

**State of Livelihood Assets in the  
Earthquake Affected Areas:  
A Way Forward**

Sobia Nazeer Ahmad\* and Abid Qaiyum Suleri\*\*

Working Paper Series # 109  
September 2008

All rights reserved. No part of this paper may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or information storage and retrieval system, without prior written permission of the publisher.

A publication of the Sustainable Development Policy Institute (SDPI).

The opinions expressed in the papers are solely those of the authors, and publishing them does not in any way constitute an endorsement of the opinion by the SDPI.

Sustainable Development Policy Institute is an independent, non-profit research institute on sustainable development.

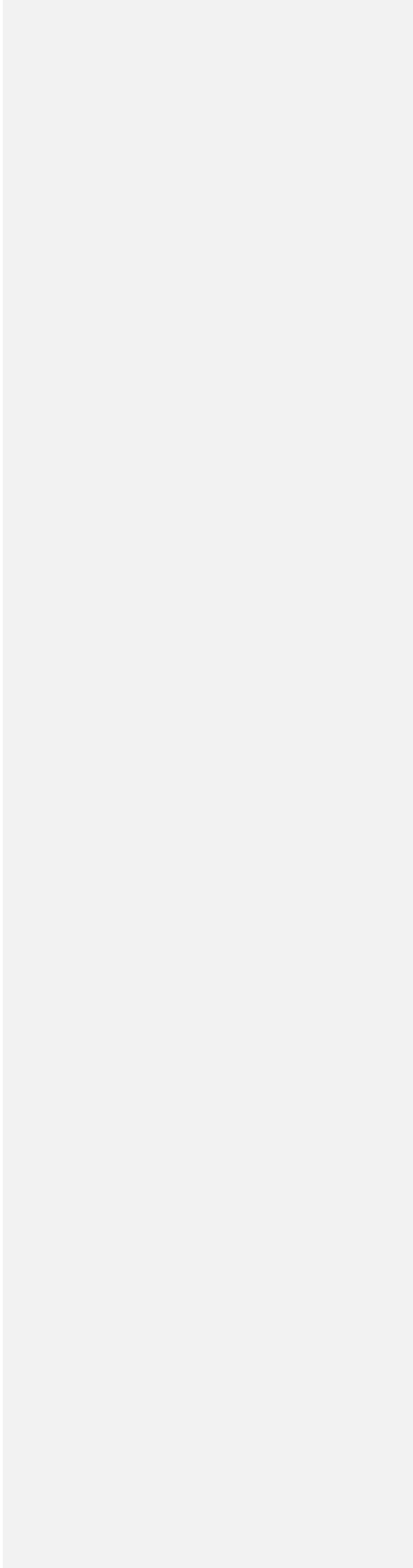
© 2008 by the Sustainable Development Policy Institute

First Edition September 2008

Mailing Address: PO Box 2342, Islamabad, Pakistan.  
Telephone ++ (92-51) 278134, 278136, 277146, 270674-76  
Fax ++(92-51) 278135, URL: [www.sdpi.org](http://www.sdpi.org)

**Table of Contents**

Abstract ..... 1  
Introduction..... 2  
Section I: Theoretical Framework..... 3  
Section II: Methodology ..... 5  
Section III: Findings ..... 7  
Section IV: Analysis ..... 16  
Section V: Recommendations..... 19  
References ..... 23



The Sustainable Development Policy Institute is an independent, non-profit, non-government policy research institute, meant to provide expert advice to the government (at all levels), public interest and political organizations, and the mass media. It is administered by an independent

### **Board of Governors**

Mr. H. U. Beg  
Chairman of the Board

Dr. Masuma Hasan

Dr. Qasim Jan  
Vice Chancellor Quaid e Azam University

Dr. Pervez Tahir  
Mahbub ul Haq Chair in Economics GC University, Lahore

Dr. Hamida Khuhro  
Member Sindh Provincial Assembly

Justice (Retd.) Majida Razvi

Mr. Etrat H. Rizvi

Mr. Sohail Maqbool Malik  
Country Representative-IUCN Pakistan

Dr. Saeed Shafqat  
Professor & Director, Centre for Public Policy & Governance (CPPG) Forman Christian  
(college) University, Lahore

Dr Abid Qaiyum suleri  
Executive Director, SDPI

Under the Working Paper Series, the SDPI publishes research papers written either by the regular staff of the Institute or affiliated researchers. These papers present preliminary research findings either directly related to sustainable development or connected with governance, policy-making and other social science issues which affect sustainable and just development. These tentative findings are meant to stimulate discussion and critical comment.

## State of Livelihood Assets in the Earthquake Affected Areas: A Way Forward

Sobia Nazeer Ahmad<sup>\*</sup> and Abid Qaiyum Suleri<sup>\*\*</sup>

### Abstract

Since the 8 October 2005 earthquake in Pakistan, relief efforts have given way to recovery and rehabilitation initiatives. Numerous non-government organizations are supplementing the Government in efforts to revive the economy of those living in the earthquake-affected areas mainly in the North West Frontier Province (NWFP) and Azad Jammu and Kashmir province. The focus is now on livelihood rehabilitation. Policy-makers are presently focusing on strategies to rebuild livelihoods of vulnerable groups based on their financial losses as a consequence to the earthquake. However, these strategies target rebuilding lost financial assets (for example donating livestock and poultry), rather than ensure sustainability by strengthening capital assets and diverting livelihood dependency on income that is less vulnerable to shocks. Therefore, there is a danger that interventions may not result in ensuring sustainable livelihoods.

This paper aims at highlighting the need to move beyond developing a limited approach to livelihood restoration in the earthquake-affected areas. In order to do so, the Department for International Development (DFID) sustainable livelihoods framework is used to analyze people's lives in terms of capital assets held within an external context of vulnerability to shocks. In the current case, the approach centers on studying the vulnerabilities caused by the earthquake on human, financial, physical, natural, and social assets, and suggests ways to strengthen these assets in order to make them resilient to such vulnerabilities in future. Information to assess the situation of capital assets before and after the earthquake, and to observe the present policy interventions was gathered through questionnaires and focus group discussions across eight villages in the NWFP and AJ&K.

In the end, it is discovered that the livelihood structures between the NWFP and AJ&K are dissimilar, and that future livelihood restoration policies should keep this difference in mind. Moreover, it is suggested that keeping the state of livelihood assets in mind, a comprehensive livelihood strategy that supports gendered human development, encourages sustainable local economic activity, and strengthens weakened livelihood assets needs to be developed.

---

<sup>\*</sup> Sobia N. Ahmad is a Research Associate in the Globalization and Rural Livelihoods Unit at the SDPI. She has done her MSc in Global Politics from the London School of Economics (U.K). Her main areas of interest are the Political Economy of Development and Political Economy of Earthquake Rehabilitation.

<sup>\*\*</sup> Abid Q. Suleri is assistant executive director SDPI. He earned his Ph.D. in Food Security from the Natural Resources Institute (NRI), University of Greenwich, United Kingdom. He has conducted intensive research on Globalization and its Impact on Livelihoods.

## Introduction

On 8<sup>th</sup> October 2005, the most debilitating natural disaster in Pakistan's history occurred. An earthquake measuring 7.6 on the Richter scale tore through northern Pakistan, leaving more than 87,000 people dead and affecting 3 million more<sup>1</sup>. It is time to reflect what all has been accomplished and what all remains to be done. At the conclusion of relief efforts, many survivors are still suffering and rehabilitation and reconstruction remains a challenge.

