

# FOOD SECURITY & VULNERABILITY IN NEPAL

*A Case Study of Selected VDCs of  
Surkhet and Dailekh Districts*

*Rural Reconstruction Nepal (RRN)*

# *FOOD SECURITY & VULNERABILITY IN NEPAL*

*A Case Study of Selected VDCs of  
Surkhet and Dailekh Districts*

**Rural Reconstruction Nepal (RRN)**

# **Food Security & Vulnerability in Nepal**

## **A Case Study of Selected VDCs of Surkhet and Dailekh Districts**

**Study by:** Mr. Ganga Dutta Acharya

**Publication date:** April 2009

**Copies:** 500 (First Edition)

**Published by:**

Rural Reconstruction Nepal (RRN)

P.O.Box: 8130, Kathmandu, Nepal

St. Address

288 Gairidhara Marg, Gairidhara, Kathmandu, Nepal

Tel: 977-1-4427823, 4434165, 4425755, 4422153

Fax: 977-1-4004508 & 4443494

Email: [rrn@rrn.org.np](mailto:rrn@rrn.org.np)

Website: [www.rrn.org.np](http://www.rrn.org.np)

**In partnership with:** Oxfam GB, Nepal

**Printed at:** Sthapit Offset Press, Kathmandu

No part of this publication should be used for commercial purposes without prior consent of the publisher. However, use of the information contained in this document for academic, developmental and non-commercial purposes is highly encouraged. We would appreciate receiving a copy of all such publications that uses this document as a source of information.

<b>FOREWORD</b>	<b>v</b>
CHAPTER: ONE	1
<b>INTRODUCTION</b>	<b>1</b>
1.1 Background and Objectives	1
1.2 Study Methodology	3
1.3 Organisation of the Paper	5
CHAPTER: TWO	7
<b>FOOD SECURITY ASSESSMENT: THEORETICAL AND CONCEPTUAL APPROACHES</b>	<b>7</b>
2.1 Food Security Defined	7
2.2 Conceptual Framework for Analysis	9
CHAPTER: THREE	15
<b>CONTEXTUALISING FOOD SECURITY AND VULNERABILITY</b>	<b>15</b>
3.1. Food Security and Vulnerability in Nepal	15
3.2 Socio-economic Background of the Study Area	17
3.3 Rural Livelihoods	20
3.4 Food Security Situation	21
3.4.1 <i>Surkhet District</i>	21
3.4.2 <i>Dailekh District</i>	24
<b>HOUSEHOLDS' FOOD DEFICIT COPING STRATEGIES</b>	<b>29</b>
4.1. Changing Consumption Pattern	30
4.2. Temporary Migration in Search of Wage Employment	30
4.3. Sale of Livestock/Poultry	30
4.4. Collection of Forest Products/Foods	30
4.5 Borrowing	31
4.6 Other Strategies	31
CHAPTER: FIVE	33
<b>CAUSES OF VULNERABILITY TO FOOD SECURITY</b>	<b>33</b>
5.1. Limited or Inadequate Asset Position of the Households	33
5.2. Shocks and Unexpected Incidents	35
5.3. Policies, Institutional and Socio-cultural Factors	38

5.3.1 Interim Constitution of Nepal 2006 and Right to Food	39
5.3.2. Agriculture Perspective Plan (APP) and Food Security	40
5.3.3. National Agriculture Policy 2004) and Food Security	41
5.3.4 Socio-cultural and Institutional Factors	42
<b>CHAPTER: SIX</b>	<b>45</b>
<b>TACKLING FOOD INSECURITY AND VULNERABILITY</b>	<b>45</b>
6.1 Ways Forward	45
6.1.1. Policy Intervention	45
6.1.2 Community Intervention	47
6.2 Conclusion	48
<b>REFERENCES</b>	<b>51</b>

### **List of Tables**

<i>Table 1:</i> Distribution of Agricultural Households by Area of Land Holding	16
<i>Table 2:</i> Food Balance Sheet – Surkhet	22
<i>Table 3 :</i> Food Balance Sheet –Dailekh	25
<i>Table 4:</i> Food Deficit Status of Study VDCs	26
<i>Table 5:</i> Households' Coping Strategies in Selected VDCs of Surkhet and Dailekh Districts	32
<i>Table 6:</i> Risk Factors as Perceived and Experienced by the Rural Households with Respect to their Livelihoods	36

### **List of Boxes**

<i>Box 1:</i> Study Districts at a Glance	20
<i>Box 2:</i> Shock and Livelihoods Collapse	38
<i>Box 3:</i> Bal Kumari Could not Benefit from 'Food for Work' Program	43

### **List of Figures**

<i>Figure 1:</i> Conceptual Framework for Food Security Assessment	13
--	----

## FOREWORD

Nepal, one of the least developed countries has been suffering from chronic food crisis since many decades. This year, the crisis has further deepened due to the ongoing global financial crisis, anti-people policies of market oriented neo-liberal economy, political instability, and effects of climate change, which of course have not spared a single country globally. In Nepal, there are many settlements that are more vulnerable and prone to hunger pangs than others are. Therefore, we selected some settlements of Surkhet and Dailekh district for this study, which were reported as highly food deficit hence vulnerable to hunger and malnutrition.

The Public Health and Basic Livelihood Support (PHABLES) Programme, which focuses on water, sanitation, food security and livelihood in Surkhet and Dailekh districts, has been instrumental in creating livelihoods opportunities for the vulnerable sections of conflict-affected people. This assessment report can be a way forward for analysing the real food security situation in the districts and provide us with the suggestions for levelling up the challenges that lie ahead.

I would like to thank Mr. Ganga Dutta Acharya, the researcher who has devoted his time and energy to bring this report to the public. Similarly, the people and the RRN's field team stationed in both the districts, who provided us with first hand information directly from the field, are highly appreciated. I would also like to extend my thanks to Oxfam GB for the financial contribution. Last but not the least, I extend my sincere thanks to the RRN team in Kathmandu office for bringing this publication to you. Suggestions for the improvement of RRN publications in future are most welcome.

Thanking you



**Arjun Karki, PhD**

President , Rural Reconstruction Nepal (RRN)



## CHAPTER: ONE

**INTRODUCTION****1.1 Background and Objectives**

This study was carried out in September 2008 amidst increasing number of news reports about food insecurity situation in the hills and mountains of mid and far western regions of the country. This type of hues and cries have been the recurrent phenomena in this region for last several years, despite of which not much seems to have been done to avoid such situations on a permanent basis.

In the past, we did not know much about famine and hunger deaths in Nepal, even though many districts in hills and mountains of Nepal have long been the food deficit areas. Traditionally, there used to be several mechanisms to fulfill the local deficits. These mechanisms included trade, animal husbandry and exchange of resources like herbs, and employment in non-farm sector, which entailed seasonal and temporary migration. Food was transported to the food deficit areas with local means, as there was no restriction in doing that. As a result, food was accessible and affordable to most people. But at present, not only the physical availability of food is limited to all people but also the purchasing power of many households has seriously been compromised.

The government statistics on food balance shows that the total production of edible cereal grains exceeds the net requirements of the country this year. Still, nearly 300,000 people from nine hill and mountain districts of the mid and far west region of the country are in severe food crisis requiring immediate assistance (WFP 2008). 45 out of 75 districts of Nepal are regarded as food deficit districts to meet minimum requirements. Most of the districts, which are incapable of producing sufficient food, lie in the hill and mountainous regions.

In 1975, when a severe famine hit in the hills of mid west region, the government started to provide subsidised food in some of the affected districts. This practice has been continued till today. This practice not

only undermined local production system but also led to a situation of dependency of local people on government for the supply of basic staples. As a result, a large part of the government resources allocated for this region goes into airlifting the subsidised food. Ironically, it is argued in many cases that a major part of this food does not reach the needy, but goes into the hands of armies, government employees and influential people in the district headquarters.

Food aid can be a temporary measure to solve the immediate emergencies of food scarcity but it can not be a sustainable measure to tackle hunger and malnutrition problem for long. For long term solution to food insecurity, it requires a thorough analysis of the livelihood bases of local people and available resources and then taking pragmatic strategies to protect and prosper livelihood system of people.

