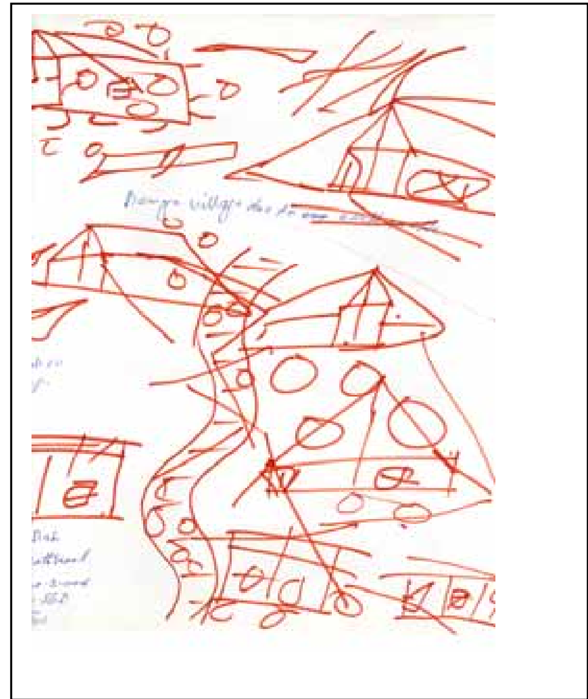
As If All Happiness Vanished In the Wink of an Eye:

An Assessment of Relief, Transition, and Development Needs of the Earthquake-Affected Population of Allai Valley, NWFP



Allai boy's drawings of his village before and after the earthquake

Commissioned by The Royal Netherlands Embassy of Pakistan

Prepared By Colleen McGinn
With Dr. Riffat Anis, Dr. Abdul Bari, Dr. Maqsooda Kasi
Amama Ambreen, Jessie Bay, Ajmal Khan
Save the Children USA

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Colleen McGinn wrote this report, although the Health and Nutrition section is based on considerable input from Save the Children health specialists and the Pakistan National Institute of Health's Dr. Riffat Anis; however the entire management and technical team for the needs assessment was involved in cleaning, reviewing, discussing, and analyzing the data. Dr. Riffat's technical analysis of the health and nutrition survey data are found in Annex One; that work is hers alone. Some parts of the report (e.g. the introduction) are adapted from other Save the Children documents, particularly a proposal recently submitted to the Royal Netherlands Embassy. Dr. Maqsooda Kasi's summaries of the FGDs for each sector were also an essential resource.

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Survey Team Leaders were: Naseer Ahmad, Kashif Ali Bangash, Samir Jan, Sher Muhammad, and Syed Iftikhar Ali Shah.

Survey Enumerators and Community Facilitators were: Hassan Haider Bangash, Shumaila Bibi, Farah Deeba, Safina Gul, Hasarat Ali Hamid, Tassaduq Hussain, Zbarg Jumhar, Kafayatullah, Saeed Khalid, Abdul Samad Khan, Faisal Ahmad Khan, Babar Khan, Haroon Khan, Nosheen Farooq Khan, Sarbaz Khan, Fateem Khattak, Sumera Khwaj, Zahida Kosar, Rizwana Parveen, Abu-Zar Kashif Qaisrani, Hummaira Qurashi, Abdur Rehman, Habi Ur Rehman, Uman Rishad, Noor Habib Shah, Mobina Shaheen, Shanza, Bibi Kishwar Sultan, and Shehzada Waqar.

[1] All individuals are listed in alphabetical order.

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Acronyms and Glossary

ANC	Ante-natal care
Burqa	Woman's veil that covers the face as well as the body
EQ	Earthquake
FGD	Focus group discussion
IDP	Internally displaced person
Jirga	Traditional council of authorities/decision-makers
KAP	Knowledge, attitude, and practices
Khan	Traditional large landowners/authorities or "lords"
Madrassa	Religious school
Mullah	Religious leader, teacher, scholar
Nazim	Elected leader
PHC	Primary health care
PRDA	Partnership for Recovery and Development in the Allai Valley
Purdah	Seclusion of women
RNE	Royal Netherlands Embassy
SC	Save the Children
Tehsil	Sub-district
UC	Union council
Zakat	Traditional alms or charity to the poor (an obligation under Islam)

Executive Summary

The Partnership for Recovery and Development in the Allai Valley (PRDA) conducted a comprehensive, multi-sectoral needs assessment in Allai Tehsil (sub-district) in the March and April of 2006. The people in this rugged locale were already among the poorest and most marginalized in Pakistan, renowned for cultural conservatism and suspicion of outsiders. Lying near the epicenter of the 8 October 2005 earthquake – the most devastating in South Asia's modern history – the needs of Allai's inhabitants have been overwhelming. Despite an extraordinarily challenging context for relief agencies to conduct operations in, relief aid and the knowledge and self-reliance of the people enabled the population to survive the harsh Himalayan winter despite near-total destruction of shelter, infrastructure, and the food stocks.

The rehabilitation work, however, has only just begun and will take years. CARE, Church World Service, Oxfam Novib and its Pakistani partner Sungi, and Save the Children joined together as PRDA and, with support from the Royal Netherlands Embassy of Pakistan (RNE), conducted this study to inform their long-term, comprehensive recovery and development programming in Allai. This assessment covers ten sectors and cross-cutting themes, and is based on a 30x30 cluster survey, 24 focus group discussions, and key informant interviews as well as the experience of the four PRDA agencies.

The study has confirmed that the people of Allai have enormous unmet needs in multiple sectors; although they are not starving, emergency conditions continue and the population remains extremely vulnerable. Furthermore, life before the earthquake was a tenuous struggle for survival, with minimal access to education, health care, etc.; the challenge is thus not simply a question of returning to the *status quo ante*, but laying a foundation for long-term development that will achieve real impact on the lives and livelihoods of the people of Allai. It will be a long and difficult process: at the time of the survey shelter was perhaps the most urgent need, but water/sanitation, health (including psychosocial health), and education infrastructure and services were grossly inadequate in both quantity and quality. Furthermore, the valley remains highly food insecure; while people are by and large consuming calories, micronutrient deficiencies and malnutrition are prevalent. Livelihoods have traditionally depended on a combination of subsistence agriculture and remittances from down-country or abroad; agriculture, however, is now devastated: the terraces that enabled farming on steep mountainsides have tumbled, seeds and tools lost, irrigation channels destroyed, and livestock killed. Relief aid in the form of distribution of food and non-food items, together with temporary camps and compensation from the government, have kept the population afloat; however they remain highly vulnerable to any hazards or shocks and their coping capacities have been significantly reduced through loss of assets, sustainable livelihoods, and psychosocial health.

One area of significant challenge is that the relief distributions may be phased out before the population is once again economically self-sufficient. Another is that due to delayed government policies/guidelines on permanent construction, durable shelter is still has not been built; people are suffering from exposure to the elements, feel acutely unsafe in tents or transitional housing, and prime building time has been lost while another winter looms ahead. Another concern is that it is clear that traditional patterns of *zakat*, or charity, have broken down while at the same time jealousy and quarrels are erupting over aid distributions. This has grave implications for both long-term community cohesion and governance, as well as the security of development agencies.

While sample sizes for both quantitative and qualitative research were small for the minority Gujur ethnic group, it is noteworthy that they are both poorer and often gave quite different answers in focus group discussions than the majority Pathans. The Gujurs, at least those in Allai, are typically semi-nomadic landless herders and tenants of the *khans* (lords). While the results are only suggestive, the findings of this study do call for programming agencies to make specific assessments and conduct monitoring to ensure that the needs of Gujurs are being met, and that their voices are fully heard.

Despite all the challenges to recovery and development, there are also opportunities: numerous organizations are now operating in Allai and basic services are sometimes reaching people for the very first time, the population is now welcoming of outside assistance, and financial resources are now available. There is especially strong demand for health and education services. However, any intervention must be sensitive to the cultural and religious conservatism that prevails. For example, women are strictly secluded in purdah and the population cannot conceive – and would not accept – any other way. Ensuring female participation and empowerment, as well as their access to education, health, and other services, requires experienced female staff able to reach and work with women in culturally appropriate ways. Many women in Allai are both highly marginalized and highly vulnerable – including to domestic violence and early marriage, which were confirmed to be widespread.

Long-term recovery and development efforts are very much in need, to rehabilitate damaged facilities and build local capacities to achieve development aims. Broad participation and consultation in all processes are needed to ensure sustainable and equitable benefits.

Introduction

Background on the Needs Assessment Research in the Allai Valley

Prior to the 8 October 2005 earthquake, the Allai Valley lay nestled in isolation in an especially remote and rugged pocket of Pakistan's Himalayan Mountains, connected by a tenuous track to the Karakoram Highway. Culturally and politically, Allai is renowned for its conservatism and suspicion of outsiders. Until 1971 it retained tribal status, and although it is now integrated into Batagram District of Northwest Frontier Province (NWFP), traditional patterns of governance and decision-making continue to dominate. Both of the valley's major ethnic groups – Pathans and Gujurs – practice an especially strict version of Sunni Islam, with women strictly secluded in *purdah* and religious leaders wielding enormous influence. Households are overwhelmingly dependent on subsistence agriculture, supplemented by remittances from men working outside the valley.
Given these factors of physical, political, cultural, and economic isolation – to say nothing of notorious insecurity -- it is no surprise that little "development" has taken place; indeed the government district that Allai is part of, Batagram, ranks in the 10th percentile nationwide in key social sector indicators.

Lying close to the epicenter of the earthquake – the most devastating in South Asia's modern history – Allai presents unique challenges for emergency operations. Nevertheless, with massive national and international support, the largest relief operation in Pakistan's history is saving innumerable lives.

The rehabilitation challenge, however, has only just begun. With extensive national and international aid provided to Pakistan, Allai's population has survived the harsh winter despite virtually complete loss of housing and food stocks. The Allai people continue to have enormous unmet needs: their shelters are inadequate, assets depleted, livelihoods undermined, and social services like health and education severely disrupted. As one focus group said in discussion, "the earthquake has deteriorated our condition by destroying water supply schemes, watermills, walking tracks, arable land, fruit trees, forests, livestock, and homes."

It is important to recognize that conditions even before the earthquake were extremely poor; it is not now simply a matter of reconstructing what was lost but to go further and lay the foundation for the people of Allai to achieve sustainable human development. The earthquake thus represents a unique opportunity to "build back better": the population is newly welcoming to outside assistance, and furthermore more funding has become available for rehabilitation and development. Donors like the Royal Netherlands Embassy (RNE) have provided generous support by funding research into relief and development needs to inform comprehensive transition and development programming leading to long-term impact and sustainable development in Allai.