Although independent sources report a much higher figure, however, World Bank<sup>2</sup> statistics report that approximately 500,000 households in the affected areas lost their livelihoods. There were losses in lives of earning members of household. In addition more than one million people lost their jobs. The Asian Development Bank<sup>3</sup> has estimated that collapsed sheds, landslides, and falling rocks triggered by the earthquake and its aftershocks, killed about half of the farm animals, and damaged about 70% of the harvested and standing crops. More than 100,000 heads of livestock (mainly cows and buffaloes) were killed in the weeks following the earthquake, and many families were forced to sell their livestock at very low prices or sacrifice it for food in desperation. This reduction in numbers of livestock does not only reflect a sharp fall in income (especially for female headed households), but it also results in reduced manure for enriching soil for the next cropping season adversely impacting the potential income of farmers. To make matters more difficult, irrigation and soil conservation structures were extensively damaged further reducing the likelihood of successful harvests.

The earthquake has changed the social dynamics as well as damaged the potential earning capacities of the residents of the earthquake-affected areas. This means that women have to bear the maximum brunt (in many cases as sole bread earners of the household) to ensure their own, as well as their families' survival. Secondly, the farming conditions have deteriorated and there has been a sharp decline in livestock holdings of each household. These conditions have long-term effects and the contribution of farm income to total household income would not remain the same for the years to come. Loss in food production would directly threaten food security thus directly threatening the income generation cycle.

Since the 8<sup>th</sup> October 2005 earthquake, efforts to restore sustainable livelihoods to victims of the earthquake have been underway by the Pakistani Government, Army, international financial institutions, as well as relief agencies. However, the challenge in restoring livelihoods remains, since none of these organizations are specialized in restoration of livelihoods of the survivors.

In these circumstances, the strategy for ensuring sustainable livelihoods should be two-pronged: firstly to ensure minimum level of subsistence, and secondly to strengthen livelihood assets for the people in the earthquake affected areas so as to reduce their vulnerability from such natural disasters. On top of it, these strategies are to be gendered; ensuring that role of women as

---

<sup>1</sup> <http://www.ri.org/articles.php?ssid=49> (Accessed 16.09.2006)

<sup>2</sup> <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:21083318~pagePK:146736~piPK:146830~theSitePK:223547,00.html> (Accessed 16.09.2006)

<sup>3</sup> <http://www.adb.org/Media/Articles/2006/9575-Pakistan-livelihood/default.asp> (Accessed 16.09.2006)

livelihood providers is well appreciated through these strategies. Another important aspect that any livelihood strategy should cater to strengthen the livelihood capabilities so that the assets may be utilized in livelihood securing activities.

The objective of this paper is to guide interventions carried out at a policy level<sup>4</sup> for ensuring sustainable livelihoods in the earthquake-affected region. In order to do this, it is imperative to analyze the composition of livelihoods in the earthquake-affected areas of AJ&K and the NWFP, and to compare the post-earthquake state of affairs with the pre-earthquake status of each component of livelihoods in order to truly understand which of the livelihood assets were most affected by the earthquake. In analyzing the ‘before and after’ situation, a clear idea of which of the livelihood components need to be strengthened would emerge.

In the first section, the theoretical framework for this study is elucidated. In the second section, the methodology for following the theoretical framework is explained. The third section presents the findings of the survey and interviews conducted, while the fourth analyzes these findings within the context of existing efforts. In the final section, policy recommendations are given in light of the analysis.

### **Section I: Theoretical Framework**

In order to comprehensively understand the impact of the 8<sup>th</sup> October earthquake on the livelihoods of the affectees and suggest policy recommendations, it is important to place ‘sustainable livelihoods’ in context. In the course of this study, the following definition of ‘livelihoods’ as elucidated by Chambers and Conway (1992)<sup>5</sup> has been used:

*‘A livelihood comprises of the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base’.*

According to the above definition, capabilities, assets and services are central in the composition of livelihood. In order for these to be sustainable, Chambers and Conway (1992) emphasize that these capabilities, assets and activities must be maintained or developed further to show resilience against any stresses and shocks. The importance of environmental sustainability is also stressed.

Once sustainable livelihoods has been defined, the next step is to explain the approach used in conceptualizing this report. The ‘sustainable livelihoods approach’ (that is being followed by many agencies including the DFID, Action Aid, Oxfam, and others) is centered on analyzing people’s lives in terms of capital assets held within the external contexts of:

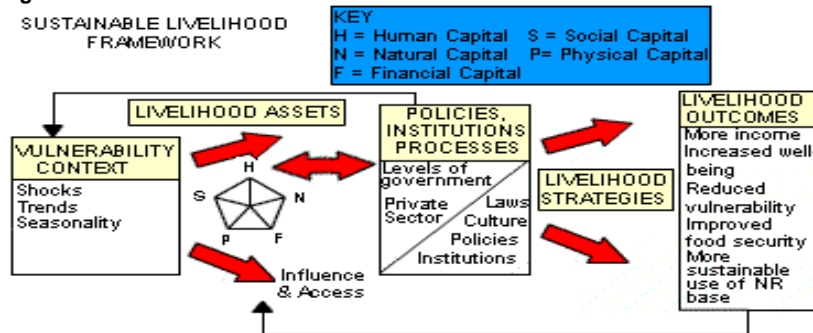
<sup>4</sup> The study was commissioned by Action Aid, and therefore the analysis and recommendations are more relevant for the international NGOs operating in the earthquake-affected areas.

<sup>5</sup> Chambers, R. Conway, G. 1992, Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. IDS DP296 February 1992

- i) vulnerability to shocks, and
- ii) various policies, institutions and processes that define the capabilities to turn livelihood assets in livelihood strategies.

In the current case, the approach centers on the vulnerabilities caused by the earthquake on human, financial, physical, natural, and social assets. Whereas, various governmental and non-governmental policies, institutions, laws, customs, and norms are some of the external factors that affect capabilities of the quake survivors to utilize these assets.

**Figure 1. Sustainable livelihoods framework**



Source: DFID 2001

In this study, the five capital assets i.e. human assets, natural assets, financial assets, physical assets and social assets of the people affected by the earthquake have been analyzed before and after the earthquake. After the earthquake, there may also have been a structural change within these capital assets, as assets are destroyed as well as created as a result of the shocks. Coupled with the interventions carried out to date, a real assessment of the situation at hand on assets and capabilities to utilize those assets can be made. Any recommendations that follow after this would reflect the optimum management of livelihood assets to ensure sustainable livelihoods.

At this stage, it is important to highlight that a holistic account of sustainable livelihoods addresses capabilities along with assets. Therefore, in the course of this paper, people’s endowments (i.e. their assets) are assessed in context of their capabilities (i.e. opportunities to translate the assets endowed into meaningful livelihood outcomes). Sen (2001) explains ‘capabilities’ as the substantive freedoms that a person has to pursue his/her objectives. In this case, it is not only the capital assets that a person holds, but also the personal characteristics through which a person may convert the assets/endowments into outcomes. For example, an able bodied person is more able to make use of land for agriculture than a physically challenged or elderly person. Capabilities result in functionings (i.e. activities) that lead to certain outcomes. In this way, a person’s capability refers to alternative combinations of functioning that a person is able to achieve. Taking it a step further, development is the freedom to achieve valuable outcomes (functionings).



At this point, policies, processes and institutions as per the Livelihoods framework play a key role. As external factors that regulate human capital assets may restrict or encourage people to translate their endowments and capabilities for livelihood development and generation.

Formatted

## Section II: Methodology

Following the theoretical framework, a clear idea of what needs to be researched emerged. A questionnaire that addressed the impact of the October 8<sup>th</sup> earthquake on each of the five capital assets was prepared. The questions were framed such that they took stock of the livelihoods situation before and after the earthquake. The research team also conducted focused interviews of the residents of AJ&K and the NWFP in order to better understand the trends emerging from the responses of questionnaires. Observations from the Action Aid staff were also taken into account. To map capabilities, key informant interviews and review of literature on various policies, processes, and institutions was carried out.