This study seeks to assess food security status of people in some of the selected VDCs of Surkhet and Dailekh District of Mid–West region by using livelihoods approach. Rural Reconstruction Nepal (RRN), a national NGO has been working with the people of the disadvantaged groups to address problems associated with the food security and livelihood sustainability in some of the VDCs of these two districts for the last couple of years with the financial support from Oxfam GB/Nepal. These districts have been affected by subsequent crop failures due to recurrent droughts, hailstorms, landslides, and infestation of pests and diseases. These natural disasters have adversely affected the lives and livelihood of the people not only in the project VDCs but in the entire district.

Against this backdrop, this assessment aims to examine the general food security condition of rural households in Surkhet and Dailekh districts. Specifically, the study seeks to:

- a. assess the overall food security situation in affected areas.
- b. identify the coping strategies adopted by rural household to mitigate food insecurity
- c. identify pertinent causes of food insecurity in the study areas and

- d. recommend appropriate intervention strategies for food security in study areas.

The findings of the study are expected to contribute towards knowledge gap in food security discourses. The food security analysis in most of the cases has been misleading due to the use of inadequate conceptual frameworks and theoretical approaches in dominant paradigm.

We are using livelihoods approach to examine and explore the key issues of unequal food availability, unjust distribution system and consequently unequal entitlements to food, which together determine the level of food security of local communities, households and individuals. This helps to devise different interventions for different livelihood groups of the same location.

Since food security is one of the main elements of the programs of both RRN and Oxfam GB/Nepal the findings in this study have direct implications in policies, plans and programs formulation of these organisations . It will help Oxfam, RRN and other NGOs and civil society to formulate policies to be advocated for ensuring food rights for the poor and excluded.

## **1.2 Study Methodology**

This report is a result of the analysis of information gathered through a number of ways. Taking into consideration that there are number of sources to gather food security information, the methodology applied in this study represents relatively a cost effective approach. The first step involved a thorough review of food security and livelihoods related literatures such as published and unpublished project reports, books, past studies, articles, policy documents, reports of programs and hunger mitigating measures undergoing in the selected districts (GO, NGOs, Bilateral and Multilateral agencies). In this way the researcher were able to make effective use of information already available while conceptualising this assessment, thus being able to focus on data collection to fill only the key information gaps.

A Comprehensive field trip was conducted to Satakhani, Garpan and Kalyan VDCs of Surkhet and Rawatkot, Katti and Kushapani VDCs of Dailekh during the second week of September to collect primary data for ground-reality, filling information gaps and obtaining the views of affected people. This helped to directly observe the physical conditions of the study area, condition of crops and livestock, available food stocks in the area, and general living conditions of people. This also provided opportunity to interact with the affected people, village leaders, grassroots social workers, teachers, health workers and agricultural technicians. Required information was collected by using standard tools including open-ended and semi-structured discussion check-lists, key informants interviews and focused group discussions.

In case of Katti and Bada Bhairav VDCs of Dailekh and Pamka and Garpan VDCs of Surkhet districts some of the selected key informants (5-10 persons) were contacted to gather required information from these VDCs. They were actually invited to the district headquarters to participate in the multi-stakeholder workshops.

Information regarding the present situation of food production, sources of food, change in food culture, access to food aid, impact of food aid, the vulnerability of the people, their opportunities, constraints and aspirations were gathered through focused group discussion representing different socio-economic groups in both the districts. One multi-stakeholder workshop in each of the two districts was organised at district level to discuss and verify the preliminary findings of the assessment. At each of the workshop participants included chief and/or their representatives from a large number of government offices at regional and district level, NGOs, Cooperatives, grassroots organisations, community groups and teachers.

The study was carried out in relatively a very short period of time and lacks comprehensive household level surveys. Therefore, the findings give a broad overview of the livelihoods and food security situation of the project area. Largely the discussions with respect to food production, distribution, land use patterns, and on going intervention programs are based on the secondary information of available statistics. However the discussion is adequately substantiated as and

when required by the first hand information gathered through the field study.

### **1.3 Organisation of the Paper**

Following the introductory section, the paper describes the key concepts of food security relating them with livelihoods approach, that make-up the conceptual and theoretical framework of food security analysis.

The third section presents brief overview of the overall food security situation of the country as a whole, mid-west region and study districts and the socio-economic characteristics of the population in study area. Fourth section is about the food security situation, livelihood options and coping strategies of the people in study area. In the fifth section, along with the concluding remarks, we synthesise the discussions and recommend appropriate strategies/measures to address the food insecurity problems in study districts.



CHAPTER: TWO

# **FOOD SECURITY ASSESSMENT: THEORETICAL AND CONCEPTUAL APPROACHES**

## **2.1 Food Security Defined**

The concept of food security has evolved through time. Until the end of 1970s food security meant more generally the ability of a nation to meet the aggregate food needs in a constant manner. Consequently, The World Food Conference 1974 emphasised to produce enough food, make the supply reliable and stabilise food prices so as to meet the food security. Accordingly, technologies like green revolution that would help to increase agricultural production were promoted for food security in developing countries.

In the 1980s, Nobel laureate Amartya Kumar Sen promulgated entitlements approach to food security analysis that emphasised access to food rather than merely the food availability. Sen's work is considered to be a major breakthrough in the concept of food security, as before him the availability of food was taken to be the overriding determinant of the hunger and famine.

With Sen's seminal work not only brought the changes in basic approach to food security but also appeared hundreds of definitions of food security. However, FAO's definition of food security is taken as comprehensive one that reads as follows:

'Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2008). This definition clearly integrates four interrelated factors- availability of food, access to food, biological utilisation of food and stability of these. More specifically, the definition introduces following dimensions of food security:

Physical AVAILABILITY of food;

- ? Economic and physical ACCESS to food;
- ? ACCEPTABILITY
- ? Food UTILISATION;
- ? STABILITY of all these dimensions over time.

### **a. Physical Availability of Food**

It refers to the possibility for adequately feeding oneself (individual, household or other units under consideration) either directly producing from their own productive resources that are under their control or through distribution, processing and marketing systems that can move food from the site of production to where it is needed. Hence, for adequate availability of required food items, proper policies are needed for the production, distribution, processing and marketing of food.

### **b. Economic and Physical Access to Food**

It refers to economic and physical access to food or in other words, the purchasing power of the people. Access analysis includes food prices in relation to wage rates, income opportunities, and social network providing food during distress, traditional safety nets etc. Sen (1991) used the idea of entitlement and endowments to explain how an individual or a household can have access to food. According to him, food availability alone does not guarantee people's access to food for consumption. Individuals and households can have legitimate command over foods if they have entitlements to 'bundle of resources' such as land, capital, technology, skills, stocks and income. He later used the term 'expanded entitlement' to include social network, relatives and so on that may help to get food especially during distress.

### **c. Acceptability**

Food is not only a basic requirement of life but also has socio-cultural values for people. Food provision therefore should be in accordance to the socio-cultural and nutritional requirements as well as taste and preferences of the population under consideration.

### **d. Utilisation**

It refers to proper use of food items for bodily nutrition. It is understood as the way body makes use of most of the nutrients in the food consumed. This dimension is primarily determined by the peoples' health status. General hygiene and sanitation, water quality, health care practices and food safety and quality are determinants of food utilisation by the body in right manner.

Besides, proper care, healthy feeding practices, food preparation techniques, diversity of the food items etc are also other important factors governing good biological utilisation of food and overall nutritional status of individuals

### **e. Stability**

The concept of food security incorporates dimension of sustainable food system (production, distribution, consumption, and waste management) at all levels – from household to national and international levels. By stability, it means food system should be able to meet the basic food needs of the present generation without compromising the ability of the future generation to meet food security from available resources.

## **2.2 Conceptual Framework for Analysis**

The theoretical approach for food security analysis, used in this study is basically derived from Sen's concept of entitlements to food and livelihoods approach to food security assessment. The entitlement approach to hunger assesses the ability of people to command food through the legal means available in the society including the use of

all available production possibilities, trade opportunities, inheritance and transfer entitlements and other methods of acquiring food (Sen, 1981). Sen argues that hunger could occur even when there is enough food to feed the entire community and those who suffer from hunger are those who fail to convert their 'exchange entitlements' into food. Sen categorises such entitlements into following four basic types:

- ? Production-based entitlements- crops and livestock
- ? Labor entitlements- waged labor and professions
- ? Trade-based entitlements-trading different goods
- ? Inheritance and transfer entitlements- supports from the state, private gifts and loans.