Research Methodology

Following the earthquake, RNE began exploring the possibility of creating and supporting a partnership of NGOs that could provide relief and reconstruction assistance in a comprehensive and coordinated manner in a geographically defined area. An initial assessment

was carried out in January when a consultant from the Netherlands visited various locations affected by the earthquake and met with Dutch Embassy personnel and Dutch-affiliated NGOs that were responding to this crisis. From this assessment, it was decided that there was sufficient interest and capacity to form an inter-agency consortium to address the wide-ranging needs of the earthquake-affected population in an integrated manner. It was decided that the consortium would initially focus on the geographic area of Allai Tehsil in Batagram District. CARE, Church World Service, Oxfam Novib and its Pakistani partner Sungi, and Save the Children joined together as the Partnership for Recovery and Development in the Allai Valley (PRDA). The consortium's first task was the design and development of a multi-sectoral needs assessment, which has been the basis for a joint proposal for submission to the RNE.

Through a collaborative approach, a broad needs assessment was conducted between March 22nd and April 7th, 2006. Each consortium partner contributed staff to the needs assessment team either as enumerators, supervisors or focus group discussion facilitators. The needs assessment explored the following sectors and issues:

- Education
- Gender
- Governance
- Health and Nutrition
- Livelihoods
- Protection
- Shelter
- Water and Sanitation

The research methodology itself was similarly multifaceted, consisting of:

- 30x30 household cluster survey emphasizing health and nutrition (see annexes for detailed survey protocol, questionnaires, and data tables).
- 24 focus group discussions (FGDs) with men, women, boys, and girls in all 8 union councils of Allai Tehsil and in Meira IDP Camp. Some sessions were held with especially vulnerable groups, such as widows and Gujurs, a marginalized, semi-nomadic ethnic minority. (See annexes for FGD protocol and semi-structured interview formats). The common theme of "decision-making" was used to explore the various sectors, as a common thread to discuss so many topics.
- Case studies (life stories since the earthquake) of ten individuals, primarily widows.
- Secondary sources, including other needs assessments
- Discussions with key informants in Allai, including staff of PRDA agencies and authorities.

The research was designed and conducted by Save the Children, with all four PRDA agencies contributing staff to collect data in the field.

Unless otherwise noted, all quotes and statistics cited in this paper are from original PRDA research data, and all statistics listed are "valid percentages," i.e. missing values removed before calculation.

The most significant findings are:

- Virtually all physical infrastructures – including water / sanitation facilities, roads and walking tracks, buildings, and terraces for farming – are severely damaged or destroyed altogether.
- Traditional patronage relationships and patterns of *zakat* (traditional charity often given to the communities' poorest and most vulnerable) have been greatly disrupted, which has potentially far-reaching consequences for self-reliance, local (traditional) governance, and security.

- Community conflicts surrounding relief aid are erupting in some areas. Problems with government assistance and suspicion of other groups/villages/communities/etc. receiving relatively more aid seem to be two areas of particular dissatisfaction.
- There is an enormous demand (far exceeding supply) for access to basic services, especially health and education, including for women and girls – but only within the context of their strict observance of purdah. This would require that teachers and health care providers for women and girls to be female; there is thus a need to increase the small pool of women in Allai trained in these professions.
- Activities that would be seen as weakening purdah would not be tolerated and could lead to violence towards both village women and aid agency staff. For these reasons, programs will need to have parallel activities implemented by female staff, in order to reach women and girls. It is also necessary to work with men on women's issues.
- At the time of data-gathering, shelter was the highest priority of FGD informants. In addition to problems of exposure, they strongly felt that tents were unsafe and vulnerable to theft, fire, and violence, and furthermore compromised the modesty, honor, and integrity of women observing purdah. However, delays on new government guidelines for earthquake-resistant construction and its damage assessments for its own compensation programs have stalled progress on rebuilding proper shelter. This matter urgently needs to be addressed – and in time for structures to be built before the onset of the next winter.
- While the people of Allai are, by and large, consuming calories, they have been highly dependent on food aid and their diets remain inadequate. Consumption of protein and especially micronutrients is inadequate, and both acute and chronic malnutrition are prevalent among children. Moreover, severe losses to livestock, arable land, and irrigation systems will compromise the valley's food security and livelihood base for years to come.
- Household income and asset stocks (particularly livestock) have both been seriously affected by the disaster.
- Gujurs – a generally landless, semi-nomadic ethnic group – are especially poor, vulnerable, and marginalized. In addition, they often gave responses in FGDs that were significantly different from Pathans, whose responses were very consistent with one another throughout the valley. While, consistent with their minority status, only small numbers were interviewed in the qualitative and quantitative research, results do indicate that efforts should be made to understand and address the specific needs and perspectives of this population.
- FGDs indicated that domestic violence and early marriage are common. Women have almost no rights or direct decision-making power. They do, however, play important but indirect roles in many respects, including community dispute resolution.
- The environment has been damaged by the earthquake, such as by landslides, destruction of trees, water sources, and soil changes, in places changing habitat and suitability for local flora and fauna. Changes in locations of springs have also impacted villagers' access to water.

Sectoral and Thematic Analysis

Household Demographics

Population estimates of Allai Tehsil vary considerably; Save the Children uses an estimate of 175,000 for its planning purposes. Survey results show that 88.9% of households speak Pashto as their primary language, with the remaining 11.1% Gujur. The median number of people per household is 7 (and the mean is 7.03); 6 is the mode. In this strictly purdah-abiding society only 1.9% of households are female-headed. Healthy, unmarried women of reproductive age are rarely found, and the lives of widows extraordinarily difficult. Normally, a remarriage is usually quickly arranged for a young widow; several cases were reported to researchers of Allai women being married to boy relatives of their deceased husbands in order to keep her in the family. Marriage is also expected of men; 96.6% of heads of households were married, 94.1% of them in monogamous unions.

Surprisingly, only 2.8% of households had members who had in-migrated since the earthquake; researchers had expected that many more would be living with or dependent on extended family than reported in this survey. It is probable that "in-migration" was understood by villagers as non-household or non-family members, and so this statistic does not capture the numbers of men working down-country or overseas who returned to help their families. It may also in part reflect the blanket coverage of relief distributions and the huge number of families who had sought refuge in camps for internally displaced persons (IDPs), rather than going to other households. FGDs with semi-nomadic and largely landless Gujurs suggested that they had been more likely to pass the winter with relatives than in camps – and had thus missed out on relief distributions both in their "home base" villages *and* in camps, leaving them in desperate circumstances. 12.0% of households had had members out-migrate since the earthquake.

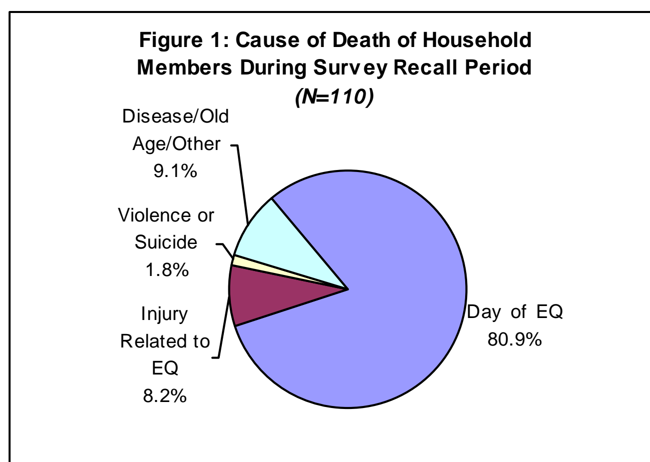


Figure 1: Cause of Death of Household Members During Survey Recall Period (*N=110*)

Between the earthquake and the time of survey, 1.9% of households had had a birth whereas 11.4% had experienced a death – overwhelmingly related to the earthquake.

Some of the most revealing demographic statistics are in the area of gender and age. 51.7% of the population of Allai is male; given that women and girls tend to outlive men at all ages given equal treatment, this number may indicate disparate access to nutrition or care. Among children aged 6-11 months, 54.8% were boys, as were 54.9% of those aged 12-23 months. After this age girls start outnumbering boys; nevertheless these numbers suggest that baby girls are neglected relative to boys,– despite FGD assertions that "a girl is a blessing from Allah and a boy is a boon." Women in Bab made an exceptionally telling commentary highlighting the difference between ideals and practicalities: "There is no discrimination between boys and girls except in food e.g. boys are given choice piece if chicken is cooked and girls are given what is left from the boys because in their opinion boys will be their old age support whereas girls will be married out of the house." 49.4% of the population is under the age of 15 – comparable to the 2003 national average of Niger;[2] 19.2% of the population is under 5, comparable to Afghanistan.

Social Sector Development

Shelter

[2] http://hdr.undp.org/statistics/data/indicators.cfm?x=45&y=1&z=1

"There is not a single house structure currently standing. The Khan has not taken care of the tenants."
-- Darra Biari Women (Gujurs)

"Our prime concern in reconstruction is that we don't have a permanent arrangement of shelter for our children and family members. People are not constructing their houses because they think the government will give them some house design of how it should be built. There are some rumors that if somebody constructs a house which is not in accordance with the government design, then he will not receive any aid. We are still under this impression that the government will help us out but unfortunately six months after the earthquake, the government has not done anything in this regard... We do not have wood for construction purposes, because we are poor people and most of the forest land belongs to few notable people. We have not even received CGI sheets either."
-- Bab Men

