.7)
6. More loans	4 (2.9)
7. Better irrigation	26 (18.7)
8. Free service	5 (3.6)
9. Marketing facilities	40 (28.8)

2.2 Who should be responsible for the improvement?

1. HMG	70 (71.4)
2. VDC/DDC	52 (53.1)
3. Community	27 (27.6)
4. NGOs	4 (4.1)

3. What are the main problems with the livestock service?

1. MS never visit	51 (36.7)
2. Too expensive	43 (30.9)
3. Center too far	71 (51.1)
4. Bad attitude	40 (28.8)
5. Lack of vet medicine	79 (56.8)
6. Lack of information	23 (16.5)
7. Lack modern equipment	30 (21.6)
8. Lack green pasture	15 (10.8)

3.1 How to improve the situation?

1. More visit by Vet. Expert	57 (50.0)
2. More vet medicine	46 (40.0)
3. Center nearby	44 (38.6)
4. Mobile team	2 (1.8)
5. Training in livestock	30 (26.3)
6. More green pasture	7 (6.1)
7. More equipment	23 (20.2)
8. Free service	17 (14.9)

3.2 Who should be responsible for the improvement?

1. HMG	74 (78.7)
2. VDC/DDC	37 (39.4)
3. Community	21 (22.3)
4. NGOs	2 (2.1)

4. Do people here have any difficulty getting the materials they need for farming?

Yes	132 (95.0)
No	7 (5.0)

4.1 What are the difficulties?

1. Center too far away	58 (41.7)
2. Too expensive	92 (66.2)
3. Lack of information	64 (46.0)
4. Lack of seeds/fertilizer/equipment	16 (83.5)

5. How easy is it to get loans for agricultural schemes here?

1. Easy 4 (2.9)
2. Difficult 116 (84.1)
3. Possible 10 (7.2)
4. Not necessary 8 (5.8)

5.1 Why is it difficult?

0. No difficulties 2 (1.6)
1. Center too far away 14 (11.0)
2. Lack of mortgage 9 (7.1)
3. Time consuming process 57 (44.9)
4. Lack of information 11 (8.7)
5. High interest rate 34 (26.8)

5.2 What are the sources of loan?

1. Institution 67 (52.8)
2. Money lender 3 6 (28.3)
3. Relatives/neighbours 20 (15.7)
4. NGOs 4 (3.1)

Annex 3.3

INSTITUTIONAL REVIEW OF GOVERNMENT HEALTH FACILITY

1. How far is this Health Institution from the centre of the community? (In time)

Less than 0.5 hour	59 (47.2)
Less than 1 hour	31 (24.8)
Less than 2 hours	27 (21.6)
More than 2 hours	8 (6.4)

2. We want to know about the opening times of this Health Facility:

2.1 How many hours/day?

4 hours	51(39.5)
5 hours	12 (9.3)
6 hours	38 (29.5)
7 hours	14 (10.9)
8 hours	7 (5.4)
24 hours	7 (5.4)

2.2 Number of days/week:

3 days	1 (0.8)
4 days	2 (1.6)
5 days	2 (1.6)
6 days	104 (85.2)
7 days	13 (10.7)

3. Is it always open during these times?

Yes	123 (93.9)
Missing	8 (6.1)

5. What is the clinical area like? <observe>

5.1. Size?

very small	17 (13.3)
small	28 (21.9)
reasonable size	70 (54.7)
good size	13 (10.2)

5.2. Is it separated from other areas in some way?

Yes	78 (60.5)
No	51 (39.5)

5.3. What is the state of cleanliness?

dirty	7 (5.4)
reasonable	76 (58.9)
clean	46 (35.7)

6. Is there any area for storage of drugs and other supplies?

Yes:	79 (61.7)
No	49 (38.3)

Is it stocked with:

	Yes
Antibiotic (eg penicillin)	86 (67.2))
Antipyretic (eg aspirin)	114 (88.4)
Sedative (eg diazepam)	44 (34.1)

7. Is there a fridge for vaccines etc?

Yes	23 (17.8)
No	106 (82.2)

7.1 If yes, Is it working?

Yes	21 (50)
No	21 (50)

7.2 If not working, when was it last working?

2 months ago	4 (80)
4 months ago	1 (20)

8.0 Where does this Health Institute get its vaccines from?

SHP	3 (2.3)
HP	50 (39.1)
Hospital	3 (2.3)
DHO	72 (56.3)

9. Do you keep records of your service activities?

Yes	125 (98.4)
No	2 (1.6)

9.1 Please show us the report or last week or last month:

incomplete	12 (9.5)
apparently complete	114 (90.5)

10. What do you do with the reports of your service activities?

To authority	118 (92.2)
Internal discussion	3 (2.3)
Planning	7 (5.5)

11. Do you use the records of your service activities locally to monitor or improve your service?

Yes	106 (82.8)
No	22 (17.2)

11.1 If YES, please describe in what way:

planning	54 (54)
supervision	30 (30)
discussion	7 (7.0)
feedback	7 (7.0)

12. Do you receive feedback on your monthly reports?

Yes	70 (55.6)
No	56 (44.4)

13. What is the average number of patients seen per day in this Health Facility?

	Median average
SHP	8
HP	20
PHCC	26
Hospital	80

14. Do you make charges for services from this Health Institute?

Yes	121 (94.5)
No	7 (5.5)

If Yes,

14.1 How much per visit?
Median average: 2 Rupees

14.2 How much per activity (eg vaccination)

No charges	106 (92.2)
Some charges	9 (7.8)

15. Are the community active in the management committee of this facility?

Yes	76 (59.8)
No	51 (40.2)

16. What are the main problems you have in providing a service?

Lack medicine/supply	108 (84.4)
Lack staff	82 (64.1)
Poor facility condition	78 (60.9)
No water/electricity	2 (1.6)
Lack of supervision	2 (1.6)
Lack community support	17 (13.3)
Isolated	2 (1.6)
Lack of cash support	5 (3.9)

17. What services do you receive from the District Health Office?<write up to three>

Medicine/supply	109 (90.1)
Training	32 (26.4)
Supervision	26 (21.5)
Feedback	3 (2.5)
Encouragement	7 (5.8)
Goods	71 (58.7)
Financial support	15 (12.4)

18. When did you last get a supervision visit from the DHO's office? <how many months ago>

Never	16 (13.0)
1 month ago	60 (48.8)
3 months ago	18 (14.6)
6 months ago	15 (12.2)
1 year ago	7 (5.7)
more than one year ago	7 (5.7)

19. How do you find the support given to you by the DHO's office?

Helpful	17 (13.7)
Not helpful	17 (13.7)
Okay	90 (72.6)

20. Do you hear complaints from the local community about your services?

Yes	84 (65.1)
No	45 (34.9)

20.1 If yes, what are their main complaints? <write up to three>

Lack staff	13 (15.7)
Lack medicine/supply	71 (85.5)
Bad attitude	29 (34.9)
Poor condition	18 (21.7)
Too expensive	12 (14.5)
Too far	1 (1.2)
Irregular hours	4 (4.8)
Long waiting time	2 (2.4)

21. What do you think could be done to improve your services? <write up to 3 answers>

Improve condition	69 (54.3)
Training	28 (22.0)
Supervision	18 (14.2)
More cash support	7 (5.5)
More medicine/supply	117 (92.1)
More staff	48 (37.8)

Annex 3.4

INSTITUTIONAL REVIEW OF AGRICULTURAL /LIVESTOCK SERVICE CENTRE (SUB-CENTRE)

1.How far is this office from the centre of the community? (In time)

Less than 0.5 hour	16 (14%)
0.5 hours	14 (12%)
1 hour	25 (22%)
2 hours	9 (8%)
> 2 hours	33 (29%)
missing	17 (15%)

2. What is the staffing of this office?

Officers

no.post sanctioned	47
no. Present today	23

JT/JAS

no.post sanctioned	281
no. Present today	124

3. What are the main challenges you face in providing a service?

Lack staff	34 (34%)
Lack resources	54 (55%)
Lack new technology	20 (20%)
Lack training	5 (5%)
Lack awareness	13 (13%)
Lack of seed	20 (20%)
Lack pesticides	35 (35%)
More centers	17 (17%)
Missing	3 (3%)

4. What services do you provide for the local community?

Nothing	1 (1%)
Provide seeds	35 (37%)
New technology	31 (32%)
Training	15 (16%)
Community visit	3 (3%)
Soil test	2 (2%)
Information	33 (34%)
Animal vaccination	35 (36%)
Advice	29 (30%)