A livelihoods approach to food security assessment considers capital resources as assets that form an **endowments** making able to gain a meaningful living. Such capitals include physical, natural, human, financial and social. This approach helps to assesses following aspects:

- ? **Entitlement endowments**- households' or individuals' command over productive assets-physical, natural, financial, social and human capitals.
- ? **Transforming structures and processes**- the state, market and civil society (structures), legal and institutional practices and policies (processes) - that govern the ways in which the people combine and transform those assets in the building of livelihoods and
- ? **Vulnerability context** that may generate food insecurity and threats to livelihoods.
- ? **Livelihoods strategies**- activities carried out by a household in making their living in the context of above factors.

Hence, livelihoods approach to food security assessment is helpful to find out both the severity of food insecurity, i.e. immediate food crisis as well as the processes that may cause food insecurity with long-term

impact on livelihoods, i.e. vulnerability and coping strategies of the households. Some of the fundamental concepts with respect to the present study are operationalised as follows:

### **a. Households' resources endowments**

In this study household is taken as a basic unit of analysis. A household generally constitutes more than an individual. Resources endowments at household level therefore refer to summation of all capitals- human, physical, natural, financial and social- possessed by the members of a household.

### **b. Transforming Structures and Processes**

The state machinery, non-governmental organisations, market institutions, civil society actors, private institutions etc are the structures that govern the way how a rural household combines and transforms available resources into food and incomes. These actors influence the households' decision to mobilise their resources through certain policies and practices - called processes.

### **c. Vulnerability Context**

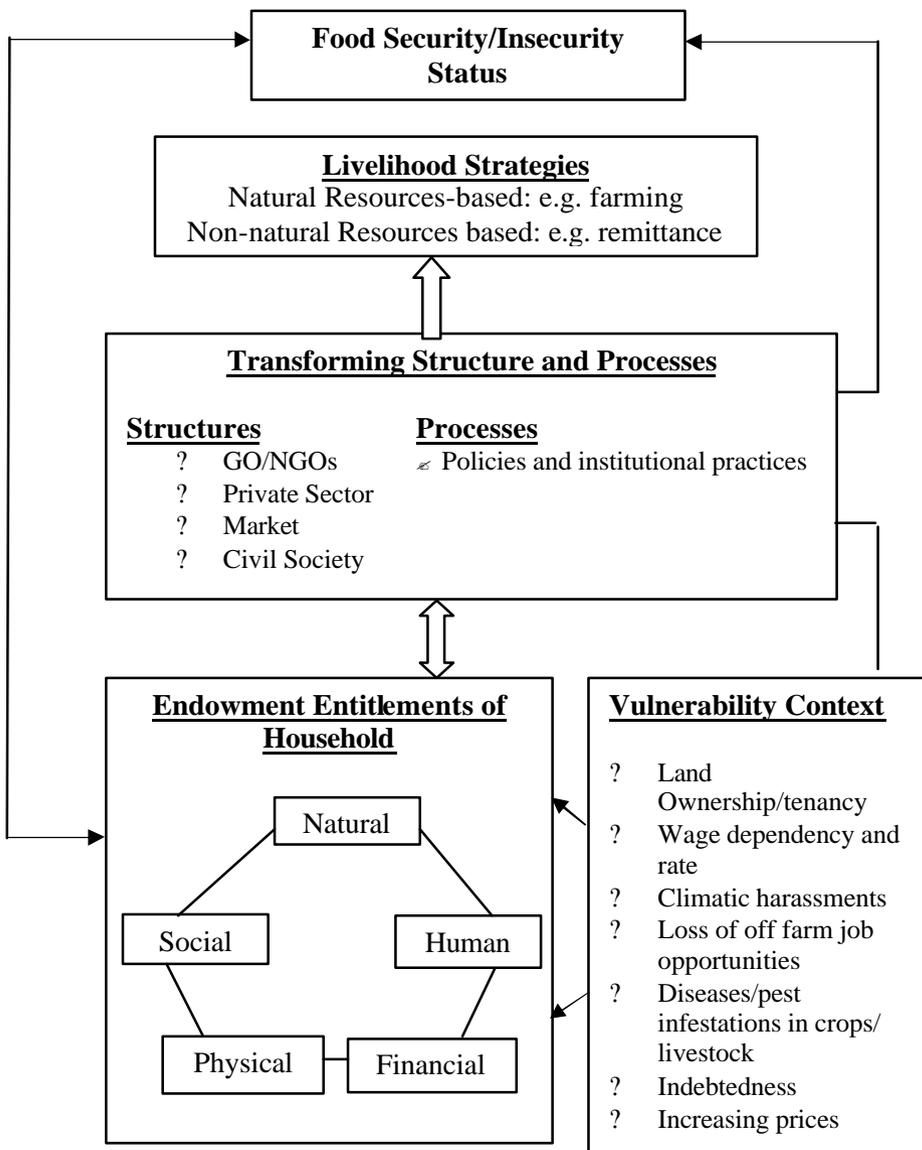
Vulnerability denotes a notion of risk. Vulnerability to food insecurity therefore, means probability of failure of the household to attain command over certain level of food required for healthy life of all its members in any point of time. A rural household may be exposed to risk associated with crop failures, loss of jobs, indebtedness, product price fluctuation, soil degradation etc.

The concept of stability dimension of food security can be understood properly through the concept of vulnerability. Vulnerability is a function of exposure of the households under consideration to risks and shocks and of resilience to these. Risks and shocks are considered to be events having negative effects to availability, people's access to and utilisation of food and hence their food security status.

Resilience means the capacity of the household to overcome the problems associated with the risks and shocks. It is determined by the effectiveness of risk management strategies at different levels through prevention, mitigation and coping and by the resources that can be drawn upon.

A schematic presentation of the analytical framework of this study is presented in figure 1 below.

**Figure 1: Conceptual Framework for Food Security Assessment**  
(Source: Ellis, 2000)





CHAPTER: THREE

## **CONTEXTUALISING FOOD SECURITY AND VULNERABILITY**

### **3.1. Food Security and Vulnerability in Nepal**

Nepal is one of the least-developed countries of the world with an annual per capita income of approximately US \$ 470. Latest estimates show that nearly 31% of the population lives below the national poverty line and 24% live with less than a dollar per day income. Despite continuous efforts to improve socio-economic status of people over the past several years, human development indicators still remain low. The UNDP's Human Development Index (HDI) rank of Nepal in 2006 was 138 out of 177 countries, indicating a low standard of living of the people.

Poverty and food insecurity are closely related in Nepal and are largely the rural phenomena. More than three quarters of the total population live in rural areas and poverty is much more prevalent, intense and severe in these areas. Within rural areas, poverty is worse in remote mid and far western hill and mountain districts where it is estimated that more than 70% of the population is poor and local food production is sufficient to meet for not more than 25% of the annual household food requirements (FAO 2004). There are 13 out of 16 mountain districts and 21 out of 39 hill districts food-deficit, based on total district production of five major food grains Paddy, wheat, maize, millet and barley. Infant and child mortality rates are remarkably high in Nepal, at 59 and 82 per 1000 births respectively. Average life expectancy at birth is 62 years. Currently, about six million people of Nepal's population is undernourished. Half of all children under the age of five suffer from malnutrition and stunting (Rights and Democracy, 2007).

Agriculture represents the mainstay of Nepalese economy and employs more than 80% of all working adults. However, this sector is characterised by low productivity and sluggish growth for more than

three decades. Consequently, studies have shown that more than 50% of people involved in farming including agricultural laborers, share croppers, rural service providers etc are hungry in Nepal (UMN 2004).

Agricultural land is the most important productive resources as well as the determinant of access to other resources and benefits including public goods and services, and power in rural economy of Nepal. However, the land ownership is highly skewed. In 2003/04 nearly 73 % farm households owned less than 1 hectare of land to cultivate (almost 45% having less than 0.5 ha only) accounting nearly 37 % of the total agricultural land. While 1% of rich households with more than 5 hectares of land held nearly 10% of the country's total agricultural land (Table 1).