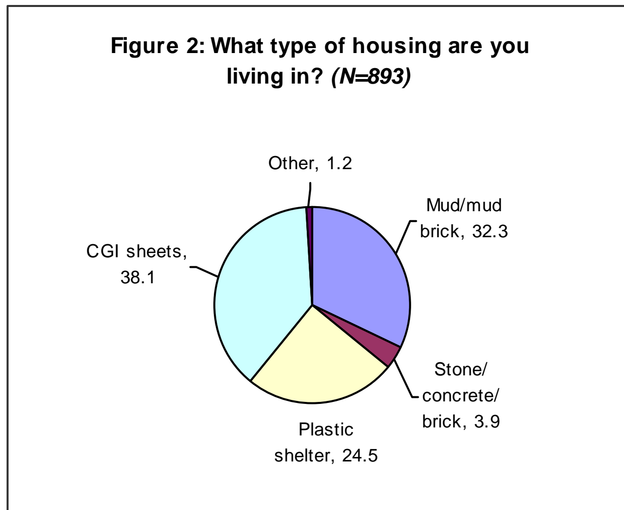
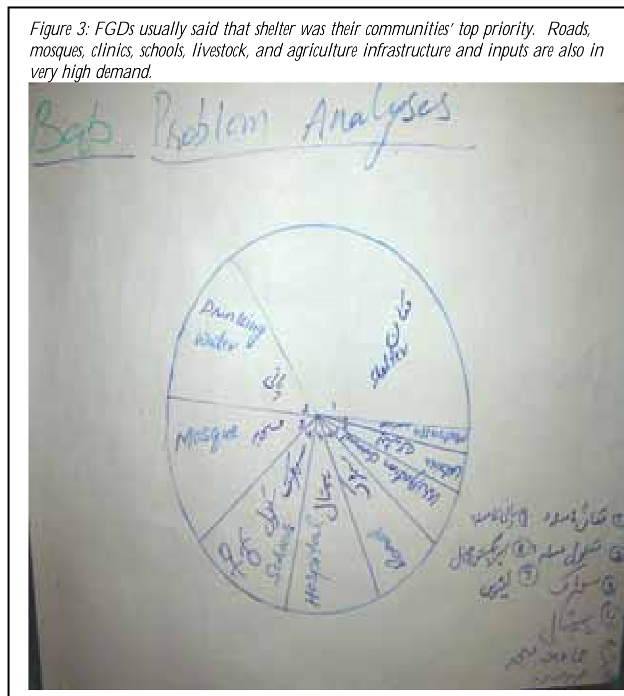


Figure 3: FGDs usually said that shelter was their communities' top priority. Roads, mosques, clinics, schools, livestock, and agriculture infrastructure and inputs are also in very high demand.



"The overriding problem is the reconstruction of houses because we consider ourselves unsafe in tents due to extremities of weather and the difficulty of maintaining purdah. The temporary shelters that we have are insufficient to withstand the hostile weather conditions of our area. Besides, privacy and purdah are the most important elements which we don't want to be impaired at any cost and we generally get our daughters married at early age...Because of numerous problems we are unable to get our daughters married and they are in shelters which are unable to provide adequate purdah. This is against our concept of prestige and integrity. We want our daughters to lead modest and dignified lives."
-- Koshgram Women

The October earthquake utterly destroyed the physical infrastructure of the Allai Valley. 98.9% of survey respondents reported that their houses had been damaged, with 88.9% of them suffering "complete destruction." At the time of the survey in the spring, 24.5% of heads of households reported that their families were living in plastic shelter, and 38.0% under CGI sheets. Agencies conducting needs assessments for wat/san infrastructure, schools, health clinics, etc., all confirm that building destruction was virtually complete in Allai.

Before the earthquake, most inhabitants of Allai lived in self-constructed homes made of mud bricks and other local materials. They are especially eager to rebuild -- indeed, "shelter" was overwhelmingly selected as the number one priority of FGDs.

Unfortunately, the government is taking longer than expected to issue reconstruction guidelines and assess damage, which has led to significant delays in the construction process. In addition, there is confusion over whether compensation will be provided to anyone who begins to rebuild without first having a government damage assessment. Previously-mentioned discrepancies over land and house ownership as well as confusion about whether the compensation policy will cover all houses in a traditionally extended household further

complicate the reconstruction process. Some villagers were just going ahead and building new houses anyway (at the time of the survey 32.3% were already living in mud or mud brick dwellings although many were incomplete or damaged). But others are afraid to do anything, or are not able to do so without assistance. Furthermore, these months are prime building months and, if intensive levels of construction of permanent shelters and storage facilities for upcoming harvests are not completed before winter and monsoon seasons, residents could be forced into dependency on aid and relatives for yet another year. This matter urgently needs to be addressed.

Key Recommendations

- Shelter for population of Allai reconstructed and "built back better" through:
  - Increasing communities' access to reconstruction materials, tools, skilled artisans, and technical assistance
    - Targeted distribution of supplies for housing reconstruction
    - Provide technical assistance to villagers
  - Improving the quality of new buildings by ensuring they are hazard-resistant, and use local materials and appropriate technology
    - Finalize and communicate government guidelines for hazard-resistant construction techniques
    - Build model homes in various communities as examples for others to learn from
  - Increasing community capacities in artisan skills through vocational training to expand the pool of masons and carpenters
    - Provide training in key skills to youths and adults
    - Train villagers in skills needed to build or strengthen shelters, and to monitor the work of artisans
  - Creating an enabling policy framework that supports addressing short and long-term shelter needs of communities
    - Accelerate policy and approval processes for permanent reconstruction to commence

Water and Sanitation

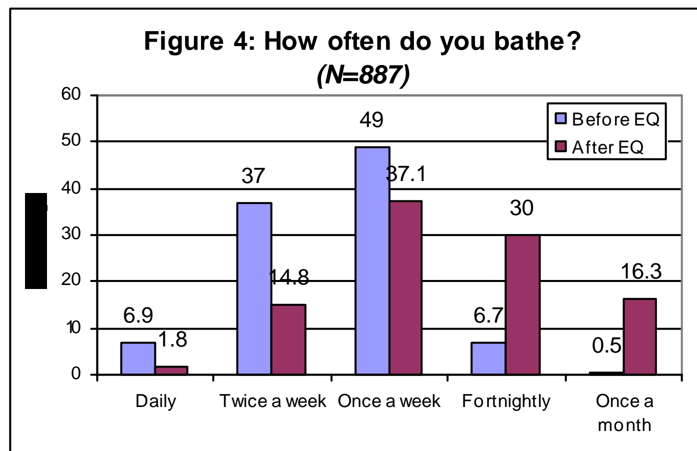
> "Diseases like pneumonia, diarrhea, coughing, fever and vomiting have spread in our since the earthquake. We do not have any source of clean water, resultantly we are forced to use this polluted water which is injurious to health but we cannot do without water because it is one of the essentials for life."
> --Bab Men

> "Latrines are a necessity in our area because of the element of absence of privacy which is shameful and besides there is always an impending danger of diseases breakout."
> -- Koshgram Men

> "Before the earthquake there were latrines in the houses but now all the women and children have to go into fields and in winter it was very difficult. For women its more important because of they cannot defecate in open. Women here cannot take bath for almost a month due to which they are susceptible to many diseases...The water supply channels are all out of order after the earthquake with the water reservoir also getting destroyed so the women are forced to bring water from the springs and open wells. Now the young girls have also joined the grownups in fetching water because there is no school left. Now they remain busy in household errands."
> --Bab Women

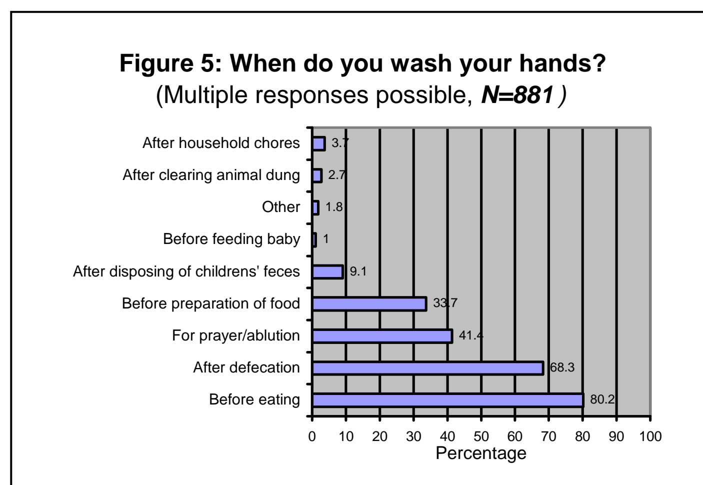
Although the Allai Valley is rich in water resources year-round, the earthquake severely disrupted water sources and schemes. Springs have disappeared permanently, new ones appeared, and others changed location. Water from many springs became turbid and will remain so in the coming years because the soil conditions of the catchments have been disturbed. 50.9% of survey respondents indicated that their source of household water had changed. Virtually all piped supply systems were damaged (usually entirely destroyed), and at the time of the survey only 40.4% were taking water from protected springs or taps. Of water samples gathered from 29 of the 30 villages in the survey, only 6 were safe for drinking –

although it should be emphasized that as only 1 sample was taken per community these results are only suggestive and not statistically sound. What is statistically sound is that 96.5% of women said they do not treat their drinking water in any way.



Women are the primary collectors and managers of household water. While 46.6% live within a 15-minute walk to a water source, 36.6% are walking 30 minutes or more each way, with an overall average of 22 minutes per trip. FGDs indicated that women and girls are now forced to cover much more distance than before the earthquake, and use unsafe sources. They said that this had exacerbated their workloads and interfered with their ability to perform other chores.

In terms of hygiene practices, it should be noted that survey respondents probably overstated their actual behaviors in favor of stating what they felt they *should* be doing. Nevertheless, it is notable that 81.0% said that they "sometimes" wash with soap, and that they report washing their hands rather frequently although with very significant gaps. This data indicates high understanding of the importance of hand washing, although some areas are very worrying, particularly in regards to caring for children or animals. However, actual hygiene behaviors need to be fully verified with a KAP (knowledge, attitudes, and practices) study. It should also be noted that reported frequency of bathing is both low and reduced since the earthquake, although some of the reduction may be due to seasonal variation. Keeping farm animals in human dwellings, or attached lean-tos is a common practice, and animal dung is found everywhere.



Water and sanitation NGO staff indicate that at the time of writing this report, sanitation is a more urgent health hazard than water access for many in Allai. 82.7% of women surveyed said that excreta are disposed in "open space" – and signs of this are clearly visible in some areas. While after the earthquake a number of agencies immediately entered Allai with wat/san programs, water access was the priority of many. There is clearly an enormous amount of further work to do in both water and sanitation programming – not only for health reasons but also for protection, dignity, and privacy – especially for women and girls.