5. Do you make charges to farmers for your services?

Yes	7 (7%)
No	89 (93%)
Missing	19 (17%)

6. What services do you receive from the District Agricultural/Livestock Development Office?

Nothing	2 (2%)
Supervision	7 (7%)
Training	21 (22%)
New technology	26 (27%)
Supplies	22 (23%)
Improved seeds	30 (31%)
Advice	39 (41%)
Pesticides	33 (34%)
Missing	5 (5%)

7. When did you last get support supervision from the DADO/DLDO office?

Never	2 (2%)
Less than one month	27 (24%)
1 month ago	37 (32%)
3 months ago	15 (13%)
6 months ago	8 (7%)
1 year ago	3 (2%)
more than 1 year ago	4 (4%)
Missing	19 (17%)

8. How do you find the service given to you by the DADO/DLDO office?

Helpful	27 (24%)
Not helpful	7 (6%)
Average	59 (51%)
Missing	22 (19%)

9 Do you hear complaints from the local community about your services?

Yes	58 (50%)
No	37 (32%)
Missing	20 (18%)

9.1 What are their main complaints?

Not enough visit	20 (35%)
Too expensive	5 (9%)
Bad attitude	2 (3%)
Lack new technology	11 (19%)
Lack seeds	28 (48%)
Lack pesticides	19 (33%)
Lack staff	3 (5%)
Lack medicine	16 (28%)
Missing	1 (2%)

10. What do you think could be done to improve your services?

More staff	32 (33%)
More Centres	8 (8%)
More resources	50 (52%)
More training	37 (39%)
More supervision	10 (10%)
More community visit	10 (10%)
More pesticides	32 (33%)
Missing	1 (1%)

Annex 3.5

INTERVIEW WITH COMMUNITY KEY INFORMANT

1. What government health facilities are available locally?

0 Nothing	1 (0.7)
1 HP	40 (28.2)
2 SHP	75 (52.8)
3 District hospital	18 (12.7)
4 PH.C.	6 (4.2)
9 Missing	2 (1.4)

2. How far away is each one from the centre of the community?

Mean distance: 50 minutes
Median distance: 30 minutes

3. What are the opening hours of each one:

Median open time: 10 am
Median close time: 3 pm

4. How much are the official charges per visit for each one?

Fixed fee: median 2 rupees
Other charges: median 0 rupee

5. How often are the drugs needed available in the government health facilities ?

1 Always	3 (2.1)
2. Most of the time	15 (10.6)
3. Sometimes	46 (32.6)
4. Hardly available	68 (48.2)
5. Never	9 (6.4)

6. If not available from the health facility, where do people go to get them ?

1 No where	1 (0.7)
2 Pharmacy	117 (83.6)
3 Market	21 (15)
4 Missing	1 (0.7)

7. Is there a medical shop in the community ?

1. Yes	78 (55.3)
2. No	63 (44.7)

8. What other health facilities are available locally (eg run by NGOs) ?

0 Nothing	86 (58.1)
1 Clinic	31 (20.9)
3 Nursing home	3 (2.0)
4 Medical shop	12 (8.1)
5 Red cross	12 (8.1)
6 FPAN	4 (2.7)

8.1 Who organizes the operation?

1 Private	33 (48.5)
2 INGO/NGO	18 (26.5)
3 DDC or VDC	4 (5.9)
5 FPAN	1 (1.5)
6 Health worker	2 (2.9)
9 DK+ Missing	10 (14.7)

9. What is the main type of farming here?

0 Nothing	2 (1.4)
1 Agriculture	134 (94.4)
2 Livestock	4 (2.8)
3 Fishery	1 (0.1)
4 Horticulture	1 (0.1)

10. Where do people here mainly go to get their supply of farming chemicals, fertilizers and veterinary drugs ?

0 Nowhere	2 (1.4)
1 Cooperation	16 (11.3)
2 Agri. Center	22 (15.6)
3 Private source	96 (68.1)
9 Missing	5 (3.5)

11. What are the prices of these materials?

Price per 50 Kg bag of fertilizer urea?
median 400 rupees
Price per Kg of cow/buffalo feed?
median 9 rupees
Price per Kg of chicken feed?
Median 11 rupees

12. What has happened to the prices of chemicals, fertilizer and veterinary drugs over the last year ?

1. Increased	117 (83%)
9. DK and missing	24 (17%)

Fertilizer increased 5 Rs per 50 Kg
Pesticide increased 1 Rs/kg
Vetoed increased 10 rupees/kg

13. Is there a library in this community ?

1. Yes	27 (19%)
2. No	115 (81%)

If so, what are the opening times ?

Median 10 am

14. Is there a public telephone} in this community ?

1.yes	49 (34.8%)
2. No	91 (64.5%)
9. Missing	1 (0.9%)

Is the phone in working order <observe>

1. Yes	46 (86.8)
2. No	6 (11.3)
9. Missing	1 (1.9)

15. Is there a post office in this community ?

1. Yes	102 (71.8)
2. No	40 (28.2)

If Yes, what are the usual post opening hours ?

1. Median open hour: 10 am
2. Median close hour: 4 pm

16. Can people here receive mail f r o m other places in the district ?

1. Yes 93 (65.5)
2. No 49 (34.5)

From outside the district ?

1. Yes 91 (64.1)
2. No 51 (35.9)

17. How long does it usually take for mail to reach here from Kathmandu ?

Median: 9 days

Annex 3.6
INTERVIEW WITH VDC CHAIRMAN

Note, all questions except 5 and 8 have multiple responses, up to 3 answers were allowed. 138 Village Development Committee were interviewed.

1. What does the VDC do for the community ?

Nothing	2 (1.5)
Set up community groups	14 (10.2)
Social development	55 (40.1)
Daily issues	23 (16.8)
Financial issues	22 (16.1)
Construction work	120 (87.6)
Look after old people	5 (3.6)

2. What difficulties do you encounter in serving the community ?

No difficulties	2 (1.5)
Lack resources	55 (40.4)
Lack information	19 (14.0)
Lack community support	44 (32.4)
Political interference	30 (22.1)
Lack time	2 (1.5)
Lack of finance	80 (58.8)
Lack of technician	15 (11.0)

3. What services and support do you receive from the DDC ?

Nothing	30 (22.1)
Financial support	69 (50.7)
Supervision	5 (3.7)
Training	4 (2.9)
Political support	2 (1.5)
Project	8 (5.9)
Technical assistance	36 (26.5)
Consultation	12 (9.6)
Provide materials	36 (26.5)

4. What services/support do you think you *should* get from the DDC ?

Financial support	80 (59.7)
Supervision	17 (12.7)
Training	7 (5.2)
Political support	8 (6.0)
Project	14 (10.4)
Technical assistance	60 (44.8)
Consultation	53 (39.6)
Provide materials	2 (1.5)

5. What do you think of the service/support you receive from the DDC ?

Helpful	13 (9.6)
Not helpful	32 (23.5)
Average	91 (66.9)

6. How do you get information about the needs of the community you serve ?

Community meeting	81 (59.6)
Informal source	37 (27.2)
Key informant	73 (53.7)
Women groups	3 (2.2)
Line department	1 (0.7)
Village profile	4 (2.9)
Self	67 (49.3)

7. What information do you think you need to help you plan your services to your community ?

Population	23 (17.7)
Literacy	2 (1.5)
Income level	14 (10.8)
Production/animal	2 (1.5)
Health	2 (1.5)
Need of people	56 (43.1)
Children	2 (1.5)
Women	1 (0.8)
Area statistics	38 (29.2)
Technical advice	56 (43.1)

8. Do you think VDC priorities are reflected in DDC (Council) decisions ?

Yes	59 (43.4)
No	65 (47.8)
Some	12 (8.8)

9. If not, how could this situation be changed ?

Nothing	3 (3.9)
Involve VDC decision making	48 (62.3)
More DDC visit	16 (20.8)
Less political interference	9 (11.7)
Community information	7 (9.1)
Technical assistance	9 (11.7)
Regular funding	11 (14.3)
Provide materials	4 (5.2)

Annex 3.7
INTERVIEW WITH DDC Chairman

1. What do you think of the government services provided in this district?

	good	Bad	Average	
Health			5 (18.5)	22(81.5)
Agriculture	1 (3.7)	11 (40.7)	15 (55.6)	
Education	4 (14.8)	8 (29.6)	15 (55.6)	
Water			4 (14.8)	23(85.2)
Sanitation		22 (81.5)	5 (18.5)	
Postal		9 (33.3)	2 (7.4)	16(59.3)
Telephone	4 (14.8)	6 (22.2)	17 (63)	
Roads		15 (55.6)	12 (44.4)	
Electricity		12 (44.4)	15 (55.6)	