**Table 1: Distribution of Agricultural Households by Area of Land Holding**

<b>Size of farms (ha)</b>	<b>Number of farm households (%)</b>	<b>Area of agricultural land (%)</b>
<0.1 ha	7.3	0.5
0.1- 0.2 ha	10.1	1.7
0.2 – 0.5 ha	27.4	11.0
0.5 - 1.0 ha	28.1	24.1
1.0 - 2.0 ha	19.1	31.3
2.0 – 3.0 ha	5.3	15.4
3.0 - 4.0 ha	1.5	6.2
4.0 - 5.0 ha	0.4	2.2
5.0 - 10.0 ha	0.7	5.7
10 ha and more	0.1	1.8
<b>Nepal</b>	<b>100</b>	<b>100</b>

Source: CBS (2004)

Poverty and or food insecurity problem in Nepal is complex, multidimensional and widespread which is attributable to the product of three factors- (i) unsatisfactory agricultural growth and aggregate outputs in the economy, (ii) historical effect of unequal distribution of productive resources and socio-economic status due to caste, ethnicity and gender related biases, and (iii) inequities born of recent development initiatives (Pandey, 2000).

Food insecurity of rural households manifests itself in terms of a) insufficient **food availability** which may be due to lack of access to productive land, small size of land holdings low productivity, bad weather, crop failures and so on b) **insufficient access** to food due to limited purchasing power and or sometimes limited stocks in the market particularly in remote areas. c) **poor nutrient uptake** due to poor health and sanitation condition of the people.

FAO has profiled seven different groups of people- marginal farmers (cultivating less than 0.5 ha of land), sharecropping tenants, landless laborers, agricultural wage workers, rural service castes, porters and urban poor households as vulnerable groups to food insecurity in Nepal

### **3.2 Socio-economic Background of the Study Area**

Surkhet and Dailekh both are, hill districts located in the Mid-Western Development Region of Nepal. Linked with the national highways, Surkhet is the gateway to the remote Karnali region. Being the headquarters of Mid–Western Development Region, it provides for regional level administrative and service centres and commercial centre for the northern districts. Dailekh is located in north-west to Surkhet and shares many features with it.

The average household size in Surkhet is 5.34 while in Dailekh it is slightly higher, i.e., 5.5. Both districts have colorful mosaic of ethnic composition where different castes and classes live in social harmony. Thapa (2007) reports these two districts represent those with relatively large population of dalits and ethnic minorities. While comparing with

the national population share of 12% dalits, Dailekh and Surkhet each district has more than 22% dalit population.

Poverty is severe and rural people heavily depend on forest and other natural resources. Farming is the predominant form of rural livelihoods in both the districts followed by a short-term migration to India basically for labor works that can earn on average NRs 1500 to 2000 per month depending upon type of works. Keeping livestock, poultry and casual labor works in agriculture sector also form integral parts of the livelihoods of poor households.

About 29% of the total land mass in Dailekh is cultivable and 80% of this is currently under cultivation. About 25% of the cultivated area is low land (khet) and 75% is upland (pakho). Only about 26% of the total land under cultivation has irrigation facilities- 6% receiving year round irrigation and 20% receives only the partial irrigation. The rain-fed agriculture with terraces of varying size, shape and slope gradients is the principal feature of farming. Lower hills and river basins constitute limited areas of wet terraces. Dailekh is rich in water resources. Tributaries of Karnali River that flows about 60 Km across Dailekh bordering Accham in the west are rich source of water for the district. These include Chhamgad, Ramgad, Lohore, Paduka, Dwari, Katti, Parajulkhola, Ratikhola, Sana khola etc. Despite rich in water resources, negligible amount of water from these sources have been utilised for productive purposes in the district. Nearly 62% of the total area of Dailekh constitute forest and pasture land. Administratively, Dailekh is divided into 1 municipality and 55 Village Development committees (VDCs).

Available statistics show that Surkhet has about 52, 200 ha cultivable land that constitute nearly 21% of the total land mass of the district. Out of this nearly 72% (37444 ha) is currently under cultivation. Nearly 60% of the cultivated land has irrigation facilities- 50% of which receives year round water supply. Surkhet is the district with the largest area of cultivated land among all hill and mountain districts of the Mid-Western Region and produces sufficient food grains required for the district. About 55% of the economically active population depends on farming and Bheri, Karnali and their tributaries

such as Jhupra Khola, Chingad Khola, Goche Khola, Sot Khola are major watershed of the district.

Administratively, the district is divided into 1 municipality and 50 village development committees (VDCs).

**Box 1: Study Districts at a Glance**

<b>Features</b>	<b>Surkhet</b>	<b>Dailekh</b>
Total Area	2451 Sq.Km.	1502 Sq.Km
VDCs	50	55
Municipalities	1	1
Total Population	288527	225201
- Female	145710	115076
- Male	142817	110125
Household Number	54047	41140
Average family Size	5.34	5.5
Population Growth Rate	2.45	1.86%
Adult literacy rate	62.7(51.7)	48 (49.4%)
- Male	73.9%	65%
- Female	-	39 % (District Education Office, Dailekh 2064/65)
Agriculture based population	54.57 %	92 % (FY 2064/65; DADO, Dailekh)
Economically Active Population (%) (10 Years and Above)		
- Female	45.15	67.07
- Male	63.92	69.25

**3.3 Rural Livelihoods**

Farming and natural resource-based livelihoods strategies are the predominant mode of living in rural households of both study districts. The occupational castes groups are continuing their professional work

as their main occupation. However, they are facing hardships to maintain their livelihoods simply by their traditional occupations and are gradually shifting to other sectors particularly to wage laboring. Short-term migration in search of income opportunities to places outside the villages within and outside the country is an increasing trend. It was reported that nearly every rural household in the study VDCs of both the district had at least one adult member in India.

Land, livestock and labor constitute the crucial asset base of rural livelihoods. Besides, common property resources such as forests, pastureland, river, streams etc are also the important livelihood resources of rural households.

### **3.4 Food Security Situation**

Maize, paddy and wheat respectively are major three food crops grown in Dailekh, while paddy, occupies first place in Surkhet. Majority of the rural population in both the district are marginal cultivators owning not more than 0.5 ha of cultivable land per household (Average land holding size is 0.57 ha for Surkhet and 0.6 ha for Dailekh). Livestock forms the integral part of their livelihoods.

#### **3.4.1 Surkhet District**

##### **a. Food Availability and Markets**

Surkhet is considered to be food sufficient district in terms of production of major food crops. As stated earlier, Ministry of Agriculture and Cooperatives (MoAC) classifies districts as food surplus or food deficit depending on total district production in five selected commodities - rice, wheat, maize, millet and barley.

According to District Agriculture Development Office, Surkhet produced nearly 10,000 tones more food than that of its actual requirement in 2007. However, the district was deficit in vegetable and fruit production. The nearby food markets to purchase food grains were not more than 2 hrs walk from the study VDCs.

**Table 2: Food Balance Sheet – Surkhet**

<b>Food Item</b>	<b>Total Production (Mt)</b>	<b>Total Population</b>	<b>Per capita food Production (Kg)</b>	<b>Per capita food Requirement (Kg)</b>	<b>Total Food Requirement for the District (Mt)</b>	<b>Balance (Mt)</b>
Food Grains	75484.81	325831	231.67	201	65492.0	+ 9992.8
Vegetables	24996.8	325831	76.72	108	35190	-10192.9
Fruits	10736	325831	32.95	60	19549.86	-8813.8

Source: DADO Surkhet, 2007

However the food grains availability in district is sufficient to cover the total requirements of the district, the food security situation at household level does not correspond to it. In the surveyed VDCs – Satakhani, Kalyan and Garpan - it was revealed that more than 30% of the rural households were able just to cover less than 3 months of their annual food requirement from their own production.

When we consider the temporal dimension of food insecurity in study areas the most difficult months for the poor households to manage food for their family members are Baisakh to Bhadra followed by Poush to Chaitra. After the harvest of maize during late Bhadra and rice in Mangsir they manage to get enough food to eat.

In recent months, it has been experienced that there is dramatic rise in food prices in local market resulting into more vulnerability to food insecurity for the poor. The prices of coarse rice, oil and salt -the basic food items of poor rural households have gone up by 40%, 30% and 15% respectively in the district within last 6 month period. This indicates that food insecurity situation in the district is rooted in constrains to access to food as a sub set of limited purchasing power of the households.

### **b. Households' Access to Food**

Socio-economic factors are clearly the determinants of food insecurity of people in study VDCs of Surkhet, as food grains produced in the district is sufficient to meet the required amount. The food insecure households as reported by the key informants of the study VDCs were mostly the marginal farmers (cultivating less than 0.5 ha of land)-mostly upland cultivators.

Others were landless wage laborers, share croppers and tenants of the guthi land, dalits and women-headed households. The causes of food insecurity were clearly their limited access to and lower quality of capital endowments.