### Rationale for selection of villages<sup>6</sup>

The first step in conducting the research was selection of villages. Action Aid gave a list of villages in which it had been operating, and from this list, a total of eight villages were chosen--four each from the NWFP and AJ&K. In order to ensure that data gathered was representative, a 4x4 matrix on remoteness (very remote, not remote) from town and degree of access (easy access, difficult access) was created and prospective study villages were placed within this matrix. From each province one village that fell in each combination box was chosen. For example, in AJ&K, Tanda was both remote (12 km from nearest town) and it was difficult to access (since access from main road to the village was 4 km on foot). Similarly, Chanut was difficult to access though not remote, while Makhdoom Kot was both difficult to access as well as remote. In the NWFP, two villages of easy access (Dharra and Pokkal) and two villages of remote access (Battmori and Moza Chullandari) were chosen. It is important to highlight that all villages chosen for the questionnaire were marked as 'mostly damaged' by the Action Aid.

From each of these villages, the survey team questioned heads of households for responses. Information from 204 (representative of approximately 1400 people) households from the NWFP and AJ&K was gathered. However, at the time of data processing, six answered questionnaires were rejected due to erroneous information in order to ensure accuracy of data. Consequently the findings follow from data processed from 100 households in NWFP and 98 households in AJ&K (representative of a total of 1367 people). Since most of these heads of households were male, so Focus Group Discussions<sup>7</sup> with affected men and women living in the study sites were carried out to ensure women's input. Four consultations with national and international relief agencies, academia, and development practitioners were also arranged to further validate our results.

<sup>6</sup> As mentioned earlier, this study was undertaken to guide Action Aid's livelihood strategy and hence the village selection was based on villages where Action Aid had field operations.

<sup>7</sup> Focus Group Discussions were conducted in Shallabagh (Muzaffarabad); Makhdoom Kot (Bagh); Dharra, Lamipatti, Charpanda and Moza Chullandari (all in Mansehra).

Media dissemination of initial findings was also carried out to seek feedback from other stakeholders.

#### Strata of surveyed villages

	Tanda (AJK)	Grath (AJK)	Channat (AJK)	Makhdoo-Kot (AJK)	Moza Chullnadari (NWFP)	Dharra (NWFP)	Battmori (NWFP)	Pokkal (NWFP)
Tehsil	Muzafar-abad	Tharrkan	Dhirkot	Bagh	Oghi	Oghi	Batagram	Bana
District	Muzafar-abad	Muzafar-abad	Bagh	Bagh	Mansehra	Mansehra	Batagram	Batagram
Population Before	550	411	4500	2500	2000	2500	4000	3000
Population After	470	410	4430	2078	1995	2480	3850	2990
Households Before	100	72	602	346	350	250	1000	1000
Households After	94	72	595	346	350	246	976	1000
Damage	Mostly damaged	Mostly damaged	Fully damaged	Mostly damaged	Mostly damaged	Mostly damaged	Mostly damaged	Mostly damaged
Distance from Town	12 km	5 km	3 km	15 km	6 km	3 km	11 km	2 km
Distance from Main Road	4 km	4 km	2 km	10 km	3 km	1 km	11 km	0.5 km
Degree of Access	On foot	Jeep mud track	On foot/ Single road	Jeep mud track & single rod	Jeep mud track	On foot	Single road	Single road
Infrastructure	Mix	Pakka	Mix	Mix	Katcha	Katcha	Katcha	Katcha
School Facility (After)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Health Facility (After)	Yes	No	Yes	Yes (after EQ)	Yes	No	Yes	Yes

#### Limitations of the study

The 8<sup>th</sup> October 2005 earthquake brought on a severe trauma to the people of AJ&K and the NWFP. At that time, residents were under shock and therefore their recollections may not be fully accurate or representative of the situation.

Another limitation of this study is that of the time span of observations. The survey and interviews were conducted ten months after the earthquake. In some ways this was too long a period, since minor injuries had healed and some recollections had been lost. In other cases, this period was too short to effectively gauge the stability of some trends that are better observed in the long run. For example trends relating to income earned from farming could not be gauged yet.

Finally and most importantly, sensitivity of people to external researchers making inquiries of their income, livelihoods, and experience of tragedy and disaster, is a substantial challenge to this type of research. In addition to the need to respect people's privacy and the time sacrificed to participate in the research, the study also had to be aware of bias in the data. People affected by disaster are usually in need of assistance and are understandably cautious in revealing the

strength of their own capacity. The study made great effort to explain to participants the independence of the research from any assistance program and assure them of the privacy of individual responses. However, due to the above-mentioned constraints there would be room for improvement in this report, both in qualitative as well as in quantitative terms.

## **Section III: Findings**

### ***Impact of the earthquake from a vulnerability perspective***

In using the livelihood approach, ‘vulnerability’ refers to “the external environment in which people exist” (DFID, 2001, 2.2). In this way, the earthquake represents the vulnerability of the locals towards unexpected disasters. In the face of this vulnerability, there are immediate consequences that follow and one of the most significant is the risk to livelihoods. Following the earthquake, the way of life for many changed. This does not only relate to the damage on life and property, but in a wider context, it also reflects the changes in the way of life and all things connected--such as sources of earning, natural resources, service demand and provision etc.

The earthquake (as expected) exacerbated previous vulnerabilities. In our study areas, 79% household reported damages to their houses, 26% households complained of poor production/harvests due to earthquake, 31% were of the opinion that earthquake induced shortage of food, 27% reported loss of livestock and poultry, 22% reported loss of land, 24% saw market fluctuation and inflation, 14% reported loss of jobs and 10% reported illnesses and death due to the earthquake.

### ***Impact of the Earthquake on Capital Assets<sup>8</sup>***

#### **1. Human Assets**

Overall, the 8<sup>th</sup> October 2005 earthquake had an adverse affect on human assets in the study villages (in the NWFP and AJ&K). The earthquake was reported to be directly responsible for the death of approximately 1% of the surveyed population in the NWFP and 3% of the surveyed population in AJ&K. It was observed that households in AJ&K suffered more from loss of life as well as from adverse health affects and injuries than those in the NWFP. Following the earthquake, the percentage of people suffering from minor injury/illnesses increased from 3% to 5% in the NWFP and from 2.3% to 6.3% in AJ&K. Similarly, those subject to major injury/illnesses also increased from 2.5% to 5% in the NWFP and from 2.3% to 5% in AJ&K. The results are attributed to the type of houses people lived in (*katcha* or *pakka*, i.e. mud or brick), and their villages’ proximity to the fault lines, however, verification of this claim was beyond the scope of current study.

It is important to bring to notice that the survey was conducted ten months after the earthquake, and therefore a lot of the minor injuries my have been healed by the time it was conducted. The number of injured people may still have been much higher previously.

<sup>8</sup> All findings are based on primary data gathered through questionnaires and field notes.