2. What are the difficulties of providing public services in this district ?

Lack resources	16 (59.3)
Lack information	10 (37.5)
Lack community support	5 (18.5)
Lack time	1 (3.7)
Political interference	3 (11.1)
Bad service delivery	15 (55.6)
Construction work	17 (63.0)

3. What services and support do you receive from the central government ?

Nothing	1 (3.7)
Financial support	20 (74.1)
Policy	6 (22.2)
Project	6 (22.2)
Training	2 (7.4)
Supervision	1 (3.7)
Planning	15 (55.6)
Autonomous body	2 (7.4)

4. What services/support do you think you *should* get from central government ?

Financial support	13 (48.1)
Policy	8 (29.6)
Planning	12 (44.4)
Supervision	3 (11.1)
Project	23 (85.2)
Create awareness	5 (18.5)

5. What do you think of the service/support received from the central government ?

Not helpful	10 (37)
Average	17 (63)

6. How could your service to the district be improved ?

More VDC supervision	8 (29.6)
More VDC training	5 (18.5)
More information	14 (51.9)
More resources	16 (59.3)
More listening	4 (14.8)
More project	6 (22.2)
Financial support	6 (22.2)
Autonomous body	3 (11.1)

7. How could the service you receive from the central government be improved ?

No suggestion	1 (3.7)
More resources	20 (74.1)
More supervision	6 (22.2)
More training	6 (22.2)
More information	2 (7.4)
More community meeting	1 (3.7)
Financial support	15 (55.6)
Autonomous body	2 (7.4)

8. How do you get information about the needs of the district you serve ?

From VDCC	16 (59.3)
From district department	6 (22.2)
From people	15 (55.6)
From media	1 (3.7)
From key informant	13 (48.1)
From district profile	6 (22.2)

9. What information do you think you need to help you plan your services to your district?

VDC need	5 (18.5)
Production level	2 (7.4)
Planning	9 (33.3)
People's need	2 (7.4)
Resources	15 (55.6)
Community need	15 (55.6)
District profile	20 (74.1)

10. Is it easy to co-ordinate the activities of different line ministries in the district?

Easy	4 (14.8)
Difficult	14 (51.9)
Possible	9 (33.3)

11. How are VDC priorities reflected in the

DDC's plans ?

In project	2 (7.4)
In training	4 (14.8)
Lack of source	7 (25.9)
People's need	11 (40.7)
Information sharing	16 (59.3)
Income generation project	4 (14.8)
District profile	5 (18.5)
Development work	1 (3.7)

12. How are DDC priorities reflected in VDC plans in this district ?

Not reflected	1 (3.7)
District profile	2 (7.4)
Community groups	6 (22.2)
people's need	4 (14.8)
Plan and programme	17 (63)
Information sharing	9 (33.3)
Coordination	18 (66.7)
Income generation programme	1 (3.7)

Annex 3.8

INTERVIEW WITH DISTRICT HEALTH OFFICER

35 DHOs were interviewed in total.
Some of the questions have multiple answers.

1. What are the main challenges facing your service in this District ?

Lack of resources	3 0 (88.2)
Lack staff	26 (76.5)
Lack female staff	2 (5.9)
Lack supervision/training	8 (23.5)
Lack information	5 (14.7)
Poor health/nutrition	1 (2.9)
Low literacy	5 (14.7)
Poor environment	1 (2.9)

2. When did you last have direct contact with the central Ministry of Health ?

Never	1 (2.9)
less than one month ago	10 (29.4)
more than 1 month ago	6 (17.6)
3 months ago	17 (50.0)

3. How does the ministry of health keep you informed about matters of importance ?

Meeting	5 (11.4)
Training	1 (2.9)
Letters/orders	34 (100)
Supervision	4 (11.8)

3.1 Does this system work well?

Yes	23 (67.3)
No	11 (32.4)

4. What services do you receive from the central ministry of health?

Nothing	1 (3.1)
Supervision	19 (59.4)
Training	5 (15.6)
Information	3 (9.4)
Feedback	3 (9.4)
Projects	2 (6.3)
Medical instruction	17 (53.1)
Trained staff	7 (21.9)

5. What do you think of the service you receive from the Ministry of health

Helpful	8 (23.5)
Not helpful	12 (35.3)
Average	14 (41.2)

6. Which of the services you receive from the central ministry of health (apart from financial support) is of most use to you?

Nothing	6 (17.6)
Supervision	11 (32.4)
Training	3 (8.8)
Information	5 (14.7)
Feedback	1 (2.9)
Project	2 (5.9)
Trained staff	8 (23.5)
Medical instrument	3 (8.8)

7. Which of the services is of least use to you?

Nothing	8 (29.6)
Supervision	4 (14.8)
Training	1 (3.7)
Information	3 (11.1)
Feedback	5 (18.5)
Project	1 (3.7)
Political posting	8 (29.6)
PHC clinic	2 (7.4)

8. What do you suggest for improving the service you receive from the central ministry of health?

Nothing	1 (3.0)
More resources	10 (30.3)
Better planning	20 (60.6)
More supervision	13 (39.4)
More training	10 (30.3)
More project	14 (42.4)
More supplies	1 (3.0)

9. Which aspects of the health services in this District are you most satisfied with?

MCH project	16 (48.5)
Curative care	3 (9.1)
Hospital service	4 (12.1)

Mobile clinic	1 (3.0)
Community project	6 (18.2)
Vitamin A distribution	3 (9.1)
NIDs	2 (6.1)

9.1 Why are you most satisfied ?

Good coverage	25 (86.2)
Good quality	7 (24.1)
Easy	3 (10.3)
Budget in time	1 (3.4)
Supervision	1 (3.4)

10. Which aspects are you least satisfied with ?

Nothing	3 (9.1)
MCH project	8 (24.2)
Curative care	7 (21.2)
Hospital service	2 (6.1)
Emergency care	4 (12.1)
Community project	3 (9.1)
HP/SHP	4 (12.1)

10.1 Why are you least satisfied?

Not effective	3 (11.1)
Low coverage	8 (29.6)
High cost	1 (3.7)
Time consuming	3 (11.1)
Difficult	17 (63.0)
Mobility of staff	2 (7.4)

11. How could you improve the delivery of health services in this district ?

More resources	15 (46.9)
More staff	18 (56.3)
More supervision	9 (28.1)
More training	8 (25.0)
More information	5 (15.6)
More facilities	16 (50.0)
Better facility condition	2 (6.3)

Annex 3.9

INTERVIEW WITH DISTRICT

AGRICULTURAL DEVELOPMENT OFFICER OR DISTRICT LIVESTOCK DEVELOPMENT OFFICER

(to answer on behalf of both services)

In total, 39 DAOs or DLOs were interviewed.

1. What are the main challenges facing your service in this District ?

1. Lack of resources	30 (76.9)
2. Lack of information	7 (17.9)
3. Lack of new technology	23 (59.0)
4. Lack of staff	21 (53.8)
5. Lack of water source	4 (10.3)
6. Poor soil	3 (7.7)
7. Lack of supervision/training	3 (7.7)

2. How many SMSs do you have (livestock and agricultural)

Mean:	14 SMSs
Median:	13 SMSs

3. How many {JT/JAS} do you have (livestock and agricultural)

Mean:	24 JT/JAS
Median:	26 JT/JAS

3. When did you last have direct contact with the central Ministry and Departments of Agriculture?

0. Never	1 (2.6)
1. Less than one month ago	21 (53.8)
1. More than one month ago	16 (41.0)
2. Three months ago	1 (2.6)

4. How does the Ministry and departments of Agriculture keep you informed about matters of importance ?

1. Meeting	1 (2.6)
2. Supervision visit	1 (2.6)
3. Training	1 (2.6)
4. Letter/order	33 (84.6)
5. Feedback	2 (5.1)
6. Media	33 (84.6)

4.1 Does this system work well?

Yes	25 (64.1)
No	2 (5.1)
Okay	12 (30.8)

5. What services do you receive from the central Ministry and departments of Agriculture?

1. Supervision	17 (43.6)
2. Training	7 (17.9)
3. Finance/supply	6 (15.4)
4. Information	27 (69.2)
5. Feedback	30 (76.9)

6. What do you think of the service you receive from the central ministry and departments?

Helpful	16 (41.0)
Not helpful	1 (2.6)
Oaky	22 (56.4)