Key Recommendations – Water and Sanitation

- Increase the use of safe drinking water and sanitation facilities in the Allai Valley through:
  - Increasing access to safe drinking water and sanitation facilities
    - Construct and rehabilitate water and sanitation infrastructure for communities and households
    - Provide safe water and sanitation to schools and health facilities
    - Develop culturally-appropriate and environmentally-sound solid waste disposal sites
  - Improving the quality of drinking water and sanitation facilities
    - Monitor water quality and protect water sources, and train

communities to do so on their own
        - Train communities to purify water
        - Pilot the use of solar water heaters
    - Increasing community capacity and participation in planning, implementing, and monitoring wat/san facilities and hygiene promotion
        - Mobilize community action committees and water/sanitation committees to help design, implement, and monitor water/sanitation projects
        - Train communities to maintain water and sanitation infrastructure
        - Conduct participatory, community-based hygiene promotion targeting specific behaviors, using male and female village volunteers
        - Conduct mass awareness-raising through radio broadcasts and sponsorship of special events with educational messages
    - Strengthening institutional capacity of government line agencies to address and manage wat/san and public health services

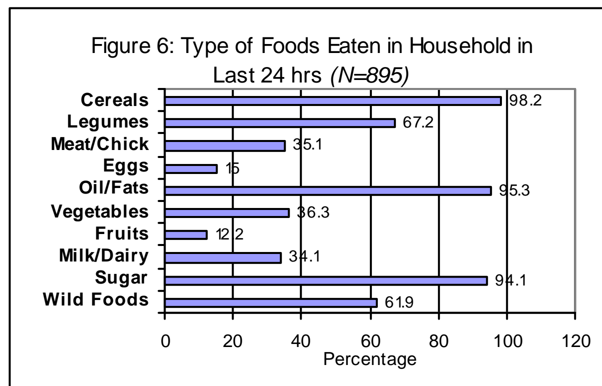
Health and Nutrition[3]

> "Even for delivery the women choose not to step out of their house for hospital because they deem it vulgarity. Home delivery is the common practice and those women who cannot deliver babies in their homes are brought to the hospital at the eleventh hour which at times results in the death of either the mother or the child."
> --Kalootay Women

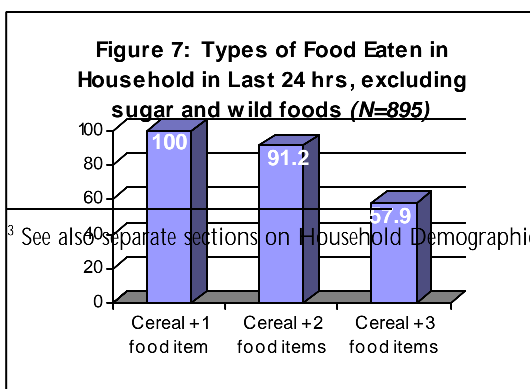
> "Due to poor mobility, people prefer to administer indigenous treatment to anyone falling ill. Pregnant women experience difficulties. Either they deliver the baby on their way to the hospital or the life of the mother and child get threatened. Most of the deaths take place in this village due to inaccessibility, for prompt treatment is not available which aggravates the diseases. People are inching towards their graves carrying curable diseases."
> -- Koshgram Women

> "The earthquake has changed our lives altogether. Our children are short of food. ...We cannot do anything for our children except provide them with education so that they become financially independent. Before the earthquake, people used to cultivate maize and wheat but now there is no production."
> -- Barachar Women

The health and nutrition status of Allai's population is poor, with several areas of serious concern, including food insecurity and micronutrient deficiencies, access to quality health care, and poor health/nutrition behaviors. On a more positive note, widespread food distributions have largely succeeded in staving off the food crisis that many expected after the earthquake. While many FGD participants expressed worry over their loss of livestock or not being able to plant crops this year, it is significant that few complained of desperate hunger, although Gujurs seemed to be needier than Pathans in this regard. Indeed, the FGD of Gujur women said that "food" was their number one need – even more than shelter which was the usual priority.



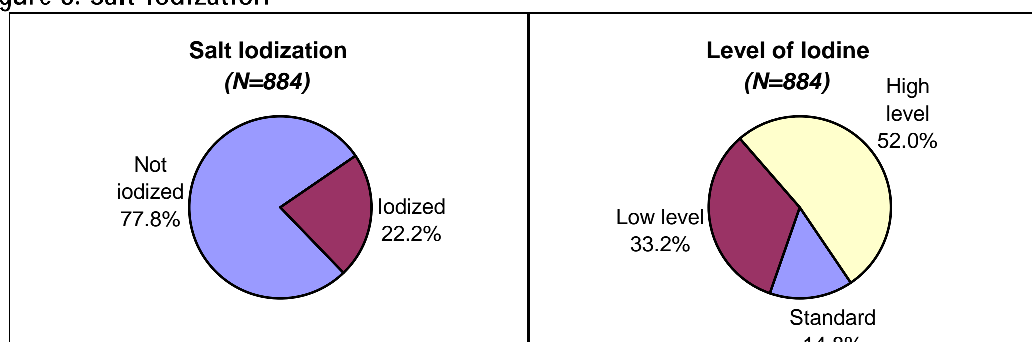
According to 24-hour food frequency recall data, 98.2% ate a cereal. Consumption of oil/fat and sugar was also near-universal, and more than 60% of households had eaten legumes/pulses and/or wild foods in the last



[3] See also separate sections on Household Demographics, Psychosocial Health, and Water / Sanitation.

day.[4] By contrast, consumption of fruits, vegetables, milk products, meat, and eggs was comparatively low. In other words, at the time of the survey people were typically eating grains – flatbread or perhaps rice -- and tea with sugar, often with dhal (lentils/pulses), and/or wild spinach. This data shows that while calorie intake may be sufficient, people are vulnerable to micronutrient deficiencies, including vitamin A and iron. Tests of household salt samples proved to be extremely worrying: only 22.2% were iodized at all, and only 14.8% contained correct levels of iodine. Moreover, since the World Food Programme had been distributing iodized salt, it is likely that iodine consumption is even less under normal conditions. Meanwhile, 7.3% of women surveyed exhibited the telltale signs of goiter. Health problems associated with iodine deficiency include miscarriage, infant mortality, cretinism, and thyroid problems.

Figure 8: Salt Iodization



Among children in Allai, prevalence of global acute malnutrition for children age 6-59 months at the time of the survey was 12.5% and severe acute malnutrition at 5.4%[5] -- internationally accepted levels for developing countries are 2.5%. In other words, wasting (poor weight-for-height) is over twice the levels that call for intervention. Stunting in this age group is 64.2%, indicating long-term malnutrition for nearly two-thirds of Allai's children.

It should be emphasized that the data shows that at the time of the survey, the population was highly dependent on food aid. 85.8% had received wheat, 90.6% legumes, and 83.1% cooking oil. These items, together with iodized salt, constitute the World Food Programme food basket. Notably, 57.0% said that they had less than 4 weeks' supply of food for their households; as relief distributions are phased out, the food security status of the valley must be closely monitored particularly as agricultural production is crippled (see livelihoods section below). Furthermore, 44.4% said that at some time since the earthquake the household had reduced the quantity of food eaten, and 32.2% the quality.

Childhood immunization coverage in Allai is low. 45.8% of children had been vaccinated against measles (determined either by mother recall or a vaccination card); 57% is the national average. Only 24.4% exhibited a BCG scar, showing low tuberculosis prevention coverage. On the brighter side, 71.3% of mothers said that their (randomly selected) child had received a vitamin A supplement. UNICEF has since conducted an immunization and vitamin A supplementation campaign in Allai, so these figures should now be significantly improved.

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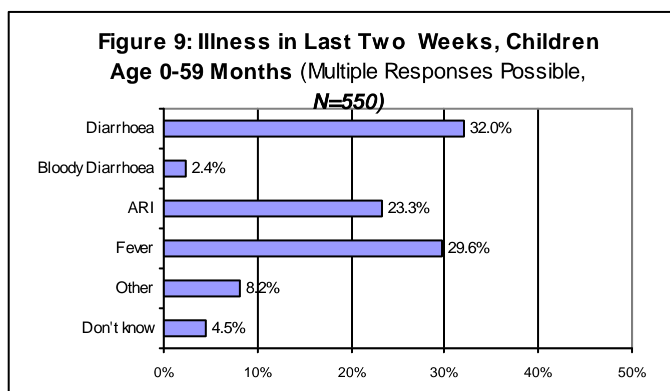
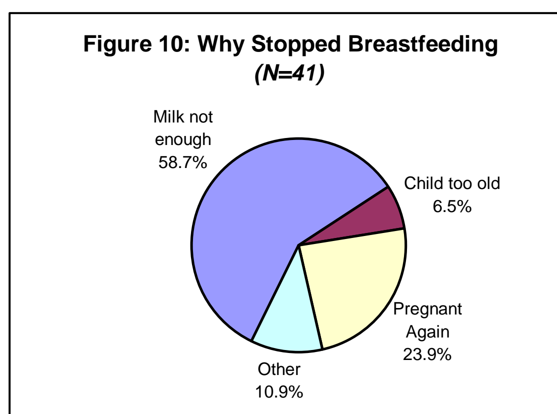
[4] It should be noted that wild greens were in season at the time of the survey.
[5] See Annex 1 for more detailed analysis of nutrition data.

Incidence of illness is very high, reflecting a combination of poor access and use of clean water / sanitation, overcrowding, exposure, poor diet, lack of medical services, and unhealthy behaviors. Mothers reported that 60.5% of their children[6] had been ill in the previous 2 weeks. Among women themselves, 23.5% had had diarrhea and 25.2% a respiratory infection in the 2 weeks before being questioned.



Even prior to the earthquake, there were only one male medical officer, three lady health visitors, and two trained birth assistants to serve this large, geographically dispersed population. The already limited health infrastructure was destroyed and health workers dispersed; however there was also an influx of emergency medical agencies and personnel, including female doctors, nurses, and medical officers, giving many women and girls in strict purdah access to health care for the first time. However, with emergency care being phased out, the challenge is now to establish a functioning and accessible health care system. There is certainly overwhelming demand for it; both children and adults in FGDs universally wanted access to medical care and some complained bitterly about various weaknesses inhibiting access, including lack of roads to transport the sick, lack of female health workers, poor quality of health care, and extortionate practices by certain unethical medical personnel. While the survey said that approximately half seek treatment for children's illnesses from the rural health centers, the FGDs were probably more revealing: they consistently said that illnesses were treated initially with home remedies, then by consulting a mullah (religious leader) and/or purchasing medicine in the markets, and only finally from health professionals. It was quite clear from their descriptions that, at least in the more remote villages, this only happens when illness is in a critical stage. On the other hand, one of the difficulties that Save the Children has had providing health care face is some women and girls appearing who are not actually sick, but simply want to go out and a clinic is the only place they are allowed to go!