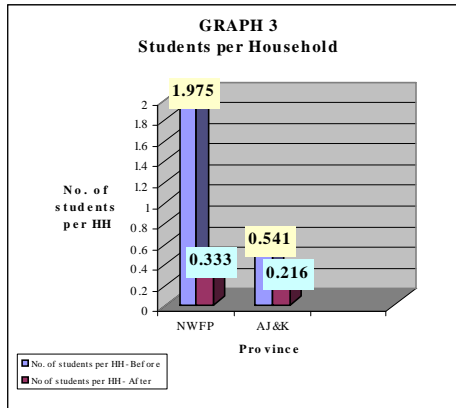
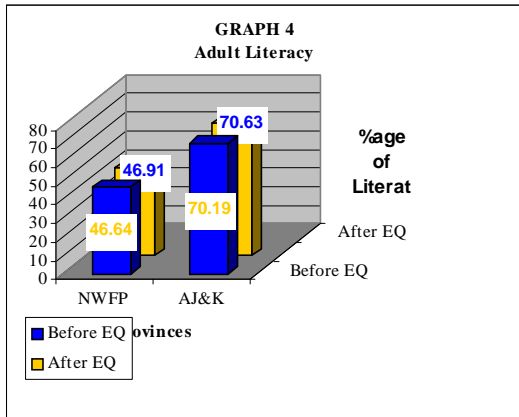
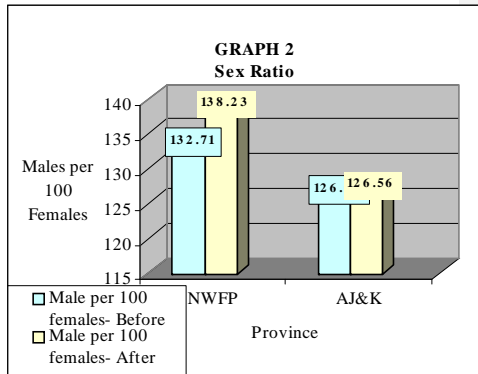
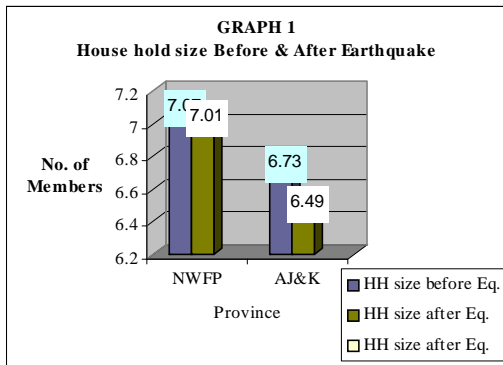
Not only a reduction in the household size (Graph 1) was noted but a visible imbalance in the already imbalanced sex ratio (number of males living per 100 female) of the households due to high mortality of women was also noted after the earthquake (Graph 2). It was also observed that in the NWFP, the female mortality was much higher than in AJ&K. Although number of school-going children per household were more in the NWFP than in AJ&K before earthquake (Graph 3) yet adult literacy rate in AJ&K was much higher than that of in the NWFP before as well as after the earthquake (Graph 4). This corresponds with the larger household size in the NWFP, which leads to the conclusion that there were more children of school-going age in the NWFP as compared to AJ&K. Adult literacy seemed to be unaffected after the earthquake; rather there was slight increase in number of literate adult present in our study areas after the earthquake. One plausible reason for this increase may be that more literate native residents who were performing services away from their village may have returned to the villages to support families/relatives, or to take a very optimistic stance, some residents of AJ&K and the NWFP may have been encouraged to read/write since the intervention of INGOs, NGOs and Government relief workers in those regions.

A sharp decrease (83.4%) in number of students per household in the NWFP (from 2.0 to 0.333) was observed after the earthquake. The number of students per household also dropped by 50% (from 0.541 to 0.216) in AJ&K. This dropout is not only because of higher child mortality due to earthquake, but also due to the response of social customs to makeshift schools set up after the earthquake. In the surveyed villages, the structural damage to schools resulted in setting up of temporary schools without boundary walls or covered toilet facilities, and this discouraged female attendance due to the strict socio-religious norms. Moreover, with a greater number of female deaths, young girls would be expected to take charge of running the house in place of their mothers.

Deaths, severe injuries, dropout from schools and imbalanced sex ratio have adversely affected human capitals of livelihoods. This is especially true where the deceased/injured was/is the primary bread earner. While death of men had turned the dependents economically and socially vulnerable, increased mortality of women resulted in absence of mother figures/spouses that in turn adversely affected the family nucleus. During focus group discussions many male respondents admitted that they had never realized the importance of their spouse while they were alive. According to them the death of their spouses has not only affected the family life but has also affected their economic achievements, as they were not able to concentrate or avail many employment opportunities.

## 2. Natural Assets

Due to seismic shocks, villages close to fault lines have suffered by way of cracks in the subsoil,



landslides, and soil erosion. Because of this, not only the agricultural land, but also the supporting irrigation channels in AJ&K and the NWFP have been destroyed. This has adversely impacted natural assets of livelihoods. Presently, the biggest concern to the women in villages surveyed was inaccessibility of water caused by the blocking of irrigation channels and water pipes due to landslides and seismic shocks. Water collection is primarily a female-driven activity, and the distance of villages from water sources made the task extremely cumbersome for women.

## 2.1 *Agricultural Land*<sup>9</sup>

Land is an important natural asset especially for those who derive income from it. The seismic shocks destabilized the land and the soil structure. Cracks in the land were visible in both regions, these cracks have caused substantial damages to terraces on slopes, and this has resulted in landslides and soil erosion during the rainy season. Moreover, irrigation channels were severely blocked and in some cases completely wiped out. In our study area, villages in AJ&K especially Tanda (Muzaffarabad) was adversely affected by landslide.

While 9% households from our study area revealed that their agricultural land was partially or totally damaged due to the earthquake in the NWFP, 51% household in AJ&K reported this damage. Similarly 4% households in the NWFP reported a partial to total loss to their grazing lands in the NWFP as compared to 16% in AJ&K. The pattern also held true for water channels, where 7% households from the NWFP reported a partial or total damage compared to 23% households in AJ&K.

Comparatively more adverse affect of earthquake on natural resources in AJ&K than the NWFP is also evident from the fact that in the NWFP (after the earthquake) the size of landholding, share of sharecroppers or rent-free landholders did not change significantly (a drop of 0.5 kanals was noticed). While in AJ&K, the average size of owner's landholding fell slightly from 13.9 kanals to 11.8 kanals. This fall is partially attributed to the destruction of land in landslides.

This damage to agricultural land, grazing land and water channel also explains the increase of expenditure on food after the earthquake (see the section on financial assets: expenditure after the earthquake).

## 2.2 *Access & Use of Natural Resources*

Natural resources such as timber, wood, grass, and herbs are important assets of livelihoods, since they can not only be sold commercially, but they also fulfill daily living needs of the inhabitants of AJ&K and the NWFP. From the available natural resources, the most commonly used were fuel wood and pastureland followed by timber and finally grass and herbs. The frequency of use of fuel wood, leaves, grass, pastureland and herbs did not change much after the earthquake (the survey was conducted in September 2006, and may not reflect winter demand on fuel wood).

The frequency of use of construction timber after the earthquake fell in our study villages. Previously, 10% of the households were reportedly using it once a month while after the earthquake, 4% responded that they used it once a month. Frequency of use of timber for sale

---

<sup>9</sup> Land Tenancy: The issue of land tenancy and house tenancy are closely linked. In some cases where the landholder is not the owner; the tenants live on a rent-free house tenancy. In AJ&K, land reforms in the 1940s in Pak-occupied Kashmir followed India's example and abolished the Jagirdari system of land holding and this resulted in redistribution of land. Land left behind by migrants to Indian occupied Kashmir was also distributed to the landless and hence increased the number of landowners in AJ&K. Attempts at implementing such reforms were not successful in the NWFP. This is mainly why the overall average size of owner's landholding is much higher in the NWFP than it is in AJ&K.

also changed after the earthquake. Some 50% of the respondents who were selling timber before the earthquake were no longer selling it after the earthquake.

This change is apparent mainly because timber is no longer used for construction, and secondly timber is being recycled from the debris mostly. ERRA is discouraging construction activities till building bylaws and building codes are fully implemented. Similarly there is some restriction on building due to seismic zoning. Moreover, construction activities have not reached the levels where timber will be required, and finally because a large amount of timber is not needed to construct houses as per ERRA's house designs. According to ERRA, houses built on their standards use 50% less wood as compared to mud houses<sup>10</sup>. However, the current houses/tents are not very 'winter-proof'. This would increase use of fuel-wood and it may pressurize locals to start constructing mud houses.