7. Which of the services you receive from the central ministry and departments of agriculture is of most use to you?

0. Nothing	1 (2.6)
1. Finance	19 (48.7)
2. Supply	10 (25.6)
3. Supervision	7 (17.9)
4. Information	1 (2.6)
5. Technology	21 (55.3)

8. Which of the services is of least use to you ?

0. Nothing	12 (35.3)
1.training	1 (2.9)
2. Supervision	8 (23.5)
3. Information	5 (14.7)
4. Technology	2 (5.9)
5. Transfer of staff	6 (17.6)

9. What do you suggest for improving the service you receive from the central Ministry and departments of Agriculture ?

1. More resources	10 (26.3)
2. More staff	9 (23.7)
3. More supervision	15 (39.5)
4. More training	6 (15.8)
5. More information	17 (44.7)
6. New technology	10 (26.3)
7. More feedback	21 (55.3)

10. Which aspects of agricultural services in this District are you most satisfied with?

0. Nothing	1 (2.6)
1. Extension service	19 (48.7)
2. Information sharing	10 (25.6)
3. New technology	7 (17.9)
4. New seeds	1 (2.6)
5. Training	5 (12.8)
6. Horticulture	11 (28.2)

10.1 Why are you satisfied with these services?

1. Good coverage	11 (28.2)
2. Improve production	9 (23.1)
3. Low cost	4 (10.3)
4. Liked by people	6 (15.4)
5. Suit local situation	2 (5.1)
6. Easy to apply	1 (2.6)
7. Information sharing	18 (46.2)

8. Control diseases of hort 1 (2.6)

11. Which aspects are you least satisfied with?

0. Nothing	5 (13.2)
1. Information	7 (18.4)
2. Technology	6 (15.8)
3. Extension service	12 (31.6)
4. Irrigation	1 (2.6)
5. Tools	1 (2.6)
6. Seeds	4 (10.5)
7. Transfer of staff	1 (2.6)
8. Credit/loan	1 (2.6)

11.1 Why are you least satisfied with this service?

0. No reason	4 (11.4)
1. High cost	3 (8.6)
2. Difficult to apply	7 (20.0)
3. Low coverage	1 8 (51.4)
4. Not suitable for local situation	2 (5.7)
5. Disliked by people	1 (2.9)

12. How do you think you could improve delivery of agricultural and livestock services in this district?

1. More resources	24 (63.2)
2. More staff	10 (26.3)
3. More community visit	9 (23.7)
4. New technology	23 (60.5)
5. Better tools	2 (5.3)
6. More information	17 (44.7)
7. More training/supervision	16 (42.1)

Annex 3.10
INTERVIEW WITH LDO

1. What do you think of the government services provided in this district?

	good	*Bad*	*Average*	
Health		1(3.0)	5(15.2)	27(81.8)
Agriculture	6(18.2)	4(12.1)	23(81.8)	
Education	7(21.1)	6(18.2)	20(60.6)	
Water		9(27.3)	3(9.1)	2(63.6)
Sanitation	1(2.9)	25(73.5)	8(23.5)	
Postal		16(48.5)	17(51.5)	
Telephone	12(35.3)	7(20.6)	15(44.1)	
Roads	1 (2.9)	16(47.1)	17(50.0)	
Electricity	7(20.6)	9(26.5)	18(52.9)	

2. What are the difficulties of providing public services in this district ?

Lack resources	22 (68.8)	
Lack information		1 (3.1)
Lack community support	4 (12.5)	
Lack time	2 (6.3)	
Political interference	4 (12.5)	
Bad service delivery	15 (46.9)	
Lack awareness		16 (50)
Construction work	19 (59.4)	

3. What services and support do you receive from the central government ?

Nothing		1 (2.9)
Financial support		25 (73.5)
Policy	14 (41.2)	
Project		2 (5.9)
Training	1 (2.9)	
Supervision	5 (14.7)	
Planning	18 (52.9)	
Autonomous body	5 (14.7)	

4. What services/support do you think you *should* get from central government ?

Nothing		1 (2.9)
Financial support		17 (50)
Policy	12 (35.3)	
Planning	10 (29.4)	
Supervision	5 (14.7)	
Training	5 (14.7)	
Project		24 (70.6)
Create awareness		11 (32.4)

5. What do you think of the service/support received from the central government ?

Helpful		3 (9.1)
Not helpful	4 (12.1)	
Average		26 (78.8)

6. How could your service to the district be improved ?

No suggestion	1 (2.9)	
More VDC supervision	10 (29.4)	
More VDC training	13 (38.2)	
More information	13 (38.2)	
More resources	16 (47.1)	
More listening	9 (26.5)	
More project	5 (14.7)	
Financial support		10 (29.4)
Autonomous body	4 (11.8)	

7. How could the service you receive from the central government be improved ?

No suggestion	1 (2.9)	
More supervision		6 (17.6)
More training	3 (8.8)	
More information	9 (26.5)	
More resources	9 (26.5)	
More community meeting		1 (2.9)
Better planning	26 (76.5)	
Financial support		20 (58.5)
Autonomous body	4 (11.8)	

8. How do you get information about the needs of the district you serve ?

From DVCC	26 (81.3)
From district department	13 (40.6)
From people	9 (28.1)
From media	4 (12.5)
From NGOs	7 (21.9)
From key informant	19 (59.4)
District profile	5 (15.6)

9. What information do you think you need to help you plan your services to your district?

VDC need	4 (12.5)	
Production level		2 (6.3)
Info. On Children/women		1 (3.1)
Planning	13(40.6)	
People's need	6 (18.8)	
Resources	8 (25.0)	
Community need		1 0 (31.3)
District profile	26 (81.3)	

10. Is it easy to co-ordinate the activities of different line ministries in the district?

Easy	9 (28.1)	
Difficult	5 (15.6)	
Possible		18 (53.6)

11. How are VDC priorities reflected in the DDC's plans ?

Not reflected	1 (3.0)
In project	1 (3.0)
In training	1 (3.0)
Lack of source	10 (30.3)
People's need	13 (39.4)
Information sharing	23 (69.7)
Income generation project	3 (9.1)
District profile	12 (36.4)
Development work	10 (30.3)

12. How are DDC priorities reflected in VDC plans in this district ?

Not reflected	2 (6.1)
District profile	2 (6.1)
Community groups	5 (15.2)
people's need	4 (12.1)
Plan and programme	26 (78.8)
Information sharing	11 (33.3)
Coordination	25 (75.8)
Income generation programme	2 (6.1)
Autonomous body	2 (6.1)

ANNEX 4: WEIGHTED AND UNWEIGHTED VALUES OF KEY INDICATORS

The derivation of the weights applied is given in the report of NMIS cycle 1 and in an Annex to that report. In this cycle, the same weights were used. They were applied using the Epi Info CSAMPLE programme.

Table A4.1 Weights applied to each District (actually each group of rural or urban sites).

Rural sites		Urban sites	
District	Weight	District	Weight
1. Udayapur	1.50	27. Lalitpur	0.48
2. Morang (r)	0.94	28. Kavrepalanchok	0.29
3. Siraha (r)	1.24	29. Makwanpur	0.46
4. Sindhupalchok	0.55	30. Saptari	0.21
5. Kathmandu (r)	1.50	31. Parsa	0.27
6. Dhading	1.59	32. Kaski	0.48
7. Ramenchhap	1.92	33. Palpa	0.34
8. Dhanusha	1.04	34. Kapilvastu	0.19
9. Rautahat	1.26	35. Banke	0.32
10. Gorkha	1.71	36. Jhapa	0.27
11. Syangja	0.34	37. Sunsari	0.51
12. Gulmi	1.51	38. Kathmandu (u)	0.48
13. Rupandehi	0.54	39. Kailali (u)	0.33
14. Rolpa	1.27	40. Morang (u)	0.26
15. Dialekh	1.26	41. Siraha (u)	0.35
16. Bardiya	0.44		
17. Achham	0.51		
18. Kailali (r)	0.44		
19. Sankhuwasabha	0.53		
20. Ilam	1.93		
21. Bhojpur	2.06		
22. Mustang	0.006		
23. Myagdi	4.03		
24. Jumla	0.53		
25. Kalikot	0.45		
26. Darchula	0.46		

(r)= rural sites within the district; (u)=urban sites within the district

Table A4.2 Unweighted and weighted values of key national indicators

Indicator	Unweighted value	Weighted value	95% CI of weighted value
Used Govt. Health service last month	12.3	12.8	11.4 -14.2
Used other health services	23.8	23.7	21.9-25.5
Proportion of respondent thought the quality of Govt health service is good	7.6	7.8	6.5-9.0
Health workers available	93.1	91.2	87.5-95.0
All medicine available	30.5	29.2	24.3-34.1
Willing to pay for improved health service	68.9	69.9	65.7-74.1
Mean landarea (ropani)	14.1	13.8	12.6-14.9
Proportion applied for agriculture loans	13.0	13.0	11.2-14.9
Proportion considered agriculture service of good quality	2.4	2.4	1.4-3.6
Proportion considered livestock service of good quality	2.8	2.7	1.7-3.7
Proportion reported JT/JTA visit communities	3.4	3.6	2.5-4.7
Proportion reported visited by AEW of NGOs	1.8	1.9	1.1-2.8
Proportion visited agriculture centers	9.4	9.5	7.2-11.9

The weighted values are close to the unweighted values for all the key indicators. The weighted values of indicators at national level are used in the Results section unless specified otherwise.