Only 18.4% of women had ever received ante-natal care (ANC) from a trained health worker, and 20.5% had delivered in a health facility. On the other hand, 78.4% had seen or been seen by some sort of health worker during their most recent pregnancy, although it appears that would be more likely to treat illness and/or been with a Lady Health Visitor or traditional practitioner rather than a medical professional. The data is also undoubtedly skewed upwards because of the number of clinics and hospitals that had been set up immediately after the earthquake, including the IDP camps that housed so many through the winter.

The data showed that 95.0% of children had been breastfed at one point between 0-24 months;[7] however, not surprisingly, breastfeeding declined with age of the child with only 18.4% of babies over 18 months still suckling. 85.2% said that the child they were being asked about had been exclusively breastfed at least until 6 months of age; however this may not be the actual case because of the harmful practice of waiting for some time to commence breastfeeding. This is of critical concern throughout the region was confirmed to be prevalent

[6] One child per mother was selected to inquire about.

[7] The World Health Organization recommends exclusive breastfeeding 0-6 months, and combination of breastfeeding with other foods for babies 6-24 months.

in Allai. Among Pathans and other ethnic groups in Pakistan and Afghanistan, there is a perception that colostrum is somehow weakening for the mother and/or infant when, in fact, it is essential for both that breastfeeding begin immediately. In Allai, mothers reported that only 42.7% began breastfeeding their babies within 1 hour, and 18.7% waited two or more days after birth.

Among those surveyed, the mean number of pregnancies is 5.2, with a range of 0 to 16. Only 21.8% knew about family planning, and 6.9% had actually used it. FGDs agreed that men like to maximize the number of children, and that any decisions about child spacing are taken jointly, or by the man. It is widely understood that the only modern form of birth control available in the valley is Depo-Provera shots.

Key Recommendations

- Increase use of primary health care services (PHC) in Allai through:
    - Improving availability and access to quality PHC services
        - Increase number of basic health units, mobile clinics, and other health facilities in Allai
        - Increase number of trained female medical officers in Allai
        - Train new and existing community health workers
        - Conduct immunization campaigns
    - Improving quality of PHC services and nutritional status
        - Provide training and skills-building for professional and traditional health care providers
        - Improve referral system for villagers requiring more specialized care
        - Establish community-based health and nutrition programs, including therapeutic feeding for the severely malnourished
    - Improving key health and nutrition behaviors, especially for women and children
        - Identify areas for targeted health and nutrition promotion, including breastfeeding practices
        - Sponsor community-based health and nutrition promotion activities
        - Broadcast health promotion messages on local radio stations
        - Support household-level livelihoods and food security initiatives, such as vegetable gardens and re-stocking poultry
    - Strengthening the capacity of Department of Health personnel in sustainable PHC services
        - Improve DOH's capacity to collect, analyze, and monitor critical data
        - Improve capacity of DOH to manage health services
        - Increase accountability of health care providers to communities through participatory action planning and monitoring of services

Psychosocial Health

> "This earthquake has psychologically amputated us and most of the people are now nervously handicapped. Our general outlook of life has undergone a transformation. Prior to the earthquake we used to fight a lot but now we fear the wrath of Allah. We cannot bring about any improvement in our village because our fields are destroyed and are uncultivable."
> -- Darra Biari Women

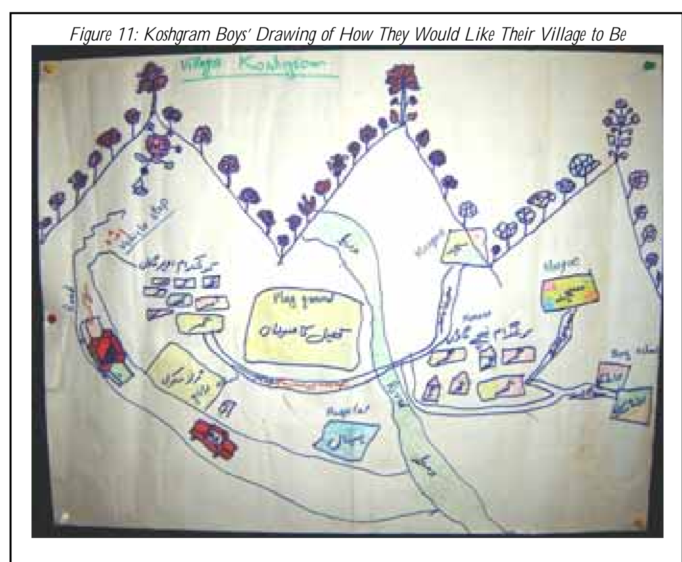
> "It is as if all the happiness has vanished in winking of an eye. We are aggrieved. We are mentally disturbed by the thought of another earthquake. We have become sleepless and the kinds of deaths we have witnessed were so moving that it is hard to explain. Some did not have coffins and some did not have a place for burial. We are constantly uncertain about the future so we have not yet constructed new homes either."
> -- Gangwal Women

> "The women are deeply scared of the earthquake and remain indoors most of the time. Men do not go to work either because they are afraid too. At times there are quarrels and conflicts in the village as well."
> -- Kalootay Women

Although psychosocial health was not one of the sectors in the original research terms of reference or design, all the FGDs spoke incredibly poignantly of their sorrows, troubles, and fears since the earthquake. Their existence had already been tenuous, and then, as one man mourned, "it is as if all happiness vanished in the wink of an eye." The psychological trauma endured by the people of Allai is extraordinary, and is undoubtedly negatively impacting health, economic, and other behaviors. Allai villagers' continuing struggle for basic needs such as shelter, food, and health care are immense, and anxieties surrounding how their families will survive are enormous and have interfered with normal family and community life. Many appear to be suffering from symptoms of post-traumatic stress, including nightmares, phobias, anxiety, depression, and a sense of helplessness. It was not uncommon for tears to be shed and children especially to express intense, trembling fear. The continuing aftershocks are clearly causing flashbacks. Psychological trauma and stress also exacerbate individuals' likelihood of engaging in aggressive or self-destructive behaviors, including substance abuse and domestic violence.

Many FGD participants said that they were taking comfort in religion or had become very fearful of Allah's wrath; either way they indicated they were becoming more strict in their Islamic duties and any obstacle to do so caused further distress (e.g. women whose burqas had been lost with other possessions, compromising their abilities to maintain purdah). One worrying area, also touched on in the governance section, is that by and large it appears that community cohesion and cooperation have broken down, as have traditional patterns of ensuring the welfare of the most vulnerable. While there were exceptions where informants said that everyone was now helping one another, the vast majority said that people were so pre-occupied with their own problems that they no longer visited one another, performed tasks together, or shared in the joys and sorrows of even their closest relatives. One group even said that "children are deprived of their parents' affection."

Figure 11: Koshgram Boys' Drawing of How They Would Like Their Village to Be



Children all said that they wanted to have more time and space to play. Without exception, boys drew a playground and/or cricket pitch in their pictures of "a village I would like to live in," and girls too said they would like to play and many drew separate playgrounds. They would like to have dolls and permission to play and to go out; in many families it appears that parents regard play as frivolous and both boys and girls are kept very busy with chores – although they do find ways to incorporate games into these activities, especially when tending livestock outdoors. Children wanted to have homes, families, schools, animals, water, and play. Girls did not want to get married young and leave their parents' homes.

Key Recommendations:

- Improve well-being and coping capacities of the population of Allai through community-based psychosocial health programs encompassing:
    - Improving access to participatory, community-based and culturally appropriate interventions to restore social cohesion, traditional networks of support and comfort, and treat individual trauma
    - Raising the capacity of professional and traditional healers about psychological trauma, stress, counseling, and referrals
    - Awareness raising about post-traumatic stress and mental health raised among communities, together with practical means of coping with anxiety and depression for adults and children

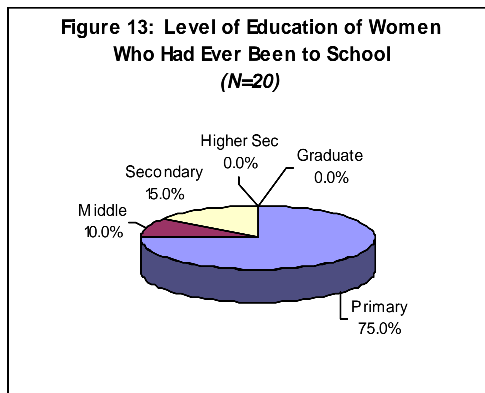
- o Strengthening the capacity of the Department of Health to support mental health treatment

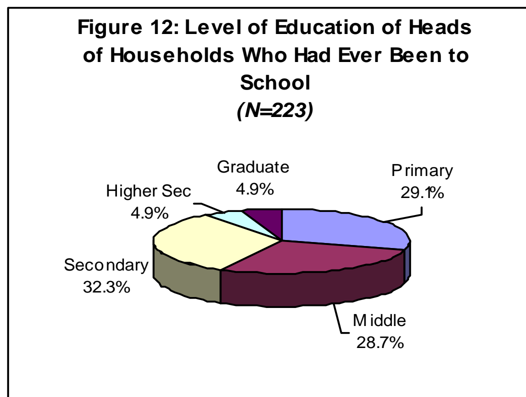
Education

"We send our children to school so that after acquiring education they should be able to earn an honorable living. Since our area is extremely poor so without adequate education, it is difficult to make both ends meet....it is because of education that you people [NGO workers] are earning a good salary as well as serving humanity and we who are without education are sitting at your feet....There is a tradition of early marriages in our area but after the earthquake now we want [daughters] to first get education and become professionals like you. Both the boys and girls should have separate schools with trained teachers."
-- Cheeran Bala Women

"For the future of our children, we want them to get education and excel in their studies so that they can get rid of this slavish life. We want the same for our girls."
-- Darra Biari Women

"We would like to have our every child educated but up till now we have not received any dividends of education from the people who received education earlier in this village. None of them got any government job, so we believe that at the end of the day even the educated ones will also be tending livestock and cultivating fields, and so there is no point spending time and money on education."
-- Gangwal Men





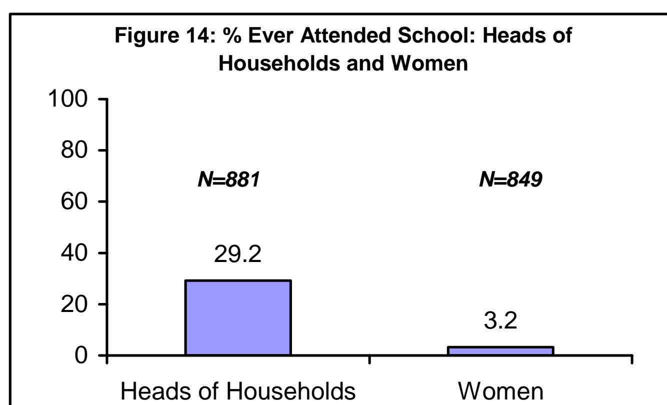
The needs assessment revealed an overwhelming demand for quality basic education, but it simply was not available before the earthquake. The statistics are as depressing as they are arresting: 96.8% of women surveyed, for example, said they had no education at all, as did 52.2% of heads of household (virtually all of whom were men). The earthquake damaged or destroyed all the schools and dispersed the few teachers; on the other hand many agencies have set up "tent schools" in IDP camps and other locations, some of which have reached children for the first time or delivered a higher quality of teaching. As one FGD facilitator commented, "the girls expressed a sense of happiness while they stayed in Meira Camp, and also told that they left the camp reluctantly, for there they could go to school, play, and get basic necessities which are absent in their village." Nevertheless, poor enrollment is pervasive in the valley; at the time of, and according to the survey, 32.1% of boys and 43.8% of girls aged 5-9 were *not* attending any government, private, or religious schools. Enrollment rates drop dramatically as children grow older and, even if families wanted to send their daughters, there are no secondary schools for girls at all in the sub-district. FGDs were able to flesh out these statistics, as well as other attitudes, opportunities, and obstacles.