### 3. Financial Assets<sup>11</sup>

All in all, the earthquake severely retarded the financial assets of the residents of AJ&K and the NWFP. From our study villages, the average overall loss on asset-based<sup>12</sup> and non-asset based income (per month) was double in AJ&K than in the NWFP. It was reported that monthly overall average income per household in the NWFP decreased by 18% from Rs<sup>13</sup>.1327 to Rs. 1090, whereas in AJ&K the monthly overall average income per household decreased by 37.33% from Rs. 1204 to Rs. 754.

Expenditure patterns and sources of income also changed after the earthquake. More amounts were spent on essentials such as food, clothes, and transportation (this pattern is evidently short term and is reflective of immediate needs). Moreover, while remittances were always there, grants emerged as new source of income whereas loans and credits also increased.

#### 3.1 Sources of income and their pattern

The majority of households were dependent on non-asset sources for cash income before and after the earthquake. Prior to the earthquake, only 20% of the respondents in the NWFP relied on asset-based income, while 87% relied on service related income. Similarly, in AJ&K, 26% relied on asset-based and 76% relied on service related income (It is significant to note that both income sources are not mutually exclusive). This small share of asset-based income got further diluted due to the earthquake, as asset-based income reduced by 38% in the NWFP (average monthly asset based income per household decreased from Rs. 357 to Rs. 220). Interestingly in the case of AJ&K, an 85% reduction in asset-based income was reported (from Rs. 375 per month per household to Rs. 58).

Asset-based income in the earthquake-afflicted areas mainly comprised of the crops, milk, poultry, eggs, livestock, fruits/vegetables and timber. From all these, earnings from selling milk

<sup>10</sup> ERRA housing strategy <http://www.erra.gov.pk/Reports/Housing%20Policy.pdf> (Accessed 26.09.2006)

<sup>11</sup> In this section, Financial Assets have been categorized into asset based (which includes agriculture and livestock), and non-asset/service based (which include Labor, employment and business).

<sup>12</sup> With reference to this survey, asset based income in the earthquake-afflicted areas mainly comprised of the crops, milk, poultry, eggs, livestock, fruits/vegetables and timber income.

<sup>13</sup> Conversion rate: 1 USD = 60.6300 PKR <http://www.xe.com/ucc/convert.cgi> (Accessed 03.04.2007)

suffered the most. After the earthquake, the number of households selling milk drastically fell by 85%. Farming of vegetables and fruit also drastically declined, while poultry and eggs no longer remained income sources.

Most households in the earthquake-affected areas rely on income from labor sources. Of these, the most common labor type is non-farm labor. Although the number of households deriving income from non-farm labor did not change after the earthquake, the regularity of income changed—40% of regular income earners switched to seasonal income. The number of regular salaried income earners also fell slightly. Similarly, the number of households providing agricultural labor and those having businesses also slightly fell. However, there was no change in remittances. These changes were noted because after the earthquake a lot of regular salaried workers gave up their full-time jobs to assist their families in receiving compensation/aid and to assist in the relief/reconstruction activities. Some even found temporary jobs working for NGOs or government organizations operating in the area.

It is important to note that overall average income losses in AJ&K were two times the losses of average income in the NWFP. However, the non-asset (services) based income was almost uniformly affected in both areas. The services based income dropped by 10% in the NWFP (from Rs. 969 to Rs. 869 per month per household) and by 14% in AJ&K (from Rs. 829 to Rs. 713).

### *3.2 Expenditure after the Earthquake*

After the earthquake, the expenditure patterns showed a significant change. There were minor increases in the expenditure on food, clothes, education, electricity, transport, socio-religious occasions and expenditure on weddings/dowry. These increases were very slight, and may be attributed to price hikes following the earthquake. Interestingly, it was noted that even in the event of a dire calamity such as the earthquake, residents of AJ&K and the NWFP still continued to spend excessive amounts on weddings/dowry. After the earthquake, an average of Rs.53,178 (median of Rs. 15,000) were spent for weddings/dowry. This highlights the intensity of social pressures surrounding these functions.

In some cases, expenses were also reduced. These were namely amounts spent on health, agricultural inputs, livestock and house rent. Although the reductions in these expenses have not been stark, they are significant because in the case of health, it proves that most health expenses are being met by external sources (aid). In the case of a reduction in expenditure on agricultural inputs and livestock, it is mainly because most people are still living in tents and available income is channeled to meet survival needs and rebuilding homes. Expenditure on livestock is mainly reduced because the majority of people have not yet bought any (after theirs became casualty to the earthquake) because care and upkeep is expensive, and destroyed shelters are not rebuilt since it is not affordable at the moment.

There has also been a sharp increase in expenditure and this has been in the case of land purchase, house repair, migration and penalties. These expenditures are a direct consequence of the damage done by the earthquake on the residents' personal property.



### 3.3 Sources of income for expenditure

As has already been mentioned, agriculture and asset-based income was never the main source of income either in AJ&K or in the NWFP. Prior to the earthquake, a combination of regular income, savings, loan, credit, in kind, charity and selling of livestock had financed the expenditures mentioned in the previous section. The dominant form of financing all the above-mentioned expenditures was regular non-asset based (services including inland as well as overseas remittances) income. This was followed by taking loans and credit for expenditures such as dowry/wedding and in very rare cases, for food, education, clothing, health, electricity and transport. Savings were used for purchasing land, livestock, dowry, clothes, and loan repayment. Charity was accepted for health services and food.

After the earthquake, relief/compensation, and grants from ERRA/Government, became 'new' sources of income to supplement the previous ones in meeting the expenditures incurred.

As noted previously, there was a drastic decrease in asset based income, however, as its share in cash based financial assets was never significant, overall household income was only reduced by 10-14%. Therefore, regular income from services still remained dominant source of income for payment. Compensation/relief money, and external help from humanitarian assistance organizations has been reported to supplement income earned through services. This additional money along with the income earned through service provision helps to finance all sorts of expenditures at the moment. Loans and help from relatives is still being sought to meet the expenses of migration, education, dowry, etc.

### 3.4 Compensation and support

Following the earthquake, assistance from the army, Government, non-government, and international non-government organizations poured into the earthquake affected areas and they all worked towards providing relief and rebuilding of the devastated/damaged areas. Through aid from relief and recovery organizations, affectees have received cash, food, bedding, utensils, livestock, poultry, agricultural inputs, medicine, housing and shelter. Moreover, roads and water supply channels have been repaired through food for work or cash for work basis.

## 4. Social Assets

DFID defines social assets as "the social resources upon which people draw in pursuit of their livelihood objectives" (DFID, 2001, 2.3.2) In this way, membership in more formalized groups and networks of trust, reciprocity and exchanges is seen to be a resource that can enhance livelihood objectives of people. This is because they encourage cooperation with community members and provide a platform whereby issues/problems are solved on the basis of community and self-help.

In AJ&K and the NWFP, prior to the earthquake, the main form of institutional partnership was that of membership in the traditional Jirga<sup>14</sup>. After the earthquake, there was a minor (2%) increase in participation in the Jirga. Other than this, institutional participation in political

<sup>14</sup> A Jirga is a tribal assembly of elders that takes decisions by consensus. The Jirga holds the prestige of a court in the tribal areas of Pakistan. (source: www.wikipedia.org)

parties, tribal associations, farmers association, religious organization or any other kind of association did not change much. However, community participation has increased as a result of INGO interventions. INGOs, engaged in relief, recovery and rehabilitation work in the villages strengthened previously existing (and have formed where non-existent) Community Associations<sup>15</sup> in order to facilitate their operations. Members of Community Associations are 'representatives' of the community<sup>16</sup> and voice the community's needs and concerns to Community Mobilizers<sup>17</sup> who in turn report to the field team members of the INGO/NGO operating in the village. Membership into these organizations have resulted in ensuring that INGO/NGO interventions are relevant and reflective of local needs, while locals feel greater ownership in the reconstruction and rehabilitation process. These community associations were different from existing Jirgas, since they did not reinforce existing hierarchal relations. Moreover, they encouraged participation by younger community members who nominated themselves and then were given encouragement form other community members.