Annex 5: Disaggregated results by geographic area and ethnicity

Tables

Figures (maps)

Table A5.1 Key indicators related to health service by geographic location

Location	% hh used govt health service in last month	% hh used other health service in last month	% hh rated Govt. Health service as 'good'	% contacts health worker available*	% contacts all medicines needed available*	% hh willing to pay for improved health service
Development regions						
Far Western	6 (84)	18 (251)	3 (40)	98 (84)	42 (36)	64 (871)
Mid Western	16 (326)	31 (644)	7 (130)	97 (388)	44 (176)	63 (1260)
Western	15 (509)	24 (839)	8 (227)	95 (610)	38 (241)	65 (2203)
Central	11 (585)	20 (1035)	7 (354)	90 (616)	21 (145)	83 (4266)
Eastern	13 (516)	26 (1004)	6 (228)	91 (582)	25 (161)	59 (2239)
Eco-zones						
Hills	13 (904)	25 (1639)	9 (603)	91 (992)	37 (406)	69 (4662)
Terai	13 (927)	24 (1784)	3 (236)	94 (1085)	23 (263)	70 (5178)
Mountains	12 (189)	18 (296)	12 (190)	96 (203)	43 (90)	65 (999)
Urban / rural split						
Urban	10 (258)	25 (655)	13 (326)	94 (304)	27 (85)	68 (1757)
Rural	13 (2020)	24 (3773)	7 (1029)	93 (2280)	31 (759)	69 (10839)
Eco-development regions						
Eastern Hill	13 (294)	33 (394)	10 (119)	94 (194)	45 (92)	72 (847)
Eastern Terai	13 (161)	20 (462)	4 (82)	90 (324)	12 (42)	50 (1147)
Eastern Mountain	19 (61)	46 (148)	9 (27)	89 (64)	38 (27)	78 (245)
Central Hill	10 (296)	25 (451)	11 (194)	81 (216)	27 (72)	84 (1509)
Central Terai	13 (227)	18 (517)	2 (62)	94 (333)	14 (50)	84 (2394)
Central Mountain	12 (62)	13 (67)	20 (98)	100 (67)	34 (23)	73 (263)
Western Hill	11 (103)	23 (558)	9 (214)	94 (443)	33 (156)	55 (1308)
Western Terai	16 (384)	29 (268)	4 (35)	98 (144)	46 (67)	85 (789)
Western Mountain	18 (22)	11 (13)	24 (28)	96 (23)	75 (18)	89 (106)
Mid-Western Hill	25 (210)	21 (179)	8 (61)	96 (109)	62 (69)	59 (505)
Mid-Western Terai	12 (100)	53 (454)	6 (51)	97 (260)	37 (97)	73 (621)
Mid-Western Mountain	5 (16)	3 (11)	5 (18)	100 (19)	53 (10)	47 (134)
Far-Western Hill	5 (24)	18 (111)	3 (15)	94 (30)	53 (17)	81 (493)
Far-Western Terai	5 (32)	18 (83)	1 (6)	100 (24)	29 (7)	50 (227)
Far-Western Mountain	9 (28)	18 (57)	6 (19)	100 (30)	40 (12)	48 (151)
All Nepal (weighted)	**13 (2278)**	**24 (4428)**	**8 (1355)**	**91 (2584)**	**29 (844)**	**70 (12596)**

* Percentages are of contacts with government health services in the previous month

Table A5.2 Key health related indicators by ethnic groups

Ethnic group	% hh used govt. health service in last month	% families hh used other health service in last month	% hh rated govt. Health service as 'good'	% contacts with health worker available*	% contacts with all required medicines available*	% hh willing to pay for improved health service
Brahmin	15 (448)	27 (831)	11 (314)	96 (536)	38 (211)	74 (2215)
Chettri	12 (406)	24 (839)	8 (256)	92 (454)	31 (151)	65 (2188)
Newar	9 (80)	24 (228)	15 (133)	93 (86)	33 (30)	77 (710)
Gurung/Ghale	14 (71)	19 (98)	9 (47)	91 (79)	35 (30)	84 (425)
Magar	11 (98)	21 (187)	11 (94)	91 (106)	32 (37)	65 (552)
Rai/Limbu	11 (99)	28 (243)	9 (73)	95 (110)	39 (45)	65 (567)
Tamang/Sherpa	9 (78)	23 (187)	14 (113)	81 (70)	32 (28)	79 (649)
Muslim	11 (71)	23 (153)	4 (26)	98 (78)	25 (20)	75 (486)
Occupational	12 (322)	21 (571)	5 (123)	91 (362)	28 (109)	54 (1420)
Tharu	13 (150)	29 (352)	5 (53)	97 (179)	32 (60)	65 (770)
Yadav	14 (126)	20 (173)	2 (17)	88 (137)	20 (30)	74 (646)
Other (Terai)	13 (253)	21 (417)	3 (64)	96 (308)	18 (57)	78 (1513)
Other (Hills)	10 (71)	21 (144)	6 (42)	89 (73)	43 (35)	67 (449)

* Percentages are of contacts with government health services in the previous month

Table A5.3 Households headed by farmers, average land holding and application for agricultural loans by geographic location

Location	% of hh with farmer as household head	Average area of land (Mean Ropani)	% hh who applied for agricultural loan
Development regions			
Far Western	86 (1169)	14 (1386)	6 (81)
Mid Western	84 (1747)	18 (2075)	20 (351)
West	82 (2850)	15 (3464)	9 (278)
Central	62 (3216)	12 (5173)	16 (650)
Eastern	70 (2669)	16 (3838)	13 (370)
Eco-zones			
Hills	82 (5662)	12 (6885)	11 (702)
Terai	61 (4560)	17 (7424)	19 (963)
Mountains	89 (1456)	16 (1627)	4 (65)
Urban / rural split			
Urban	24 (266)	10 (2626)	11 (98)
Rural	73 (11678)	15 (15936)	13 (1730)
Eco-development regions			
Eastern Hill	83 (996)	16 (1211)	17 (177)
Eastern Terai	60 (1384)	16 (2308)	11 (164)
Eastern Mountain	91 (289)	23 (319)	10 (29)
Central Hill	74 (1321)	10 (1796)	12 (203)
Central Terai	50 (1427)	14 (2875)	24 (432)
Central Mountain	93 (468)	9(502)	3 (15)
Western Hill	84 (2025)	14 (2406)	9 (199)
Western Terai	78 (731)	19 (936)	10 (77)
Western Mountain	77 (94)	7 (122)	2 (2)
Mid-Western Hill	92 (795)	10 (863)	13 (108)
Mid-Western Terai	71 (607)	23 (852)	39 (243)
Mid-Western Mountain	96 (345)	21 (360)	0 (0)
Far-Western Hill	86 (525)	9 (609)	3 (15)
Far-Western Terai	91 (411)	20 (453)	11 (47)
Far-Western Mountain	80 (260)	17 (324)	6 (19)
All Nepal (Weighted)	**71 (12300)**	**14 (18562)**	**13 (1828)**

Table A5.4 Visits by extension workers, visits to centres and rating of services by geographic location