FGDs, however, demonstrated an overwhelming demand for education for both boys and girls. With few exceptions, informants pleaded for more schools and better quality teachers so that sons and daughters could have better opportunities in life and be more "enlightened" and "moral." Across the board, all agreed that lack of educational opportunities for both boys and girls was a particular problem. In this deeply devout society, participants' requests for religious instruction were perhaps as high as for basic education, so that children can learn "to distinguish right from wrong." However, traditions of purdah are so deeply entrenched and valued that participants could not conceive of compromising it in any way in order to improve access to education, nor would that be permitted by religious leaders. Absence of separate girls' schools – staffed with female teachers – thus represents an impossible obstacle to them. One religious leader said outright, "we are against the concept of co-education and will not tolerate such things in our society." They were, however, able to articulate practical suggestions given existing resources and constraints within their communities. For example, women in Koshgram Village pointed out with frustration that although the local boys' school has been revitalized, the girls' one is near a public transport stop that is always crowded with men. Even if it had a teacher – which it doesn't – girls would not be able to attend classes in that location. They asked that the girls' school be rebuilt in an appropriate place and staffed with a woman teacher.

In the survey, the most frequently-stated reason for both boys and girls under 15 not attending school was "there is no school," especially at higher ages. A related problem in the valley is lack of teachers, especially female ones.

Lack of quality as well as availability of education was frustrating to many villagers. As Cheeran Bala Village women complained, "we want to send our children to a school where the quality and methodology of teaching is effective but in our village neither the schools are good nor are the teachers who could advance the skills of the children. For instance, if the children know how to read, they do not know how to write. We cannot do anything about it." Another group said, "The women of this village want to have separate schools for girls and boys with good teachers who can teach children effectively. Before the earthquake, the teachers were not teaching appropriately. For instance, one child is a student of grade 5 but still he cannot write. They need teachers who are effective." A fundamental problem is poor capacity of tehsil and district-level education officials to recruit, support, train, and monitor personnel. Teacher absenteeism is widely recognized to be a pervasive problem. Men in Kalootay, for example, said that the instructor in their village was a relative of the *khan* (large landholders and traditional authorities, often translated as "lords") and did not teach any classes although he did collect his salary. There is virtually no community participation in local education.

We know from experience elsewhere in Pakistan, Afghanistan, and other parts of the world that barriers to children's education are complex and multifaceted, requiring much more than a school to overcome. Poor nutrition, for example, can severely compromise a child's ability to learn. Nevertheless, the evidence from the needs assessment overwhelmingly confirms a serious disparity between demand and supply of quality, basic education – especially for girls – that urgently can and should be addressed.



Key Recommendations:

- Increase utilization of quality, basic education services for children in the Allai Valley:
    - Increasing access to basic education for children, especially girls

        - Build or reconstruct schools in appropriate locations, with community participation
        - Increase the pool of teachers, especially women
        - Establish community-based schools in underserved areas, and have them absorbed into the formal education system over time
        - Health and nutrition programs for school-aged children, enabling them to attend school and to learn
    - Increasing the quality of primary education services
        - Improve teacher attendance
        - Improve teacher training, support, and supervision
        - Increase the availability of learning and teaching supplies
    - Increasing community capacity and participation in planning, implementing, and monitoring basic education services
        - Revitalize or establish School Management Committees, with full training and support, so that communities are actively involved in monitoring and supporting their local schools
        - Develop community-based "school improvement plans" as a means for communities to set, achieve, and monitor their own goals
    - Strengthening the institutional capacity of district and tehsil authorities to provide quality primary education, including how to:
        - Collect and analyze data about education access and quality
        - Develop education plans based on what is learned from analysis
        - Support, train, and supervise teachers

Sustainable Livelihoods

Livelihoods

> "The once evergreen fields have become a city of stones. There was a barn that used to house the animals but after the earthquake nothing survived neither the barn nor the animals."
> -- Kuz Tandool Women

> "We all are impoverished people because of absence of employment opportunities. There is no business in this area. We do not own any land and the possessions that we had before the earthquake are no more. There are about 35 widows in our village and almost 20 handicapped people. We can physically help them out but we are unable to contribute materially, as we are ourselves poor people. In our village, some people received the relief checks promised by the government but most of the people have been left out in the check distribution. In this relief exercise, we were troubled a lot. Some people did get the relief but others did not get anything."
> -- Darra Biari Men (Gujurs)

> "We have very scarce agricultural land where we grow maize and wheat. The crop production is so low that instead of selling some portion of agricultural produce, we purchase wheat flour and rice from the market which puts us in debt. Before the earthquake, we used to cultivate two crops but now the land terracing is damaged inhibiting any cultivation. Before the earthquake, we used to obtain many fruits and honey from our lands which would enable us to make our both ends meet properly but now everything is finished."
> -- Kuz Tandool Men

It is obvious that the earthquake had an enormously detrimental effect on immediate livelihoods and incomes, including almost total wipeout of the 2005 harvest. Long-term livelihoods were also seriously compromised, both in agriculture and paid employment. Although less than a third of heads of households (25.8% before the earthquake and 25.2% after) said that some form of agriculture was their "main" occupation, it is understood that virtually all families in the valley rely on some combination of subsistence agriculture and/or herding with remittances from down-country or overseas. Only 5.3% said that they sold or traded their produce, and only 1.8% said they do not cultivate land at all. Meanwhile, the proportion of professionals and artisans is minimal – and artisans are often landless poor, rather than a step above farmers. Troublingly, the number of small or middle-sized businessmen was nearly halved by the earthquake, from 8.1% to 4.7%.

Figure 15: Household Monthly Income Before and After EQ
All Ethnic Groups

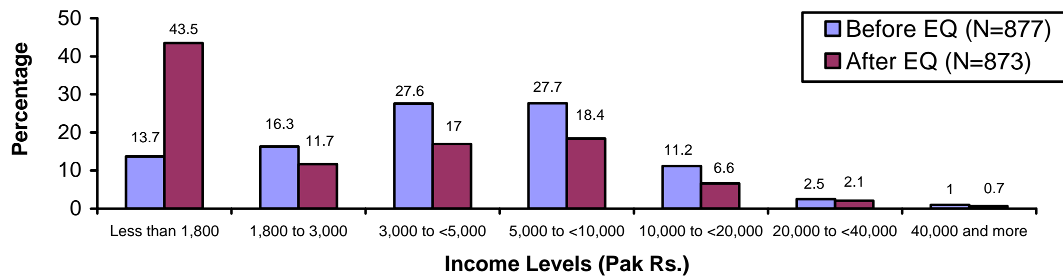
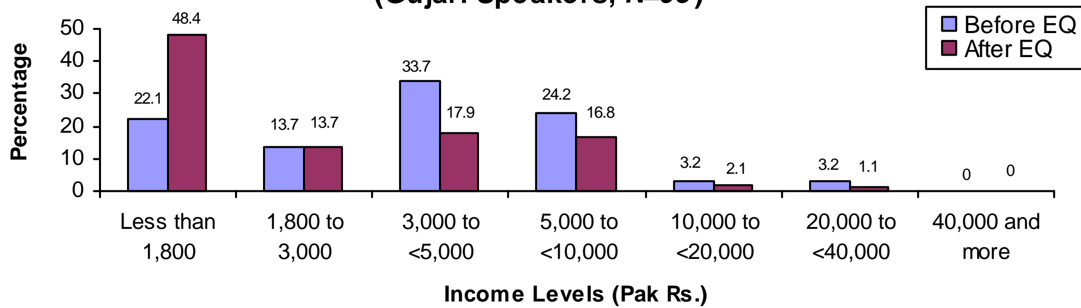


Figure 16: Household Monthly Income Before and After EQ
(Gujari Speakers, *N*=95)



Meanwhile, self-reported unemployment of heads of households skyrocketed from 4.4% before the earthquake to 24.2% at the time of the survey, and the proportion of households subsisting on a cash income below 1800 Rp/month has shot up from 13.7% to 43.5%. The household survey also showed a 14.1% decline in the numbers of heads of households working overseas, presumably because many returned to be with their families after the disaster – although there was still a significant out-migration of household members since the earthquake, reasons for which are not specified. FGDs confirmed that men are too pre-occupied with reconstruction to seek or perform paid employment now. On the other hand, 94.2% of households said they had received some sort of financial assistance.