### **3.4.2 Dailekh District**

#### **a. Food Availability and Markets**

Dailekh district is deficient in food grain production including fruits and vegetables (Table 3). According to DADO sources, the declining food grain production of past couple of years was due to increased infestation of pest and diseases in paddy and wheat, while maize production was hampered due to inadequate rainfall and hailstorms.

**Table 3 : Food Balance Sheet –Dailekh**

Food Item	Total Production (Mt)	Total Population	Per capita food Production (Kg)	Per capita food Requirement (Kg)	Total Food Requirement for the District (Mt)	Balance (Mt)
Food Grains	39492.600	242429	162.9	201	48728.220	-9235.6
Vegetables	23590.700	242429	97.30	108	26182.332	-2591.6
Fruits	6374.240	242429	26.29	60	14545.740	- 8171.5

Source: DADO Dailekh, 2007

From the interaction with the key informants and focused group discussions it was revealed that more than 70% of the households in Kushapani-one of the study VDCs produce enough food not more than 3 months to fulfill their household food demands. Similarly, almost 50% households of Katti, 60% households of Badabhairab and 60% of Rawatkot VDCs also produce food to cover not more than three months of their household needs.

These figures also correspond to the findings of poverty mapping report published by District Development committee Dailekh, this year (table 5)

**Table 4: Food Deficit Status of Study VDCs**

Percentage of households producing food just enough for less than 3 months of their household requirements			
Kushapani	Katti	Badabhairav	Rawatkot
>40%	26-40%	>40%	>40%

Source: DDC Dailekh (2008)

The deficit food grains are imported in local markets as well as supplied through Nepal Food Corporation (NFC) in deficit areas. This year, NFC has already supplied 1.5 Mt rice to the district and has plans to increase if required. Besides, there are food aid programs such as 'food for works' in several deficient VDCs.

In the case of Dailekh district government of Nepal had been supplied 691 Mt. rice through the Food Support Program of government of Japan in 2064/65, for the remaining months of this Fiscal Year, 350 Mt. has been estimated to supply and for 2066/67 further 1000 Mt. rice has been estimated to fulfill the district demand. (Interview with chief of NFC, Dailekh dated on 26th March, 2009)

With some exception in Dailekh, markets and government/non-government sectors' schemes of basic food supply have capacity to solve the food deficiency problems. However, the prices of food

grains and daily consumption items have gone up in recent months. It was reported that over the past 6 months there has been dramatic rise in prices of basic food items with an average 48 % rise in rice (coarse), 30 % rise in oil and 15% increase in salt. Despite these facts the poor households are vulnerable to chronic as well as transitory food insecurity situation. Therefore, food insecurity problems of people in the district are again rooted in the limitations of poor households to access adequate food as a part of their limited entitlement endowments and thereby purchasing power.

### **b. Households' Access to Food**

Food access is crucial factor determining food security status at household levels. Poor households lack productive resources to produce enough food for them. They often lack employment opportunities to generate enough income to meet their food needs.

Dalit households in the study area were found to be living in distress condition chronically. As elsewhere in rural Nepal, they are deprived of opportunities in virtually all aspects of daily life and have lower level of human and physical capital constraining their access to adequate food.

Besides, share-croppers, landless wage laborers and marginal cultivators were considered to be suffering from food insecurity problems in all study VDCs. This clearly indicates that socio-economic factors particularly uneven entitlement endowments of the households limit their capacity to access food.



CHAPTER: FOUR

## HOUSEHOLDS' FOOD DEFICIT COPING STRATEGIES

Poor households adopt different strategies to cope with the potential risk of food deficit affecting their livelihoods, based on the options available to them. Seasonal migration to India in search of labor works was found to be one of the most prevalent forms of coping strategies found in both the districts under study. In Dailekh it was revealed during this study that Poor households take loan from local elites in extremely high interest rate (120%) to manage their movement to India. It was found that the migrants normally pay equal sum of Indian currency to the borrowed Nepalese Rupees within 6 month period.

Besides, collection of wild food, loan from local money lenders (especially from teachers) for food, sale of small livestock such as goat and poultry, casual labor, sale of jewelry, sale of land etc are also the forms of coping strategies adopted by households under distress.

Food assistance, safety nets and other noteworthy income transfer schemes for the poor and vulnerable are not present in Surkhet district as officially the district is taken as food secured. Dailekh has provisions of subsidised rice through Nepal Food Corporation and Food for Work programs run by World Food Program of the United Nations. However, the respondents overwhelmingly opined that these programs were not helpful to overcome the food crisis situation of the district in long run as it was creating the dependency syndrome among rural dwellers and undermining local food system.

This chapter highlights some of the coping strategies adopted by food insecure and vulnerable households in response to the various risks that threaten their access to food. Understanding the nature of peoples' risk management strategy is important as it gives us an idea to develop appropriate interventions to reduce long-term costs on lives of vulnerable groups. Some of the immediate coping strategies adopted by the poor households in the study VDCs are as follows:

#### **4.1. Changing Consumption Pattern**

Many households change their consumption behavior as an immediate strategy to cope with the period of food deficiency at home. It was reported that poor households began to take fewer meals and consume locally available but less common food items such as Sisnu and khole instead of rice, when food and or cash is scarce. Some households, especially indigenous groups and dalits take wild roots such as gittha, Vyakur, ban tarul etc collected from nearby forests.

#### **4.2. Temporary Migration in Search of Wage Employment**

Nearly every household in the study villages, facing food deficiency during certain months of the year has at least an adult member migrated out of village in search of wage employment. In most cases male member (s) of the household migrate mostly to India or other parts of the country to find employment as wage laborer. It was revealed that the poor households draw on average NRs 2000/- per month from the remittance of the migrant member (s). It was also indicated that migration is the most common coping strategy of the poor households in the study area.

#### **4.3. Sale of Livestock/Poultry**

Selling small livestock such as goats, pigs and chicken to cope with food shortages and need of money especially during festival period is another most common strategy of poor households, when other options get exhausted. Some households informed that they are forced to sale their livestock even in inadequate prices to tackle the emergency cash or food need especially during the time of festivals.

#### **4.4. Collection of Forest Products/Foods**

Wild foods like mushrooms, bamboo shoots, ferns (Niguro), Cassava (ban tarul), gittha, vyakur, sisnu, siplikan etc form important components of rural diets during the period of food shortages in study VDCs of both the districts. Besides, non-timber forest products such

as medicinal herbs and fuel wood provide vital and customary source of income for the poor in difficult times.

#### **4.5 Borrowing**

Many households in the study VDCs were found compelled to borrow money even in very high interest rate from the local elites to cope with food deficit periods. This is particularly the case when they wanted to send their adult member (s) out of village seeking to have wage employment in an attempt to avoid hunger. In Rawatkot VDC of Dailekh, for example, it is a common practice among poor households to borrow money in extremely high interest rate (more than 120%) from the local money lenders. They usually borrow money which is to be paid within 6 months in IC equivalence, i.e. they have to pay equal sum of borrowed money in Indian Currency within 6 months of borrowing.

In extremely difficult period households may also borrow grains from private traders and landlords which also have high interest rates, pushing poor households further into debt.

#### **4.6 Other Strategies**

The poor and vulnerable groups adopt several other strategies also to cope with the distress. Some households reported that they sell their jewelry and other assets including land, if any, during the period of crisis. Some households, particularly the dalits change their traditional occupation and look for the opportunities of wage works in the villages. Some households try to rent in additional land for cultivation to cope up the food shortages. It was reported that many poor households in Dailekh seek to get engaged in 'Food for Work' programs to meet their household food requirement during the period of crisis.

Tentative estimates of the households' coping strategies found in study VDCs of two districts which was produced from the focused group discussions is presented in table 5.

**Table 5: Households' Coping Strategies in Selected VDCs of Surkhet and Dailekh Districts**

<u>Coping Strategies</u>	Number of rural households adopting given strategy					
	Surkhet			Dailekh		
	Kalyan	Satakhani	Garpan	Kushapani	Katti	Rawatkot
Change in Consumption behavior	70%	75%	80%	80%	75%	80%
Migration in search of wage employment (mostly India)	60%	70%	70%	80%	80%	80%
Casual labor (carpentry, wage works)	60%	60%	65%	40%	50%	55%
Sale of livestock/poultry	60%	75%	75%	70%	75%	75%
Collection of wild food	20%	30%	45%	55%	60%	45%
Loan for food	20%	25%	25%	50%	55%	60%
Sale of jewelry	20%	20%	10%	20%	20%	10%
sale of land	-	-	-	5%	2%	2%

Source: Field Study, 2008

CHAPTER: FIVE

## **CAUSES OF VULNERABILITY TO FOOD SECURITY**

As discussed in preceding chapters, food insecurity and households' vulnerability to it are closely associated with the poverty rather than merely the availability or unavailability of required amount of food grains in the district. Following three categories of factors are largely responsible for deepening vulnerability to food insecurity at household level in the study area.