Location	% hh visited by JT/JTAs	% hh visited by NGO extension workers	% hh who visited agriculture / livestock centre	% hh rating agriculture service as 'good'	% hh rating livestock service as 'good'
Development regions					
Far Western	2 (22)	0 (3)	3 (32)	1 (11)	1 (15)
Mid Western	3 (62)	1 (11)	14 (253)	4 (60)	5 (75)
Western	6 (177)	2 (50)	16 (516)	4 (115)	4 (120)
Central	3 (116)	3 (137)	6 (234)	2 (61)	2 (74)
Eastern	3 (77)	1 (40)	6 (173)	1 (35)	2 (39)
Eco-zones					
Hills	4 (259)	1 (86)	12 (774)	3 (163)	3 (187)
Terai	3 (150)	3 (132)	7 (368)	1 (67)	2 (85)
Mountains	3 (45)	2 (23)	4 (66)	4 (52)	3 (51)
Urban / rural split					
Urban	3 (27)	2 (17)	13 (119)	4 (35)	5 (47)
Rural	4 (454)	2 (241)	9 (1208)	2 (282)	3 (323)
Eco-development regions					
Eastern Hill	3 (31)	2 (20)	7 (76)	1 (9)	1 (7)
Eastern Terai	3 (40)	1 (20)	5 (79)	2 (22)	2 (23)
Eastern Mountain	2 (6)	0 (0)	6 (18)	2 (4)	3 (9)
Central Hill	4 (64)	1 (24)	8 (129)	2 (29)	3 (44)
Central Terai	2 (36)	5 (95)	5 (95)	1 (13)	1 (14)
Central Mountain	3 (16)	4 (18)	2 (10)	4 (19)	3 (16)
Western Hill	6 (126)	2 (39)	20 (438)	5 (96)	5 (107)
Western Terai	5 (37)	1 (8)	7 (59)	1 (7)	1 (10)
Western Mountain	14 (14)	3 (3)	19 (19)	12 (12)	3 (3)
Mid-Western Hill	5 (38)	0 (3)	15 (128)	4 (29)	4 (29)
Mid-Western Terai	4 (23)	1 (8)	20 (126)	4 (23)	6 (36)
Mid-Western Mountain	0 (1)	0 (0)	1 (2)	2 (8)	3 10)
Far-Western Hill	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)
Far-Western Terai	3 (14)	0 (1)	2 (9)	1 (2)	1 (2)
Far-Western Mountain	3 (8)	1 (2)	5 (17)	3 (9)	5 (13)
All Nepal (weighted)	**4 (481)**	**2 (258)**	**10 (1327)**	**2 (317)**	**3 (370)**

Table A5.5 Households headed by farmers, average land holding and application for agricultural loans by ethnic groups

Ethnic group	% of hh with farmer as household head	Average area of land (Mean Ropani)	% families applied for credit and loans
Brahmin	67 (2087)	15 (3031)	14 (351)
Chettri	81 (2843)	15 (3430)	10 (295)
Newar	44 (394)	8 (931)	7 (38)
Gurung/Ghale	85 (446)	10 (513)	8 (38)
Magar	80 (711)	11 (876)	13 (94)
Rai/Limbu	81 (725)	16 (883)	8 (61)
Tamang/Sherpa	74 (612)	12 (832)	10 (65)
Muslim	51 (341)	13 (659)	17 (63)
Occupational	52 (1420)	6 (2668)	10 (177)
Tharu	74 (913)	25 (1195)	22 (200)
Yadav	83 (753)	29 (882)	18 (140)
Other (Terai)	50 (1004)	15 (1946)	20 (237)
Other (Hills)	55 (389)	9 (699)	16 (68)

Table A5.6 Visits by extension workers, visits to centres and rating of services by ethnic groups

Ethnic group	% hh visited by JT/JTAs	% hh visited by NGO extension worker	% hh who visited agriculture / livestock centre	% hh rating agriculture service as 'good'	% hh rating livestock service as 'good'
Brahmin	6 (143)	2 (43)	17 (426)	5 (111)	5 (128)
Chettri	4 (107)	1 (36)	12 (375)	2 (68)	3 (82)
Newar	6 (32)	2 (12)	9 (47)	6 (29)	7 (32)
Gurung/Ghale	2 (7)	7 (33)	4 (19)	1 (2)	1 (5)
Magar	2 (16)	1 (5)	7 (53)	3 (22)	2 (15)
Rai/Limbu	3 (24)	1 (4)	6 (42)	2 (12)	1 (9)
Tamang/Sherpa	3 (18)	2 (14)	4 (28)	2 (14)	1 (8)
Muslim	4 (16)	2 (6)	8 (31)	2 (6)	2 (6)
Occupational	1 (21)	1 (8)	5 (78)	2 (27)	3 (39)
Tharu	4 (36)	1 (7)	9 (86)	1 (11)	3 (22)
Yadav	2 (15)	5 (40)	6 (51)	0 (2)	1 (8)
Other (Terai)	3 (38)	4 (46)	6 (73)	1 (7)	1 (9)
Other (Hills)	2 (8)	1 (4)	4 (18)	2 (6)	2 (7)

Figure A5.1 Proportion of households using government health services in last month

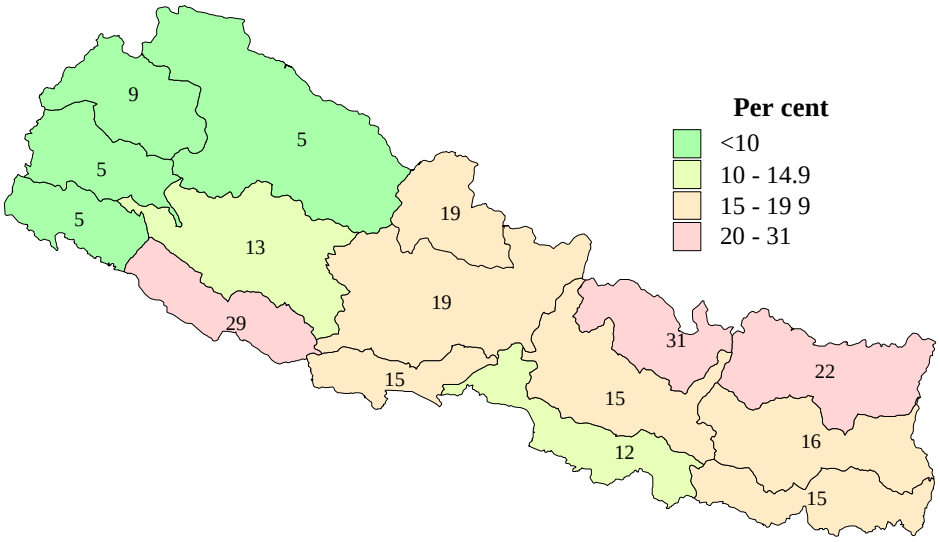


Figure A5.2 Proportion of households using other health services in last month

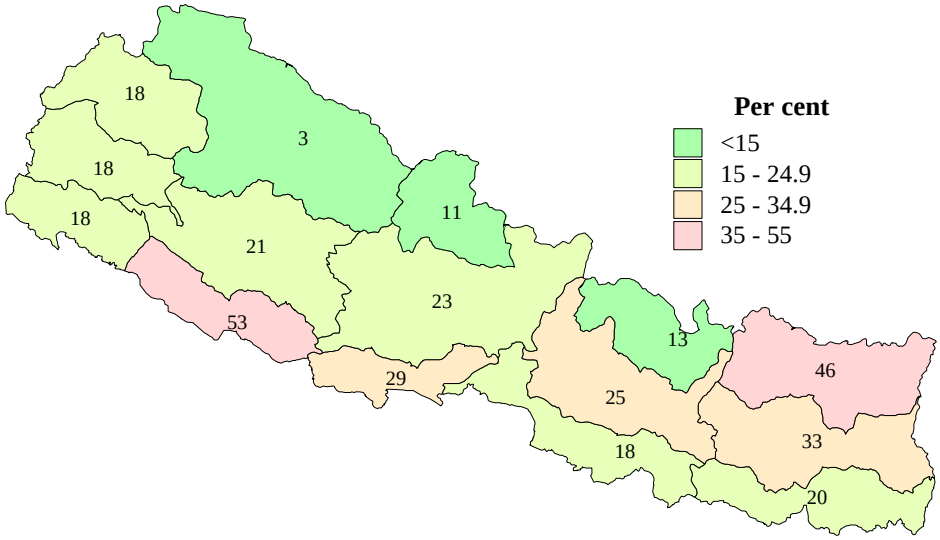


Figure A5.3. Proportion of households who rate the government health service as 'good'