Immediately after the earthquake, families went through severe trauma caused by the loss of life as well as loss of shelter and belongings. This not only resulted in dysfunctional behavior in people, but also increased marital discord and in some cases led to domestic violence. Furthermore, as a result of the earthquake, each family went through severe crisis (in terms of loss of shelter and financial assets and injuries to health) and consequently the sense of community help eroded and selfish interests in procuring aid and compensation surfaced. Although participation in community associations increased (as mentioned earlier), in Lambipatti (Siran valley, Mansehra), the members of the community associations were discovered to project issues and claim benefits on individual interests. Such cases, however, are few and far between.

The effects of compensation are also witnessed to be causing a break in the traditional joint-family system. Compensation for house construction is seen as an opportunity for some to claim separate residence for their parents or married siblings. In cases where extended families lived under one roof, disputes arose on the basis of who should get compensation money (from ERRRA). In one village (Shallabagh, Muzaffarabad), a family dispute over compensation even led to (accidental) murder.

Death of mother figures, and physically challenged spouses (mainly wives) after the earthquake also led to eroding of social assets as it resulted in either shifting of burden of taking care of the siblings to the eldest daughter or in mismatch marriages, where men wanted to remarry because their wives had passed away or were physically challenged.

#### 4.1 Physical Assets

---

<sup>15</sup> From each village, two groups of approximately seven to 10 men and women each are members of the community associations.

<sup>16</sup> They voice the demands of the community and therefore guide INGO interventions with relation to what (kind of aid) the community needs most, which families/individuals are in dire need of aid, and give feedback of village members on the work of the INGO

<sup>17</sup> Community Mobilizers are salaried workers of the INGO operating in the area. They are responsible for conducting surveys, coordinating meetings of the community associations, etc. They act as an interface between the INGO and the community/community associations.

The most damaged physical assets by the earthquake were houses, home appliances, daily use utensils, bedding, clothing, and furniture. In our study area, 41% of the houses in the NWFP, and 49% of the houses in AJ&K were totally damaged by the earthquake. The destruction of houses and land resulted in temporary displacement, but in the long term, the form of tenancy ought not to vary in AJ&K (since almost all the respondents are landowners). However, there are some concerns especially from those who are not allowed to reconstruct on their land due to their proximity to the fault lines. In the NWFP, on the other hand owned tenancy fell by 1%, Kandhri<sup>18</sup> tenancy fell by 3%, rent-free tenancy increased by 3%, while rented tenancy and mortgage remained constant at 5% and 1% respectively. Tented tenancy increased by 5%.

In AJ&K the losses of utensils, home appliances, bedding, clothing, and furniture were much higher (at least 25% more) than that in the NWFP. Physical assets such as cultivated land, grazing land, water channels, cash and jewellery also suffered damage, but total destruction of these assets was rare and in most cases they were damaged but useable.

In the NWFP, damage to assets such as farming implements, farm machinery, motorcycle and car and jeep was negligible, whereas in AJ&K in some cases these assets suffered total damage to slight damage.

The earthquake caused considerable damage to the supporting infrastructure of the surveyed villages. Road damage, collapse of shops, damage to schools and hospitals hampered smooth functioning of daily life. The links between villages and commercial centers hampered commerce activities, and therefore adversely affected the lives of the people.

#### 4.2 *Livestock*

According to the survey results, the majority of residents of AJ&K and the NWFP have lost their buffaloes, cows, bullock/oxen, sheep and poultry after the earthquake. More than 70% of the respondents answered that their cows, sheep/goats and poultry died after the earthquake. This was because of collapse of shelters as well as lack of veterinary care for injured livestock and unavailability of fodder. Less than 10% answered that they had sold their livestock, and less than 6% responded that they have consumed the livestock. Five respondents (out of 198) answered that relief agencies had provided them with sheep/goats, one was provided with oxen, and six received poultry as aid.

---

<sup>18</sup> Residence is provided by the land owner and the rent is received in kind rather than in cash usually in the form of domestic labor by women and on farm labor by men.

## Section IV: Analysis

In order to frame effective recommendations, it is essential to analyze the emerging findings in the context of contemporary livelihood frameworks. To put things in perspective Chambers and Convoy's definition of livelihoods (Chambers and Convoy, 1992) is used as a benchmark.

The most significant damage has been to human assets. There has been a noted reduction in family size, which means a reduction in personnel capital. The increased number of female deaths and human injuries resulted in reduced capacities and capabilities for earning, dismantling social setup, and threatened livelihoods. Time and money has been channeled to restore the health of those injured, and there is a noted dysfunction of families that lost the male or female head of households. Women had significant functions within the household--their role as bread earners may not have been recognized but they were subsistence farmers, attended to livestock, and managed homes. Similarly, the formation of makeshift schools in the months immediately following the earthquake coupled with the trend of young girls taking over responsibilities of unwell or physically challenged mothers (or diseased mothers) resulted in noted absence of girls from schools (more noticeable in Mansehra as compared to AJ&K). This trend is especially disturbing because of its long-term implications on female literacy, since lack of education in women will result in reduced capabilities in the future.

Likewise, in houses where male heads of households became casualties, the women became most vulnerable. With no means of earning as well as suffering losses in terms of physical and financial assets, their future seems bleak. The damage to human assets is very significant, since it reflects the reduction in capabilities of translating endowments into outcomes of those affected by the earthquake.

Similarly, the earthquake has also damaged natural assets. In areas close to the fault lines, agricultural land and irrigation systems have been destroyed due to landslides. The natural resources of the earthquake-hit villages are also strained with the demands of survival and reconstruction. In the short term, this has led to a disturbance in the crop cycle, harvests, and environmental degradation.

Financial assets have also come under pressure. However, in most cases, the impact on financial assets is clearly short-term. The findings show that for the majority of affectees, agriculture was not a primary source of income. Also, for those few who depended on it, it was not substantive. However, in the few cases where it was, there was an obvious loss of income due to death of livestock and damage to land. It is also important to note that although the victims of the earthquake were not financially dependent on agricultural activities, they were subsistence farmers, and with a destruction of crops, lands and irrigation systems, their expenditures on food items increased and hence further burdened them financially.

The primary source of income for the majority of surveyed people was services, and according to our findings, the earthquake only caused a short-term shock to income earned from services. The exceptions were where the earners faced severe injuries and were unable to resume work, or

where they expired. A few cases have also been found where upland workers took extended leave from work, or gave up their jobs altogether and settled in their villages in order to claim for compensation, or take care of injured family members. The slow process of reconstruction of houses has made it extremely difficult for migrant workers to resume their jobs, since they claim that they would be unable to work knowing that their families are living in makeshift shelters and are vulnerable to the external environment. This reflects reduced capabilities, and hence financial income of such people has come under stress after the earthquake. At the macro level, it shows that given the opportunity to earn (for example able bodied men who are not re-entering the job markets), some affectees do not pursue income-generating activities since they do not want to leave their families. Initially, in the months immediately after the earthquake, there was a temporary loss of service providers in major cities that affected the smooth functioning of the economy.

Financial circumstances were further worsened due to the change in financial status of the sources of credit after the earthquake. Prior to the earthquake, the primary source of credit for the people of AJ&K and the NWFP were shopkeepers, relatives and landowners. After the earthquake, adverse changes in their circumstances resulted in a loss of credit availability to the earthquake affected people. Moreover, for those who relied on remittances to finance expenditures, remittance flows were temporarily interrupted at the time of the earthquake due to breakdown of remittance flow channels, as well as return of national and international migrant workers. The working capability of some migrant workers was reduced owing to loss of jobs due to long absence, and for a very few international migrant workers, it became problematic to go abroad again due to problems with visas (Suleri and Savage, 2006).