Figure 17: Households with No Animals Before and After EQ
(N=895)

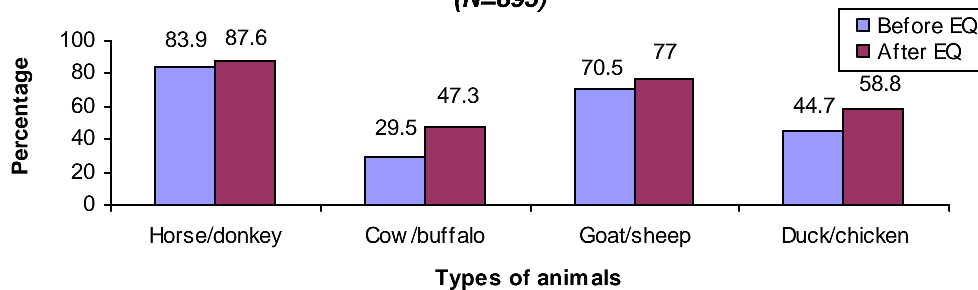
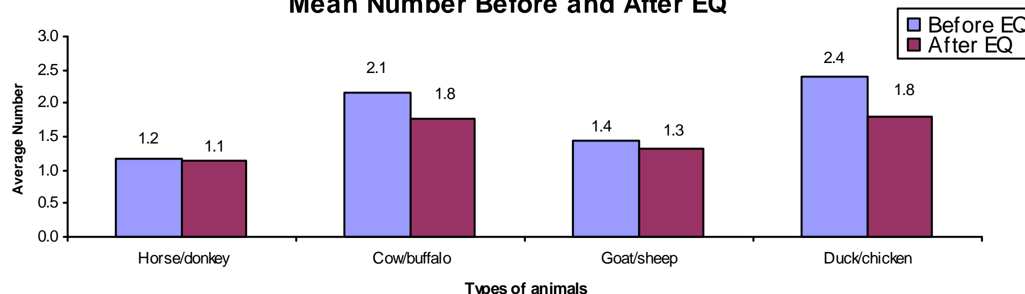
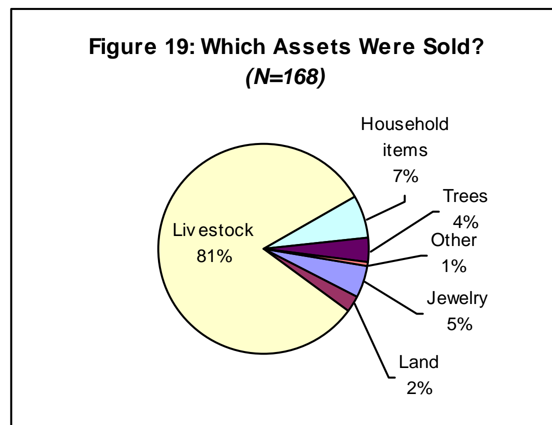


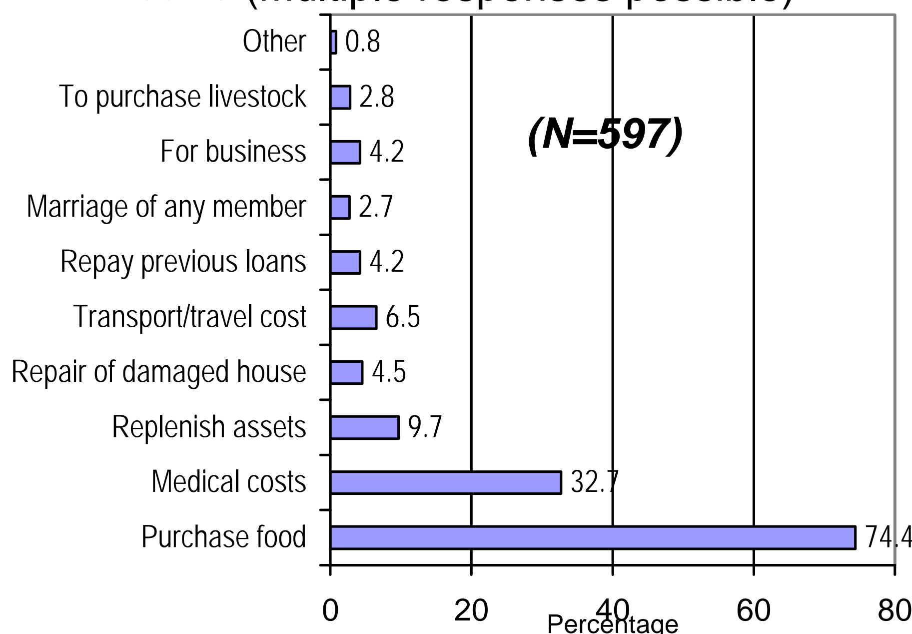
Figure 18: Of Those Households With Animals,
Mean Number Before and After EQ



Although female income generation was not captured separately from household income in the survey – and, indeed, women would almost never work outside the home due to purdah – women's FGDs indicated that their contributions too had been crippled, particularly by the loss of sewing machines. As one said, "now our source of livelihoods is snatched." This has particularly compromised the few female-headed households, many of whom depended on tailoring. Widows pleaded for sewing centers and machines with which to support their families.



Domestic animal stocks have been seriously depleted, although people spoke of these losses in bleaker terms than the statistical data shows. It is possible that some families who were dependent on herding and lost their animals left the valley altogether. Many animals were killed directly by the earthquake, but 19.8% of households have also liquidated assets – 82.1% of them livestock. FGDs reported that they had been forced to sell their precious animals at a fraction of their normal worth. Meanwhile, 55.6% of households report taking on new debt since the earthquake, and 48.1% have extended a previous loan.[8] The reasons for the overwhelming majority of these loans have been for basic survival, such as food (74.4%) and medical expenses (32.7%).[9]



Irrigation and terracing systems were almost totally destroyed, and the valley's extensive fruit orchards were also seriously damaged. Implications for this are profound: villagers will simply be unable to cultivate normal yields this year; one group said a quarter of arable land has been rendered unusable, and others said that farmers were missing spring planting altogether due to lack of viable land and/or being too busy with reconstruction. The damage is so extensive that it will likely take years to rebuild necessary infrastructure, rendering the entire valley food

[8] There is almost certainly overlap between the past two responses.
[9] Multiple responses were possible on this survey question.

insecure for some time to come. Local mills for grinding grains too have been destroyed, further undermining the financial solvency of agriculturalists.

Key Recommendations

- Increase the utilization of restored and improved livelihood opportunities in Allai through:
  - Improving access to financial services, livestock, functional farming infrastructure, and agricultural inputs
    - Distribute agricultural inputs, including seeds and tools, until the rehabilitation advanced to the point where Allai is once again self-sufficient in food
    - Distribute breeding animals
    - Cash-for-work and/or food-for-work to rehabilitate damaged agricultural infrastructure, including terraces and irrigation systems
    - Establish micro-credit and micro-grant schemes to revitalize economic activities for men and women
  - Improving quality of livelihood services and opportunities
    - Facilitate increase in numbers of both male and female agricultural extension workers
    - Train trainers in agriculture and related skills (e.g. bee-keeping, orchard cultivation)
    - Build capacity of communities to advocate with authorities to respond to their own priorities
  - Increasing community capacity for enhanced livelihoods through vocational training, small business start-up support, and micro-finance
    - Introduce new technology and methods, where appropriate, affordable, and accessible to improve generation
  - Strengthening the institutional capacities of government line agencies to conduct agricultural extension services
    - Train Department of Agriculture staff in technical and management skills
    - Partner with communities and Department of Agriculture to develop, implement, and monitor joint, participatory action plans

Environment

> "We do not have wood for construction purposes, because we are poor people and most of the forest land belongs to few notable people….The unfortunate element of our area is that there is no [tree] nursery. We request that a nursery should be made. As most of our land got damaged, tree planting can at least counteract land erosion because when trees take roots in the land, it gets strengthened."
> --Bab Men

> "We got the plants from the nursery before the earthquake, but now after the earthquake we are very disturbed. Though we are trying to have a forest nursery established in our area, most of the men work outside the village and cannot take care of the environment so the village is left to remain a wasteland. If there are no forests then the area will become very dirty."
> -- Kalootay Men

> "The forest wood is adversely affected by the earthquake. Grass, water resources, vegetation, birds and human have been severely affected by the earthquake. Much of the livestock has died…Grass is not available in the close by area and the places where it is changed…People have sold out their remaining livestock because there is no grass available and above all they need money. The livestock were sold at a very low price."
> -- Cheeran Bala Men

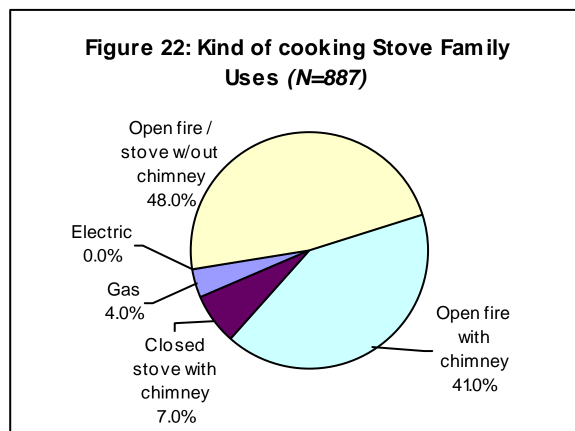
The earthquake-affected areas of Pakistan are among the most ecologically fragile areas in the Himalayan Mountains, and are characterized by both breathtaking scenic beauty and unremitting poverty.

Figure 21: Villager's Drawing of Deforestation

Over the last few decades small-scale infrastructure development has had an impact on Allai Tehsil – at times to the detriment of both the local subsistence economy and to the environment. Illegal timber harvesting, deforestation, over-cultivation of farmland, uncontrolled grazing, poor water management, and a host of socio-political factors have contributed to ecological degradation. The earthquake further damaged the environment, causing landslides, erosion, and contamination and disruption of water sources. Meanwhile, it has forced the local population to resort to environmentally-damaging coping strategies, including logging and over-consumption of wild game and foods. The need to rebuild nearly the entire physical infrastructure is placing further strain on scarce natural resources, particularly timber and other materials used in building. To date the humanitarian response to the earthquake has been focused on immediate relief and enabling the population to survive the harsh Himalayan winter. While recovery, rehabilitation, and transition programming is now underway, little is being done outside of water/sanitation and agriculture that impacts pre- and post-earthquake environmental degradation.

Deforestation is considered by many to be the most serious environmental threat facing Allai. Local authorities, unfortunately, have demonstrated limited capacity in environmental management in Allai Tehsil, and are unable or unwilling to effectively address massive illegal logging in the area. Government capacity, too, has been further damaged by the earthquake, with offices collapsed and staff killed or displaced. While no FGDs specifically discussed the local economics of logging, the entire area is being rapidly denuded and informants did not indicate they were benefiting financially.

99.1% of households use wood as their primary source of fuel for heating and cooking – and 88.8% of households are using open fires, which are both exceptionally wasteful and a health and safety hazard. FGD participants in many villages indicated that there is not enough local wood to meet their household needs and they must purchase it in the markets – a disturbing sign for an area that was once thickly forested.