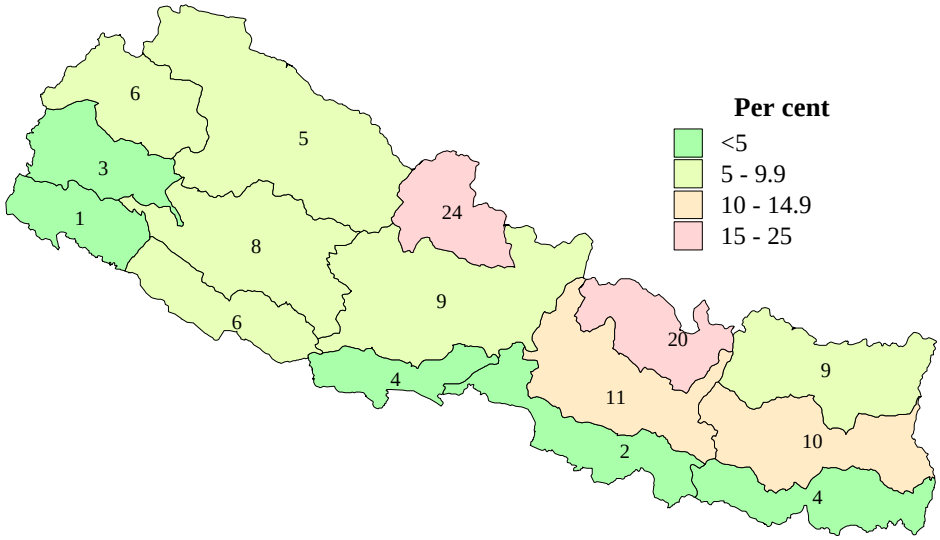


Figure A5.4 Proportion of contacts with government health services with all needed medicines available

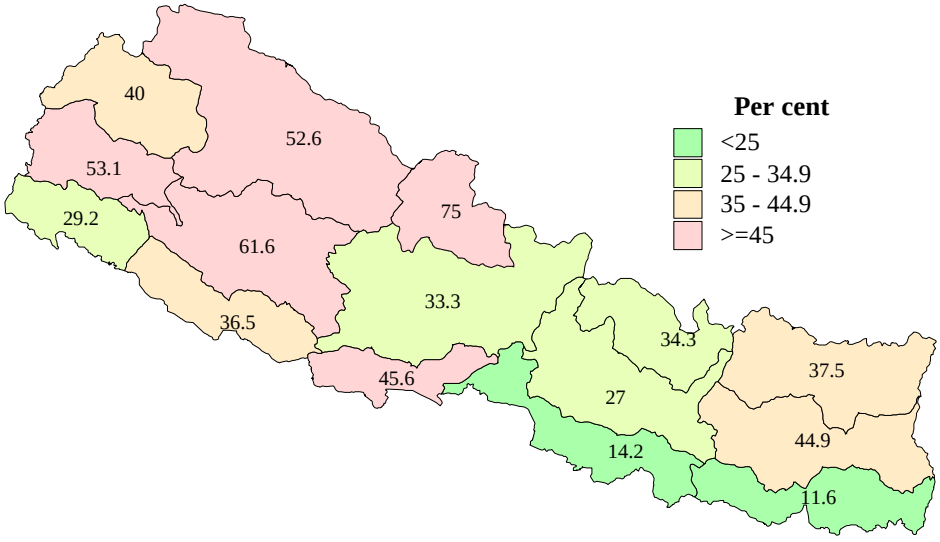


Figure A5.7 Percentage of household heads as farmers

Figure A5.5 Proportion of contacts with government health services with health worker available

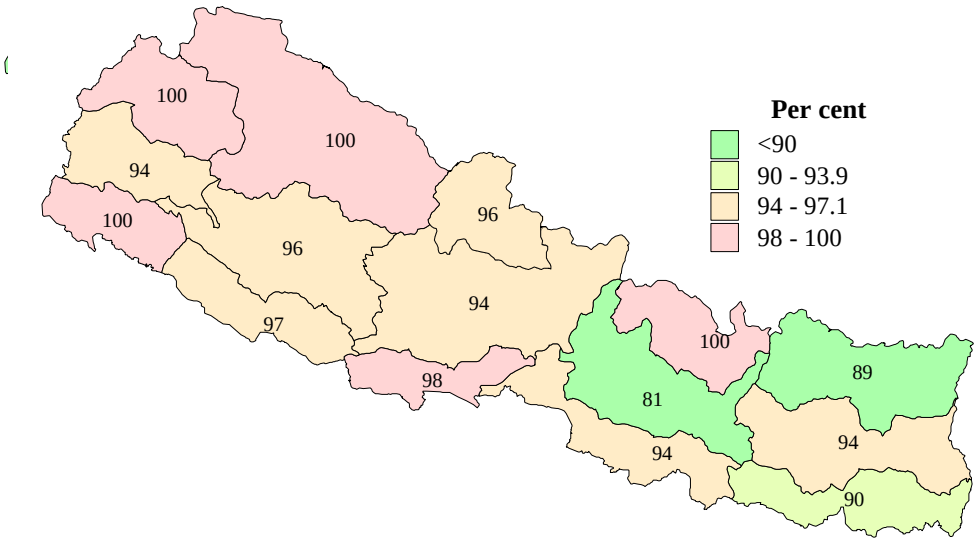


Figure A5.6 Proportion of households willing to pay for improved health services

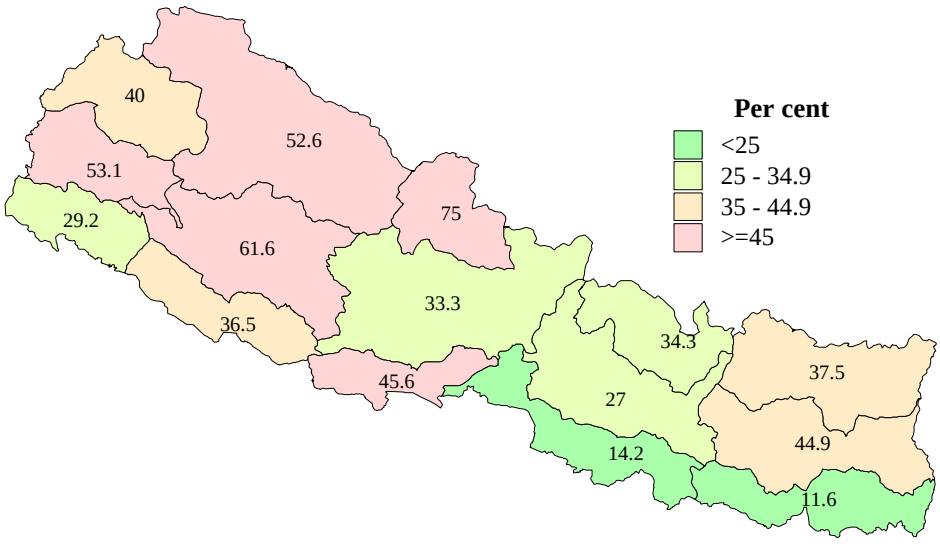


Figure A5.9 Percentage of households who applied for an agricultural loan

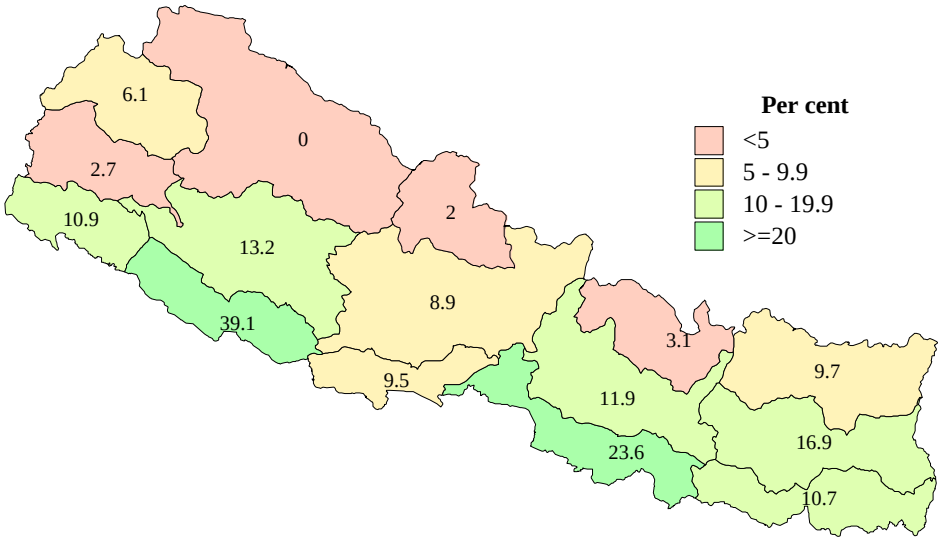


Figure A5.8 Mean total land holdings (ropani)