- ? Limited or inadequate livelihoods assets position of the households
- ? Shocks and unexpected incidents
- ? Policies, Institutional and Socio-cultural factors

### **5.1. Limited or Inadequate Asset Position of the Households**

Limited quality and quantity of livelihood assts- Human, Physical, Natural, Social and Financial- available to households is the main factor contributing to food insecurity at household level.

According to Nepal Human Development Report (2004) almost one fourth of the total population in Dailekh and more than 15% of the total population in Surkhet have life expectancy less than 40 years of age, indicating poor health and hygiene condition. Almost two third of the total population in Dailekh and more than 45% in Surkhet have no access to safe drinking water. The DPHO Dailekh reported that more than 30% of the children below the age of five years are underweight for their age with Surkhet reporting 25% underweight in the same age category. More than 43% of the total working adults in surkhet and 60% in Dailekh are illiterate (UNDP, 2004).

Obviously, these facts indicate the poor health and low educational level of working members of the households. This reduces the return to labor productivity, which in turn lowers household incomes barring access to food.

Problems of inadequate access to food are compounded by poor food utilisation due to their low standard of sanitation and hygiene which is primarily governed by the access to safe drinking water. Almost two thirds of the population in Dailekh and more than 45% in Surkhet have no access to safe drinking water (ibid). This has resulted poor households particularly the Dalits of the study VDCs into a high exposure to water-borne diseases such as typhoid, dysentery and diarrhea hampering their nutritional status as well as household level incomes.

Inadequate availability of basic infrastructure such as motorable roads, market centres irrigation facilities; basic health facilities etc are also contributing factors to food insecurity of the study villages. Lack of adequate transportation facilities is not only responsible for the high cost of the basic food grains but also physical unavailability of food. Physical exclusion is also blamed for people's inability to exploit the opportunities existing in their localities.

Natural resources such as agricultural land forests, river, springs etc form an important component of livelihood assets of rural households. Particularly for the people with low food production and earnings common property resources like forests, pastureland and rivers become additional source of food and incomes. As such resources and environmental endowments are at risk due to over exploitation, poor households are becoming more vulnerable. Intensive farming practices and improper management has resulted into declining production and productivity of agricultural land. Marginal households and tribal communities who are traditionally dependant on nearby forest resources have been affected badly due to the conversion of open access resources in community managed forests.

As discussed in earlier section, the average land holding size of the rural households in the study districts is less than 0.5 ha and low in productivity. Majority of the poor households in study VDCs were

having less than 0.2 ha of land and the informants in every VDCs had overwhelmingly expressed concern over declining productivity of their small parcel of land. Consequently, they were able to manage their household food requirement not more than 3 months of the year.

Subsistence of the poor households in the harsh and fragile hilly environment of the study VDCs seemed to be largely dependent on collective support and cooperation- social capital. However, such cooperation and support are found to be closely confined within caste and ethnic boundaries- largely excluding the dalit households. Social discrimination particularly against dalits is still prevalent in rural areas limiting their abilities to become involved in many economic activities in the study VDCs.

Poor and marginal households in the study area have limited access to financial capital restricting their opportunities to invest in their livelihoods, diversify their production base and or cover the emergency cash needs. Such households seldom acquire loans from formal sources as they lack appropriate land or gold to deposit as collateral in banks. Consequently, they have to depend on local money lenders for loan with extremely high interest rate ultimately falling into the debt trap.

## **5.2. Shocks and Unexpected Incidents**

Study areas of both the Surkhet and Dailekh districts are at risk of exposure to natural disasters and other unexpected incidents causing crop failures and even threatening lives and livelihoods of people such as drought, hailstorms, flooding, landslides, diseases and pest outbreaks etc. Different risk factors with respect to livelihoods of rural households in the study VDCs as perceived and experienced by the informants for last three years are listed in table 6 below.

**Table 6: Risk Factors as Perceived and Experienced by the Rural Households with Respect to their Livelihoods**

<b>Livelihoods Components</b>	<b>Associated Risks</b>
Farming and livestock	<ul style="list-style-type: none"> <li>- Natural disasters (erratic rainfall, drought, hailstorms, flooding and landslides)</li> <li>- Diseases and pest outbreaks/infestations</li> <li>- Inadequate knowledge and skill</li> <li>- Apathy of younger generation and male members of the households to farming profession</li> <li>- Inadequate extension support services available (JT/JTAs seldom visit in the village)</li> <li>- Lack of improved technology and seeds/breeds</li> <li>- Lack of market facilities to buy inputs or sale farm produce</li> <li>- Lack of irrigation facilities</li> <li>- Lack of pastureland for grazing and barring from forest resources after community management.</li> </ul>
Casual wage works	<ul style="list-style-type: none"> <li>- Lack of opportunities in the villages</li> <li>- Low wage rate,</li> <li>- discrimination in wage rates against women workers</li> </ul>
Collection of fuel wood and wild foods from the forest	<ul style="list-style-type: none"> <li>- Restricted access to forest after community management regime was introduces</li> </ul>
Cottage industry	<ul style="list-style-type: none"> <li>- lack of knowledge, skills and training facilities</li> <li>- Inability to investment</li> <li>- Lack of equipments and raw materials.</li> </ul>
Migration out of village	<ul style="list-style-type: none"> <li>- Lack of money to migrate</li> <li>- High interest rate on loan</li> <li>- No guarantee to get job</li> </ul>

The informants from Satakhani, Kalyan and Garpan VDCs of Surkhet and Katti, Kushapani and Rawatkot VDCs of Dailekh district equivocally reported that they have frequently experienced loss of their major field crops-maize, wheat and rice- due to unexpected and ill-time hailstorms before the harvest. They have also experienced increased infestation of diseases and pests in their field crops. The DADO of Dailekh reported that the district has experienced three crop failures for the past three consecutive years due to drought, pest and diseases impacts.

The farm households in Rawatkot and Kushapani of Dailekh reported that the standing rice crop of this year is also heavily infested by blast disease fearing significant yield loss. Kushapani VDC experienced hailstorms just before the harvesting time of wheat crop this year causing heavy loss of the yield. The maize yield also significantly reduced due to heavy infestation of stem borer (Gabaro)

Besides the natural disaster, any unexpected incident causing any forms of bodily harm to any one of the working adult member of the family has direct bearing on household food security in poor households with no savings and limited assets base. Diarrhoea, dysentery and other common illness related to chronic state of malnutrition and inadequate access to safe drinking water cause frequent incidents of calamities preventing adults in the households from working, thus shrinking incomes.

Such problems also result in deterioration in health status and consequently the nutrient uptake leading to malnutrition. In case, where by any chance an income earner in the household becomes sick for prolonged period or dies, the impact is devastating (Box 2).

**Box 2: Shock and Livelihoods Collapse**

Bhabisara Magar (age 50 Years) is an inhabitant of Katti VDC-6, Dailekh. She has about 0.2 ha of land. She had her husband, two sons and a daughter. The daughter got married 5 years back. The family of four members used to manage their food requirement from their own production, casual wage works and collection. Unfortunately, last year her husband died at an age of 55 and subsequently her elder son also died of an accident. The youngest son is still child and can not go for work. Due to the great shock that she had experienced within a short period of time, she broke down and can no longer go for work to earn. Now this family is facing sever challenges of food shortages.

*Source:* Field study, 2008

Another form of shock, the poor households in study area are currently facing is increasing market prices of the food. It was reported that coarse rice, cooking oil and salt are three most important basic food items for which the households depend on market. Over the past 6 months there has been dramatic rise in prices of these food items with an average 48 % rise in rice, 30 % rise in oil and 15% increase in salt (Dailekh). The corresponding figures were 40%, 30% and 15% respectively in Surkhet district. With no increment in the wage rate in rural areas, increase in market prices of basic food items, has added the financial hardship to poor households.