Although there has been a noted increase in income through aid and compensation<sup>19</sup>, most of the money received in aid/compensation was immediately spent on sundry living expenditures such as food, clothes, shelter, health, etc. Very little was actually spent on income-generating assets (such as setting up of business, service outlets, agricultural inputs/ masonry tools, livestock<sup>20</sup>) and this may negatively impact the sustainability of livelihoods in the future.

The difference in prioritizing between aid receivers and aid providers on how to spend aid money is highlighted in the observations where it was noted that many households had recently bought mobile phones from the aid money that was provided to them for revenue generation activities. Pre-earthquake social and class difference still exists in many cases. Those who were comparatively well off before earthquake, although living in makeshift temporary residences (waiting for reconstruction) do own assets such as washing machines, fridge, TV, satellite dish and DVD players, etc. Thus a social competition to spend everything on maintaining their life style was observed. That may be problematic and non-sustainable for many observers but the residents feel that they may not wait forever for the official reconstruction to take place and have to get on with their lives. Similarly there was no fall in expenditures relating to social functions

---

<sup>19</sup> Most of the respondents added compensation/aid money when reporting net income after earthquake. This resulted in an over-optimistic reflection of the present situation.

<sup>20</sup> Few people have bought livestock for subsistence or income generating purposes since too much money is needed in buying and up-keeping them, and because shelters are not available as yet.

such as weddings/dowry. These are some of the social pressures that divert the spending of the aid money from “would be” revenue generating activities to non-revenue generating activities. The above-mentioned social pressures are clearly at the cost of meaningful livelihood generation.

As for physical assets, it was noted that many people whose houses were destroyed, find it hard to rebuild on the amount of compensation given by ERRA. In some areas, construction costs<sup>21</sup> do not match the amount of money given in the installments. In other areas, the land on which houses were built is declared unsafe (due to its proximity to the fault lines) and hence the inhabitants find themselves at a loss of not only their house, but also their property. Furthermore, ERRA’s one-size fits all compensation policy (where all houses are to be two bedroom houses) obstructs construction for people who have different needs. Again, the installment given by ERRA does not cover the cost of land as well as the cost of construction. The inadequacies of ERRA’s housing policies have had knock on effects on people’s financial situation. In some cases, men who were migrant workers are unable to resume their jobs (away from home) since they do not want to leave their families (living in tents or makeshift houses) vulnerable to the external environment. Furthermore, they are staying close to home to ensure compensation and to supervise construction. Delays in the process delay their earnings as well.

Furthermore, it must be noted that in some cases the victims lost not only their houses, but also their household goods such as bedding, furniture, clothes, kitchen utensils, etc. Even in cases where houses were partially destroyed/damaged (e.g. some walls caved in), these items were destroyed. There is no compensation given to such unfortunate people.

The most interesting affect of the earthquake (and ensuing relief/aid work) is on the social assets. Since the earthquake, the people of AJ&K and the NWFP have experienced an opening up to foreign cultures. Members of field teams (of INGO’s) affirm that they initially faced difficulties in approaching the women of the communities. Male members would be suspicious of ‘trainings’ or other female led/female related activities. However, with time the male community members realized that these trainings were for the benefit of women and that their social norms and customs were not threatened in any way. Now it is fairly easy for outsiders to approach the female members of the community, and female community members are as active as their male counterparts in voicing concerns and raising demands.

Although previously, people living in the earthquake affected communities were conscientious members of the communities, the earthquake made every person think of him/herself. Community spirit was eroded to a certain extent, because every family carried heavy burdens of its own. In lot of ways, NGOs/INGO intervention has regenerated a sense of cohesion and strengthened ‘self help’ attitudes within community members. Community based associations have greatly assisted INGO interventions in villages. Members of these associations are volunteers who work to ensure equitable distribution of aid, help formulate strategies for rehabilitation, and represent any other concern of community members. In this way, people’s vulnerabilities have mitigated to a certain extent.

---

<sup>21</sup> This is apparent in villages that are at a distance from the hub. In such cases transportation of materials hikes up construction cost.

In the course of the field research, all field researchers highlighted an important point that emerged from focus group discussions: INGOs and NGOs operating in earthquake affected areas should concentrate their efforts on developing the will of aid recipients to develop capabilities and proactively take matters in their own hands. That is the optimum way of ensuring sustainability of livelihood generation activities. This is so because the majority of people questioned in the survey villages seemed content with maintaining the asset-based livelihood generation structures that is most volatile in the face of natural calamities such as earthquakes. In some cases the will (of residents in earthquake affected areas) to enhance capabilities by taking advantage of trainings offered by some NGOs and INGOs is lacking<sup>22</sup>.

Putting all this in context, the state of capital assets and capabilities must be reviewed in terms of the policies and processes defined by institutions overlooking the reconstruction and rehabilitation phase. In this case, the institutions defining policies and processes that affect locals are INGOs, NGOs and ERRA. At the micro level, each INGO defines its livelihood strategy and in areas where there is more than one INGO and/or NGO operating, there is no legal framework to ensure that their work is in tandem with each other. There may be inefficiencies caused by lack of cohesive policy making. Similarly, as mentioned earlier, ERRA's strict (and tedious) rules and procedures on housing compensation have resulted in reduced capabilities (since upland workers will not resume work until houses are reconstructed) and have weakened capital assets (temporary shelters exacerbate vulnerabilities and health risks).

## Section V: Recommendations

Two key findings that emerge from this paper are firstly that livelihoods cannot be isolated to financial assets. Hence any strategy that aims to strengthen livelihoods needs to assess the previously explained five capital assets as well as capabilities to utilize those assets. In order to ensure sustainability, these assets must be strengthened in the context of external vulnerabilities. Secondly, it is discovered that the capital assets differ in their composition as well as in their level of significance between the the NWFP and AJ&K. For example, from the study villages, human capital had greater earning potential in AJ&K as compared to the NWFP since the literacy rate was higher in AJ&K (difference in composition), and damage to natural assets had greater consequences for income generation in AJ&K since more people relied on asset based income in AJ&K as compared to the NWFP (difference in significance).

To date, livelihood strategies are in the initial phases of implementation. INGOs such as USAID, Mercy Corps, Action Aid, Care International, etc., are presently focusing on:

- Providing trainings to local men in reconstruction work such as masonry and carpentering, while women trainings focus on stitching, handicrafts, and kitchen gardening.
- Giving out livestock and poultry as aid to vulnerable groups/ individuals.
- Financing and setting up of village shops to be run by women or physically challenged.

<sup>22</sup> Case: In an FGD Lamipatti (Mansehra) residents refused trainings offered by the INGO operating in the area, and confessed that in cases where they attended trainings, the incentive was daily stipend received for attendance, or goods given (such as tools, sewing machines) at the end of the training session.

- Handing out cash grants to previously identified extremely vulnerable individual
- Providing temporary jobs through reconstruction and rehabilitation work by means of cash for work or food for work.

Ideally, the focus of livelihood strategies should also include building human assets by encouraging education and improving health facilities, supporting natural assets by restoring farm production training the locals on the significance of conservation, finding solutions for better water management, strengthening physical assets by laying emphasis on infrastructure and house construction, and enhancing social assets by trauma counseling, encouraging community participation and leadership, and encouraging awareness of women's rights.