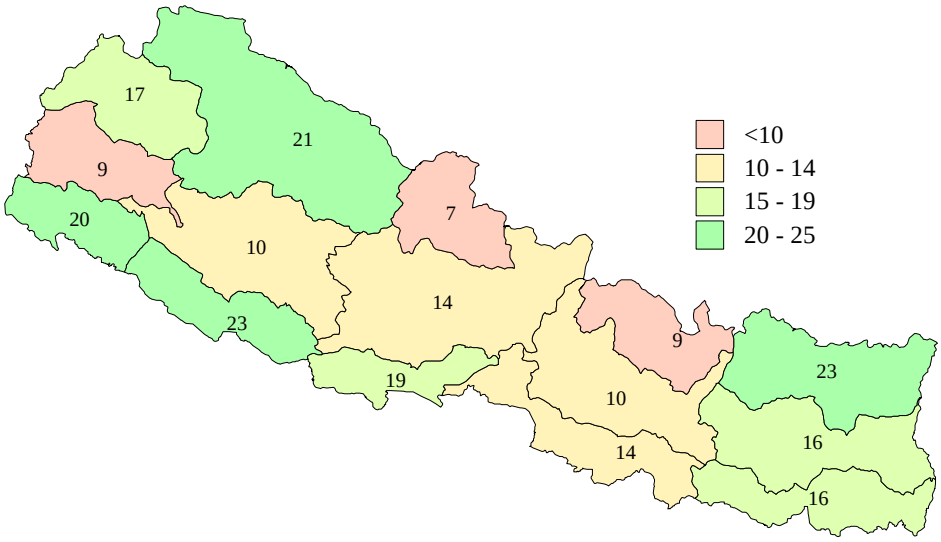


Figure A5.11 Percentage of households ever visited by an NGO agricultural extension worker

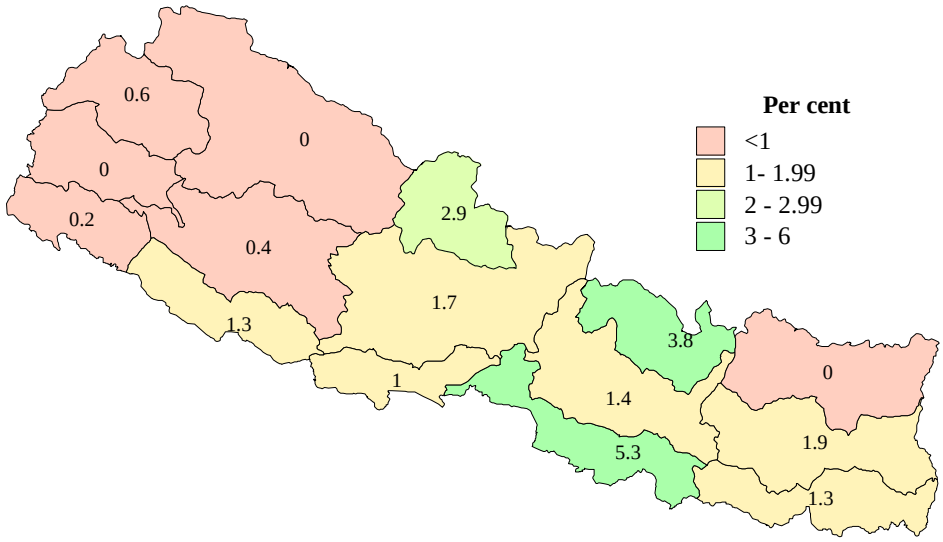


Figure A5.10 Percentage of households ever visited by JT/JTA

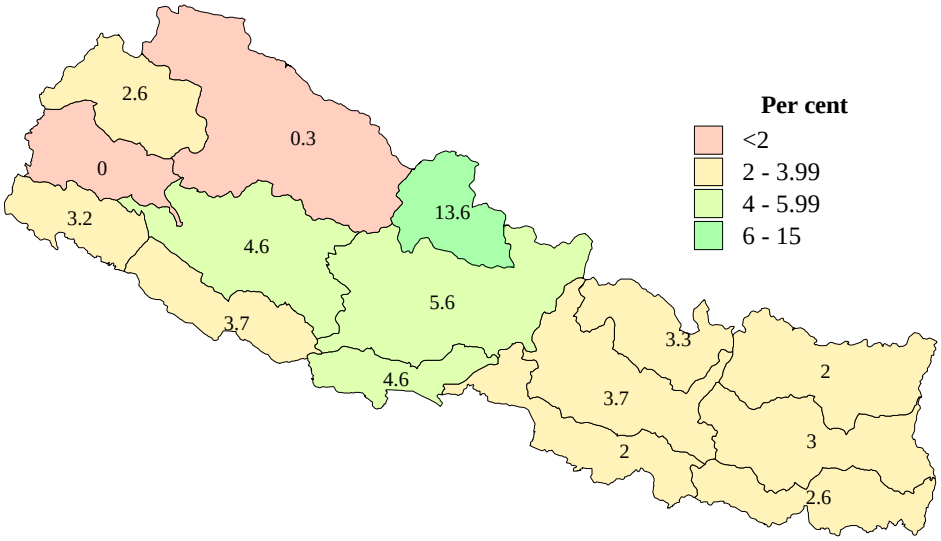


Figure A5.13 Percentage of households rating government agricultural service as "good"

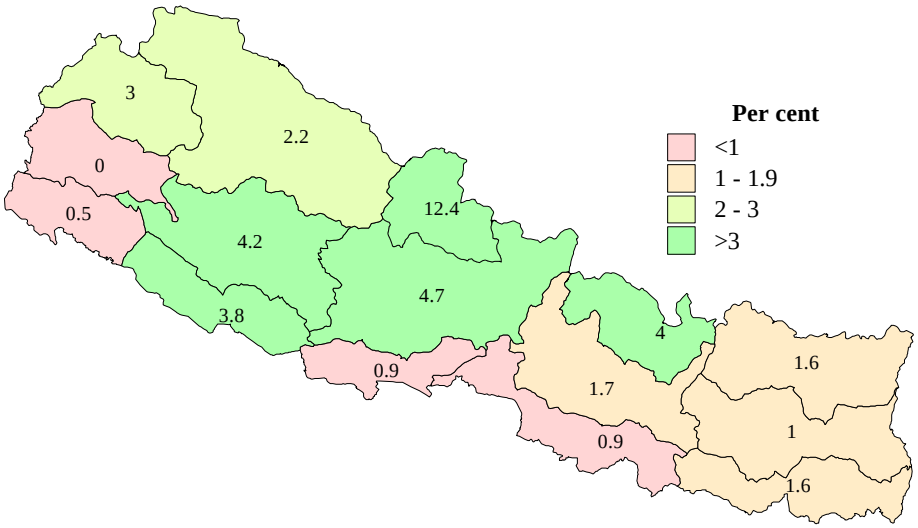


Figure A5.12 Percentage of households who have ever visited an agricultural/livestock centre

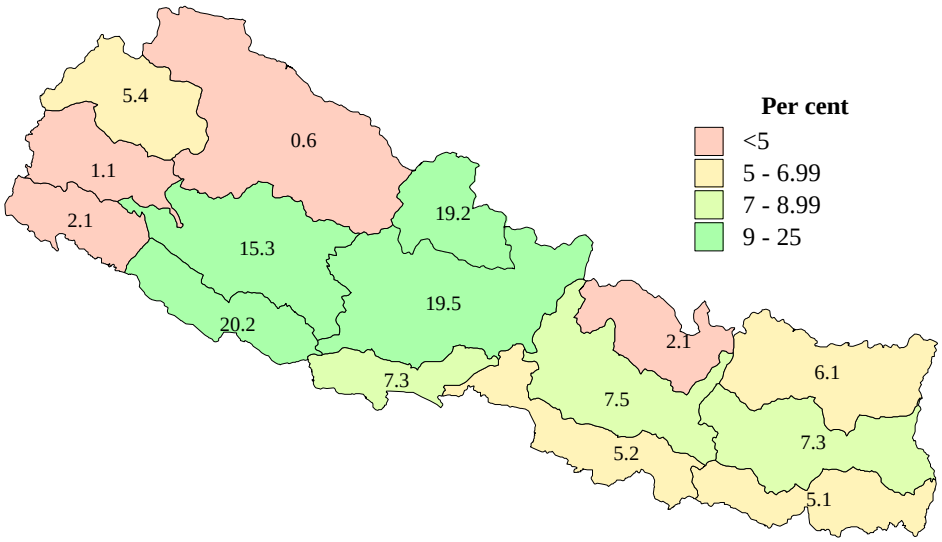


Figure A5.14 Percentage of households rating government livestock service as ‘good’