### **5.3. Policies, Institutional and Socio-cultural Factors**

Difficult terrain, less availability of productive land and variability in climatic factors, lack of basic infrastructure etc are some of the factor making the life in study VDCs difficult. On the other hand, the opportunities provided by the natural conditions are not explored. Despite very rich in natural resources particularly forests and ever flowing river, the state policies and programs have neglected to exploit these resources in favour of people for long.

The marginal productivity of land is gradually declining in both the districts resulting from environmental degradation, reduction in forest

cover, traditional technology, diseases and pests infestations. Even though introduction of new technology were reported in both the districts, the farming sector has largely been traditional.

Following section briefly puts forth the national policies, institutional practices and programs of Nepal that have direct bearing on food security status of poor households.

### ***5.3.1 Interim Constitution of Nepal 2006 and Right to Food***

The interim constitution of Nepal 2006 is the main legal and political document that governs all policies, practices and programs in the country. The interim constitution includes provisions that protect economic, social and cultural rights of the citizens. Article 33 of the Constitution under Duties and Directive Principles, lists down following obligations of the state which are directly related to food security of people.

- ? Pursue the policy of establishing the rights of all citizens to education, health, housing, employment, and adequate food.
- ? Adopt universally accepted fundamental human rights
- ? Effectively implement international treaties and agreements of which the State is a party.
- ? Adopt a policy of providing economic and social security to the socio-economically and culturally backward classes.
- ? Pursue the policy of adopting scientific land reform programs by gradually ending feudalistic land ownership practices.

Besides, Article 18 of the Constitution protects the right to employment and social security of the citizens.

Despite the fact that the constitution has several progressive provisions that safeguard the rights of the citizens to be food secured, the government has yet to make concrete strategy or institutional framework to address the recurrent problems of food insecurity and hunger.

### **5.3.2. Agriculture Perspective Plan (APP) and Food Security**

The Agriculture Perspective Plan (1997-2017) is the main sectoral policy document to modernize farming in Nepal and has been under implementation since 1997. The basic premise of APP is to trigger overall economic development of the country through high growth in agricultural production. It aims to accelerate agricultural growth by 3 percent per year. This growth is expected to stimulate nonagricultural growth in employment-intensive goods and services in both urban and rural areas. This would create job opportunities for the poor, particularly poor women, and thereby help increase incomes of rural households. The overall objectives of APP are as follows:

- ? accelerate the growth rate in agriculture through increased factor productivity;
- ? alleviate poverty and achieve significant improvement in the standard of living through accelerated growth and expanded employment opportunities;
- ? transform agriculture from subsistence to commercial orientation through diversification and realisation of comparative advantage;
- ? expand opportunities for overall economic transformation by fulfilling the preconditions of agricultural development; and
- ? identify immediate, short-term and long-term strategies for implementation, and provide clear guidelines for preparing future periodic plans and programmes.

APP was developed with the financial support of Asian Development Bank in order to alleviate wide spread poverty and improve agricultural systems of Nepal. It has emphasizes the dynamics of private sector and role of market in agriculture. It has identified irrigation, fertilizer, technology, roads, and power as area of “Priority Inputs” and livestock, high-value crops, agribusiness and forestry as “Priority Outputs”. Poverty reduction, food security, environmental sustainability, gender equity and regional balance in development have been taken as "Impact" by APP. Identifying suitable production pockets in district level and concentrating all production inputs in the

form of a single package its main implementation strategy. It is one of the major policy thrusts to fulfill the commitments made by the government in the World Food Summit, 1996 to eradicating hunger.

Although APP is a long-term visionary plan in agriculture, it has not made specific provision with respect to access of disadvantaged groups of people to productive resources particularly the land and other agricultural resources. Moreover, it has recommended extensive use of capital intensive technologies such as chemical fertilizer, hybrid seeds and improved breeds in agriculture that leads to further marginalisation of resource poor households. It has not paid much attention to conservation and promotion of traditional knowledge of farmers' which is the unique strength of disadvantaged ethnic groups. Besides, there are serious flaws in implementation of this plan at district level due to lack of coordination and problems of under-funding. Consequently, the impact of APP in terms of food security is disappointing at national as well as local level.

### **5.3.3. National Agriculture Policy 2004 (*Rastriya Krishi Niti 2061*) and Food Security**

In 2004, Ministry of Agriculture and Cooperatives brought National Agricultural Policy into effect. The main objectives of the policy are:

- ? to accelerate agricultural growth through increased use of improved technology,
- ? to develop commercial and competitive agriculture production system and
- ? to promote, utilise and conserve biodiversity and natural resources.

The main emphasis of the policy is on commercialisation of agriculture. As like APP this policy is also silent on the access of resource poor disadvantaged communities to land and other natural resources. Semi-feudal land ownership and use patterns and highly skewed distribution of productive land resources, continued land fragmentation, lack of responsive land use policy are posing

prominent challenges to ensure access and control of land and land based resources by the poor households in rural Nepal. But both of these policy documents fail to adequately realize this fact. As a result, both APP and Agriculture Policy 2004 seem to be ineffective to tackle growing food insecurity problems of the country particularly due to poor commitment of the government to bring genuine reforms in this sector.

The lack of market infrastructures for the products that can be grown in the villages is another problem. In the absence of adequate infrastructures like roads, irrigation channels, storage facilities, processing facilities and the like, people were not able to earn income from cash crops or commercial farming. Because of this inability to earn cash income from local sources, people's exchange entitlement also did not improve.

#### ***5.3.4 Socio-cultural and Institutional Factors***

It is said that, but without much evidence, Dailekh is not deficit in food but deficit in rice. But it is a fact that the influence of dominant culture of eating 'rice' is growing in rural areas. 'Rice' previously was taken as a food eaten primarily by the administrators in the district headquarters. Every household however, used to store some amount of 'rice' just for festivals. In the past, different types of local foods including maize, wheat, millet, barley and the like were eaten by people. These were also considered as durable and giving more energy. But due to intervention from outside and the demonstration impact of government officers means that people slowly started to disregard their own local food increased the demand of rice.

Because of this change in the habit, the new generation has lost the knowledge of finding food in the forest or lost their interest to cultivate traditional food that is locally suitable. This seems to have created dependency in external market for food supply. However, there is a dominant thinking among the civil society members and even civil workers in Dailekh that the food aid (actually 'rice aid') has created a dependency habit among the people developing a tendency to ignore the possibility of food production locally. However, they

were not ready to stop it as it may cause them blame the anti-development groups.

It was also revealed during the focus group discussion in the field that people had not received much from the government food supply, even though the amount supplied by government has been increasing. A major part of it goes to government officers, army personnel and a significant part also ends up to local bhatti (alcohol brewery) at district headquarter.

The continuous increase in the government food supply and diversion of the budget allocated for the district to food subsidy (for transportation) has a concern of many members of civil society and some political leaders. They argue that this should be reduced and then stop along with incentives and activities to cultivate crops and produce more food locally.

**Box 3: Bal Kumari Could not Benefit from 'Food for Work' Program**

Ms Bal Kumari Lamichhane (55) - a widow, an inhabitant of Kushapani-3 Dailekh owns just 5 kattha (approx. 0.2 ha) of land and a buffalo as her property. She can produce food for no more than 3 months of her requirement from the land what she has. She is very weak to be engaged in any kind of wage works also. As she does not have anybody to accompany with in the family, it is her own responsibility to manage food and other necessity for herself.

There is 'Food for Work' program undergoing in her VDC/ Ward and obviously she wishes to be involved in this program so as to manage the food shortages. Unfortunately, she is not allowed to involve in 'Food for Work' as she is too old to deliver any significant work for the project. She is facing severe food crisis but has no any alternatives other than to remain hungry.

*Source:* Field Study, 2008

Socio-cultural factor such as caste, gender and ethnicity based discriminations in the communities have also been major problems causing and intensifying food insecurity in study VDCs. Despite the anti discrimination provisions in the Interim Constitution-2006 of Nepal, caste discrimination remains well ingrained in Nepalese society. The disparity in the society between high caste and low caste (dalits) seems well-entrenched and pervasive in the study areas. This is reflected in the distribution of land and access to other resources. As a reason, the condition of Dalits seems very precarious. Most Dalit households still depend on high caste households for food and other necessities.