As observed earlier, the majority of the households in AJ&K (76%) and the NWFP (87%) rely on services for their main source of income. Therefore, most households only sustained short-term financial losses due to temporary suspension of work, or shift from regular to seasonal work. Those that suffered more in terms of financial assets were agriculture-related service providers or those injured (or dead) due to the earthquake. Therefore, this group of people needs to be effectively identified and provided with alternate sources of income. It is not enough to revive farming activities of the affectees, but non-farm income generating activities must also be promoted in order to mitigate the vulnerability context for future. This can be done by adopting a three-pronged approach; i.e.,

- First, providing alternate skills, trainings and passing information regarding job opportunities (local and national) in the service sector to the recipients of the trainings (ideally to connect them with potential employers),
- Second, linking trainings with a micro-finance/grant program so that skilled persons do not face financial constraints to utilize their skills,
- Third, ensuring market access to newly trained persons. In order to ensure this, employment bureaus may be established to ensure that those who received service trainings are generating income as a result of it. Display center and the NWFP/AJ&K emporiums may be established in major cities where products produced by community members could be displayed and sold. Finally provision of infra structure support for market access may be given a priority.

Again, in order to mitigate the vulnerability context for natural assets, it is important to encourage forestation activities and raise awareness relating to protecting the natural habitat. Forestation activities such as plantation of trees will (with time) reduce soil erosion and landslides. At the time of compilation of this report (November 2006) the construction activities had not yet reached roof-making stage where more timber was required, and therefore till then it had not been possible to gauge the demand for timber. Use of timber must be monitored in construction activities. Presently, there is a strong presence of NGOs and INGOs in the earthquake hit areas and they should try to educate the locals on the significance of resource conservation. Furthermore, water management and waste management projects should also be encouraged.

Education is a key to human development. Activities are underway to construct more schools and makeshift schools have already been set up in most places. The next step is to encourage



attendance (especially of girls). To date, female attendance is low due to lack of privacy for female students (e.g. open air bathrooms, no segregation in makeshift schools, etc.). In this regard, emphasis should be placed in ensuring that newly built schools are female friendly, and secondly community leaders and *imams* (religious leaders) may be approached for help in advocacy of sending children to school. Already, a social change by way of increased participation of women in the community development projects (post NGO/INGO intervention) has been noted, and hopefully this change will spill over to other areas (such as school/college attendance) and will be permanent.

Support mechanisms for vulnerable groups must be strengthened. There should be monitoring of treatment meted out to widows, orphans and the physically/mentally challenged. This is especially necessary to ensure that livelihood grants given are used by these people, and not appropriated by others.

Finally, it is imperative to build up self-help attitudes within the community. In the long run, aid cannot sustain development. To do so, it is crucial to provide access to finance and micro credit to those affected by the earthquake. It is now time that the task of resource/program management be placed into the hands of the locals. These communities have been used to tackling development problems (such as access to water through water pipes leading from water source to the village<sup>23</sup>) through pooling resources. Therefore, making target-based plans with time lines (and informing locals of the phasing out of development agencies) may encourage locals to take sustainable development in their own hands.

Such a reality check is essential in order to make locals understand that NGO/INGO interventions are a short-term feature. In most focus group discussions to date, the locals admitted that they had faced the same problems (in terms of financial hardships and livelihoods as well as harsh living conditions) after seasonal shocks (prior to the earthquake), but the national government had never helped. The earthquake itself was a colossal calamity, and it projected the living conditions of the people living in these marginalized areas to the international community. The Government and INGOs poured in for assistance and this was taken as an opportunity to voice development concerns that had been previously falling on deaf ears.

However, monitoring and evaluation of relief, rehabilitation and reconstruction efforts is essential. Up to now, aid given has been channeled to relief and money received by families has been used for meeting immediate needs such as food, clothing and shelter. Very little is spent on investing in any other income generating activity. Moreover, there has been a case where two installments of money for house construction have been received from ERRA with little intention of building a concrete house (Dharra). The reliance on aid money needs to be curtailed and programs to develop income generation activities should be initiated.

---

<sup>23</sup> Community members in Shalabagh (Muzaffarabad) informed the field team of such an initiative carried out in the past.

Aid providers and relief agencies should maintain a distinction between aid for income generating activities and that for maintaining a minimum acceptable social standard of living. The impact and effectiveness of aid/compensation would increase if this distinction were made so that there are no surprises either for communities or for relief agencies. Moreover, there is a need for aid agencies to develop service provision strategies cohesion with other NGOs/ INGOs operating in the same sites in order to ensure implementation of well thought out comprehensive policies

Other specific possible policy interventions in this regard are:

- Ensure that newly set up schools are conducive for female attendance<sup>24</sup>. Educational facilities may be segregated and female teachers should be inducted. (This is more important for villages in the NWFP, where people are more ‘purdah conscious’ (those who wear veils) and hence do not encourage their girls to go to school after the primary level). Moreover, education support and planning needs to be put in place. It is imperative to ensure that a balance between economic livelihood and care given by young boys and girls is complimented rather than countered with education by way of incorporating apprenticeships and introducing balanced work and schooling programs that ensure that livelihood support and schooling are realistically attained without over emphasis on one at the expense of the other.
- Holistic livelihoods strategy should be put in place: Care needs to be taken in fully understanding the dynamics of the local economy. The influence of remittances, structure of ‘unemployment’, and structural limitations need to be studied in more detail. There is a need to strengthen remittance transfer channels so that they respond in times of crises. Moreover, capable workers unwilling to work due to insecurity caused by inadequate shelter need to be relieved from mental stress if they are to resume work. There needs to be a link between training and access to jobs for those who have received vocational training through aid workers.. For this, it is necessary to initiate recruitment bureaus at the district office level (in order to place those who have received skills trainings) and hence ensure that livelihoods trainings are reaping results. Moreover, supporting infrastructure needs to be set-up in order to facilitate those engaging in entrepreneurship activities. Access to local markets, establishing communication links, and access to finance and banking are imperative in this regard- and care needs to be taken to consider.
- Any training on agricultural methods should include elements advocating conservation of natural resources (such as agro-forestry, forest terracing, etc.).
- Locals should be given ideas of farming products that have higher yields (in terms of income) and are ecologically feasible. Some examples are mushroom farming, cultivation of medicinal plants, beekeeping, etc.
- Facilitate speedy housing reconstruction: In order to speed up construction activities to ensure that migrant workers go back to work and earning for their families, locals facing problems with approaching ERRA for cash grants may be facilitated in completing

---

<sup>24</sup> By way of physical structure: there must be separate bathroom facilities, and girls’ classrooms should be sheltered from public view. This is currently not the case in most makeshift schools in villages in the NWFP.

outstanding procedures and contacting elusive officials.

- Encourage women entrepreneurship: Women being trained to stitch or make handicrafts may have their wares displayed for sale at Action Aid offices at fair prices. Moreover, they may be given regular access to patterns, designs and items that are in vogue and in demand.
- Spread health awareness through workshops (with emphasis on female health): Although aid workers have presently set up village level dispensaries that are staffed by a male doctor and two female nurses (in some villages), it is also essential to spread health, hygiene and nutrition awareness at the household levels in order to enhance capabilities, and ensure sustainability of health care. In this regard, the above-mentioned set up may be used to conduct quarterly sessions/workshops on informal first aid trainings, hygiene and nutrition issues, etc.
- Invest in grassroots capacities: Existing governance structures should work in tandem with community decision-making bodies. Community representation (where there is equal participation between male and female members) should be further encouraged and development strategy decisions should be made in consultation with the local (community level) bodies.

## References

- CHAMBERS, R., Conway, G. (1992) *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*, IDS DP296, Feb. 1992.
- DFID 2001 Sustainable Livelihoods Guidance Sheets: [http://www.livelihoods.org/info/info\\_guidancesheets.html](http://www.livelihoods.org/info/info_guidancesheets.html) (Accessed 23 Sept. 2006)
- SEN, A. (2001), *Development as Freedom*, Oxford University Press.
- SULERI, A.Q., and SAVAGE, Kevin (2006), *Role of Remittances in Crisis: A Case study from Pakistan*, London, UK: Overseas Development Institute.