High level of gender inequality at household level is also a major problem of food insecurity among women. Lack of empowerment of the women is clearly reflected in poor domestic sanitation and care of children while observing the field. It was reported during the field study that women in households are quite literally a residual category in intra-household food distribution, eating after men and the children and making do with what is left. This discrimination, which is cultural in origin, even extends to pregnant women and girl child too. Women do not have property ownership and resources. As a result, position of women in the family and society is very low.

CHAPTER: SIX

# TACKLING FOOD INSECURITY AND VULNERABILITY

## 6.1 Ways Forward

In this assessment, we attempted to examine the general food security situation of the households in study areas, identified major causes of food insecurity and examined the ways in which vulnerable households cope with the risks of livelihoods. It is however, not easy to suggest any silver bullet solutions to pervasive food insecurity and vulnerability problems in the study area as they emanate from variety of reasons and warrant contextual outlook. Following section presents broad range of options with respect to potential interventions by the government, international organisations, civil society organisation and NGOs in order to support vulnerable groups in their attempts to make their living and cope with the shocks and adversities. The options we propose here are broadly of two different types-policy intervention and community intervention.

### 6.1.1. Policy Intervention

At policy level three distinct areas of activism seem to be prominent for food security and reduced vulnerability of poor and disadvantaged communities of the study districts.

- ? Democratising food aid programmes,
- ? institutionalising social safety nets schemes at district level and
- ? ensuring access of the poor and disadvantaged communities to productive resources (such as land and forest) and inputs (appropriate technologies, technical backstopping, suitable seeds and seedlings and so on)

The operational strategies to address above issues need to cover micro, meso- and macro levels (local, district and National level).

### **A. Local Level Strategies (Micro-Strategies)**

- a. Empower poor and disadvantaged households (through group formation, mobilisation, training, sensitisation and campaigning) so as to be able to raise their voices and make accountable the concerned stakeholders to them in order to ensure justice and equity in food aid programs.
- b. Organise, sensitise, mobilise, and initiate campaign of the poor and disadvantaged households demanding appropriate safety net schemes in district in case of emergencies
- c. Organise, sensitise, mobilise and initiate campaigns of the poor and disadvantaged households to increase their access to productive resources and to make the government line agencies more accountable to them and their problems.
- d. Initiate dialogue at local level to enable poor and disadvantaged households to take part in meaningful ways in decision-making processes of local level institutions such as Community Forest Users' groups, irrigation users groups etc.

### **B. District Level (Meso-Level) Operational Strategies**

- a. Advocate for good governance in part of concerned government line agencies particularly District Agriculture Development Office, District Livestock Services Office, Nepal Food Corporation, District Development Office, District Irrigation Office, District Forest Office, District Public Health Office etc.
- b. Campaign for social safety net schemes at district level (multi-stakeholder workshops and interaction programmes for sensitisation).
- c. Campaign for genuine agrarian reforms (multi-stakeholder workshops and interaction programmes for sensitisation).

- d. Campaign, sensitisation and Advocacy programmes to protect, promote and enhance local farming system through improved cultivation practices, better irrigation facilities, and improved extension services.
- e. Campaign, sensitisation and advocacy programmes against 'dependency syndrome' among rural households created by food aid programmes (more specifically 'rice aid' programmes).

### **C. National Level Strategies**

- a. Advocate for formulating pro-poor agricultural development policies and programmes.
- b. Advocate for genuine agrarian reform agendas- so as ensuring access of poor and disadvantaged rural households to productive land resources.
- c. Advocate for targeted welfare programmes in order to remove the impediments on food security created due to socio-cultural factors and physical facilities.

### **6.1.2 Community Intervention**

At community level, immediately requires,

- a. Exploration, identification and promotion of context-specific viable additional incomes opportunities for the poor households in the study area. Such opportunities would be of wide range including NTFP enterprising (Garpan, Surkhet) to livestock (Satakhani, Surkhet), fresh vegetable production to poultry (in Dailekh).
- b. Food aid programmes need to have mechanisms to ensure justice and equity among poor households.
- c. As a short-run strategy, it requires
- d. to support for enhancing human capital among the vulnerable households through education, skill and health improvements.

- e. to implement specific programmes to correct gender and caste-based discrimination in community.
- f. to support vulnerable households in their attempts to diversify their livelihoods portfolios. For example helping them to access financial resources required to ease their migration efforts.
- g. to act on democratising public food distribution system and in Food Aid schemes. For example introduction of 'food quota' system instead of the prevailing Coupon system etc.
- h. support to promote appropriate technologies that sustain local production system in long run.

As a long run strategy, it requires

- a. attempts to reverse growing trend of 'feminisation of agriculture' and 'rice preferences' in food. (Develop appropriate intervention strategies in partnership with the government line agencies (piloting) so as to motivate male member and youths of the households to engage in farming).
- b. efforts to increase access of poor households to financial capital through formal channels. (For this the group saving schemes currently run by RRN can be developed along with the line of rural financial institutions).

## 6.2 Conclusion

The analyses in preceding sections clearly spell out that poverty and food insecurity are closely associated. The main causes of food insecurity and vulnerability in the study districts are rooted in asset constraints, risks associated with unexpected incidences and socio-political and cultural elements. The majority of the households in the study VDCs of both the districts are found to be facing similar constraints including very limited assets base (especially cultivable land), limited opportunities of incomes, low education and skills and poor health and nutrition conditions. Most of the households are marginal cultivators owning less than 0.5 ha of land. Agricultural production is very low due to recurrent problems of natural calamities,

lack of adequate support services and use of traditional farm technologies.

Consequently, majority of the households can produce enough food to cover their household's needs for not more than one quarter of the year.

The households facing food deficiency adopt combination of different coping strategies like changing consumption behaviour, working as casual labour, migrating out of the district or country, collection of wild foods, looking for the 'food for work' opportunities, sale of small livestock and poultry and so on. Seasonal migration to India in search of labour jobs was found to be one of the most prevalent forms of coping strategies adopted by the food insecure households in both the districts.

Rural households face number of risk factors with respect to their livelihoods. The major livelihood strategy of the rural households constitutes farming which has number of risks including natural calamities, lack of irrigation facilities, insect/pest infestations, lack of adequate knowledge and skill, poor extension support services, inadequate technology, lack of improved seeds/breeds etc. Similarly, the casual wage works and migration strategies are also not free from risks as there are limited opportunities available in the villages and migration involves costs for which the poor households fall into the debt trap. Possibilities of cottage industries in the study villages are constrained by inability of poor households to investment, lack of technology and raw materials.

The food for work programmes and subsidised food supply schemes are operational in Dailekh district. But affected people and other stakeholders opined that these schemes are not effective in solving their problems. Rather, there is growing problems of 'dependency syndrome' among rural households.

Based on the analysis of the problem, numbers of practical measures at policy and programme level have been devised in order to reduce vulnerability to food insecurity of the rural

households in the study districts. Some of them include emphasis on increasing local food production and productivity through the provisions of improved cultivation practices, irrigation facilities and improved technology. Secondly, provision of the off-farm income opportunities for resource poor households is necessary. Similarly, programmes directed to enhance human capital (health, nutrition, education, skills and empowerment) are immensely important in the study villages.

## References

CBS (2004). Nepal Living Standard Survey (2003/04). Kathmandu: Central Bureau of Statistics (CBS).

DADO, Surkhet (2007). District Agricultural Statistics. Birendranagar: District Agriculture Development office

DADO, Dailekh (2007). Annual Agricultural Development Report. Narayan: District Development Office, Dailekh.

DDC, Dailekh (2008). Poverty Mapping Report. Narayan: District Development Committee, Dailekh.

FAO (2004). Food Insecurity and Vulnerability in Nepal: Profiles of Seven Vulnerable groups. ESA Working paper No.04-10. Rome: The Food and Agriculture Organisation of the United Nations.

Pandey, D.R. (2004). Nepal's Failed Development: Reflections on the Mission and the Maladies. Kathmandu: Nepal South Asia Centre.

Sen, A. K. (1981). Poverty and Famines: An Essay on Entitlement and Deprivation. Oxford: Clarendon Press.

UMN (2004). Food Security and Hunger Survey in Nepal. Kathmandu: United Mission to Nepal (UMN).

UNDP (2004). Nepal Human development Report , Kathmandu: United Nations Development Programme.

WFP (2008). Report on Rapid Emergency Food Security Assessment (EFSA)- Far and Mid West Hills and Mountains, Nepal. Kathmandu: World Food Programme of the United Nations