Rebuilding is putting further strain on wood supplies; as women in Bab Village said, "There are Guzara forests in the village which are being rapidly depleted by the population for their homes' reconstruction." Male FGDs were requested to draw maps of their villages' livelihoods base, and these maps consistently depicted environmental degradation, particularly deforestation and destruction of infrastructure. Villagers also expressed appreciation for reforestation projects such as tree nurseries, and some singled out for praise CARE's efforts in this regard.

While 83.7% of those "currently" cultivating said they are farming their own plots of land, FGDs indicated that forests and other public lands were owned by "a few notable people," i.e. the khans. However, one group did indicate a more distributed pattern of ownership of forest land (and that some of it "has been forcibly usurped from us by the people of Kohistan"!) Very notably, patterns of land ownership or rights of access, especially for forest and other non-farm lands, were one of the few areas where FGDs were not consistent with one another across the valley; this is clearly an area which requires further investigation. However, that local classifications of rights and obligations surrounding access to grazing grounds, farmlands, and forests do not easily fit into English definitions of "ownership" and "tenancy;" see the governance section for more discussion of this.

Key Recommendations – Environment

- Increase natural resource management skills and practices in the Allai Valley through:
    - Increasing access to sustainable livelihood opportunities and natural resource

management projects
    - Community-based, environmentally-sound projects that enhance both livelihoods and the environment (for example, fruit orchards, bee-keeping, watershed management)
    - Promote energy efficiency through use of fuel-efficient stoves
- Reforesting significant areas through building the capacity of communities and authorities to plant trees and protect forests
    - Plant local forest trees, especially in environmentally-sensitive areas such as watersheds
    - Expand the number of functioning tree nurseries in Allai, which can also be a sustainable source of income generation for the Forestry Department and communities
    - Stabilize road banks and locations vulnerable to landslides and erosion, using trees and other appropriate flora to secure the soil
    - Build capacities of the Department of Forestry and villagers in community-based forest management
- Increasing public awareness of natural resource conservation
    - Broadcast radio messages on key environmental issues
    - Community-based education on environmental themes such as conservation, sustainable use of non-timber forest products, and landslide prevention, aimed at both adults and children
    - Establish environment clubs at schools
- Improving government policies and responsiveness on key environmental issues
    - Build capacity of communities to identify and advocate for their own environmental priorities, for example through establishing "Green Sector Forums" and partnership with the Department of Forestry to protect local lands
    - Build capacity of NGOs to address
    - Build capacity of Department of Forestry to effectively govern forest land, curb illegal logging, and partner with communities

Cross-cutting Issues

Governance

> "The Prime Minister borrows from a donor agency such as the World Bank which reaches the capital from where it is given to the province and then comes to the district. Do you think anything can reach us when there are so many tiers of corruption?"
> --Kalootay Men

> "Decisions are usually taken by the elders but in case of a problem extending the capacity of the elder, it would be reported to the local police station and the government. Most disputes are solved locally within the precinct of the village, in fact we have never actually had a situation where it wasn't. In a husband-wife conflict, the husband generally beats the wife and then makes the compromise as well because he is powerful."
> -- Cheeran Bala Women

> "The women make their men realize that quarrelling is not decent and in the dark they secretly visit the house of other party and entreat them to desist from fighting and to compromise."
> -- Kuz Tandool Women

Governance was an emphasis of the FGDs, which used the common theme of decision-making to explore multiple sectors. It is abundantly clear – and no surprise – that traditional patterns of governance still dominate, and khans typically hold key elected positions. *Nazims* (elected

local government leaders) or police are brought in only rarely, with governance issues resolved at the local level. A number of groups and individuals, especially but not exclusively Gujurs, voiced numerous complaints about the selfishness, corruption, or tyranny of the khans.

Normally conflicts are settled by families themselves or brought before a *jirga* (traditional council of men with authority). Mediation by jirgas most frequently concerns land conflicts; disputes over other natural resources and women are other common problems. Women play no role in jirgas, and while women in one village said that they "do not play any significant role [in dispute resolution]," in the other groups both men and women said that females "visit each other's houses requesting the other party's women to ask their men to settle the issue" and so forth. Some described this process in more detail, and it was clear that while women take an indirect role in settling village conflicts, they are often the first to initiate matters. Meanwhile, several groups said that husbands, parents, or older women mediate when there are problems among women, but such issues are not part of jirgas.

Although the Allai Valley is considered to be highly insecure to work in, FGDs generally did not report that "tribal enmities" or inter-village disputes were a problem in Allai. However, Gujurs had different responses from Pathans to a number of points in the FGDs, including on matters of governance and their status in the communities and with traditional authorities, and articulated complaints that were not shared by Pathans, including economic and political marginalization, dependency, and exploitation. One group of Gujur tenants also said that that they were armed by and fight for the khan when called upon. Reflecting their minority status, only a small number were interviewed in surveys and FGDs, but the research does demonstrate that further investigation into the needs of the Gujur population are warranted.

One area of particular concern is that several groups indicated that, in addition to collapse of community cohesion and traditional patterns of zakat for the needy[10] after the earthquake, there is rising conflict over distribution of relief goods. Suspicions are rampant about corruption, with several groups charging favoritism or that khan or other villages had received or hoarded aid meant for them.[11] Even within villages, people mentioned that quarrels were erupting over victim benefit checks, relief goods, etc. As men in Kuz Tandool Village explained, "after the earthquake, our close social bonding suffered a lot and disunity has crept in. Everyone is hankering after the relief items so much so that the people have given up visiting mosques and children do not attend school." This has serious implications for community governance as well as the security of NGOs and must be watched very carefully.

A second area of change since the earthquake is the question of land ownership; as was discussed briefly in the environment section, in Allai concepts of "ownership" and "tenancy" vary somewhat from the English definitions. In the valley, true tenants cultivate the khans' lands in exchange for grazing their own animals and patronage. They have no inherent rights to these lands and may be asked to leave at any time. Very frequently, they are from the Gujur ethnic minority – only 8.9% of Gujurs said they "owned" land (if they were cultivating) in contrast to 91.1% of Pathans. Most small farmers, however, have traditional, inherited rights to plots of land, but still give a portion of their yield to the local khan, who probably holds actual legal ownership. Since the earthquake, government and non-government relief has been going directly to the small farmers who consider their land and houses "theirs" and there are indications that they are using the earthquake to establish full ownership, which the khans consider to be an affront of their own property rights and authority.[12] This too has potentially enormous implications for both security and governance in Allai in the coming years.

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[10] See Livelihoods and Psychosocial Health sections for more discussion on this topic.

[11] Investigation into the most serious charge – that the local khan was hijacking aid that was meant to go to landless Gujurs – proved to be unfounded. However, it did appear that this population had been more likely staying with relatives and had therefore missed out on distributions in both their home village and in the IDP camps. In other words, while the khan was blameless in this instance, they had indeed slipped through the distribution cracks. Save the Children promptly addressed the matter.

[12] This information comes from an informal investigation following the actual needs assessment, as the data was inconclusive. The SC staff member who looked into this emphasized that he had only spoken with a few people and that "the issue is more delicate and complicated at a deeper level."

FGDs also reported a good deal of dissatisfaction with the government relief effort, alleging corruption at various levels. Distribution of checks has been essential to keeping families afloat; however the lack of a bank to cash them at has caused immense difficulties. Villagers also said that some people, especially widows, had been omitted altogether, and that checks had been distributed according to favoritism. Furthermore, it was alleged that bank staff were pocketing a portion of each check and that "the revenue officers and the military authorities refused to listen to our entreaties....officials and bank authorities have disturbed us a lot. The government has not given any benefit to us. The only benefit that we received is from NGOs and we assure them of our fullest cooperation as well." There were also some complaints about NGO distributions, but by and large people seemed thankful of the assistance they had received.

Key Recommendations

- Improve effectiveness and responsiveness of governance in Allai, both traditional and official, through
    - Increasing access of villagers, including females, Gujurs, and other marginalized groups, to government offices and services
        - Partner with communities and authorities to improve time and space for consultation, including separate facilities for women
        - Improve supervision and support of government staff
    - Increasing the accountability of traditional and official authorities to the communities they serve
        - Through partnership with jirgas, village development committees, and women's groups, develop action plans together with government offices to set, achieve, and monitor specific goals and performance of staff
        - Build local capacities in dispute resolution and security monitoring
        - Train traditional and official authorities in participatory leadership and management skills
    - Building the capacity of communities, including women, Gujurs, and other marginalized groups, to participate in traditional and formal government processes, and advocate for their needs and rights
        - Including through the use of female and Gujur-speaking trainers, build awareness of rights and opportunities for participation in formal and informal governance
        - Build skills in advocacy and leadership
        - Facilitate greater linkages between traditional leaders, formal authorities, and the communities they serve to increase open dialogue, consultation, and sensitivity to needs of marginalized groups
        - Human rights education campaigns
    - Strengthening the capacity of traditional and official authorities to deliver quality services, including relief, rehabilitation, and development programs.
        - Partner with relevant government departments to enhance their skills in gathering and analyzing key data in order to inform priorities and monitor progress
        - Increase capacities of authorities to support, train, and supervise staff to deliver better services and leadership

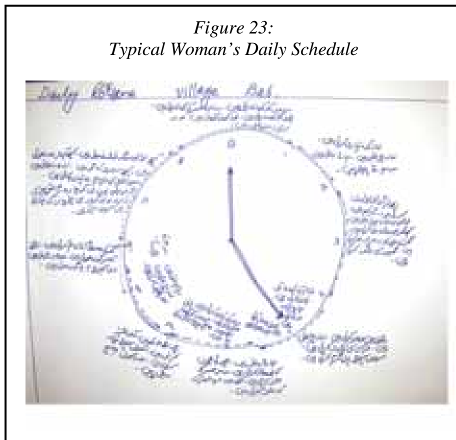
Gender

> "There is no discrimination between boys and girls. All the family members are treated equitably. Some women are of the opinion that boys get preferential treatment. "
> -- Bab Women

> "In case of any disagreement, the men have the conclusive opinion. A woman has to sacrifice in many ways. The husband fights with the wife but when he is in good mood he compromises. The women here have staunch faith in the supremacy of men."
> --Bab Women

"We are not happy that we are girls because one day girls are to be married and leave the house of their parents, whereas boys stay with the parents. After marriage, the husband's parents also put the girl to the task and become rude with her and besides husbands beat the girls too. The boys go to other cities and enjoy liberty that girls cannot even dream of. The boys also visit markets and purchase things for the family."
-- Kuz Tandool Girls

Figure 23:
Typical Woman's Daily Schedule

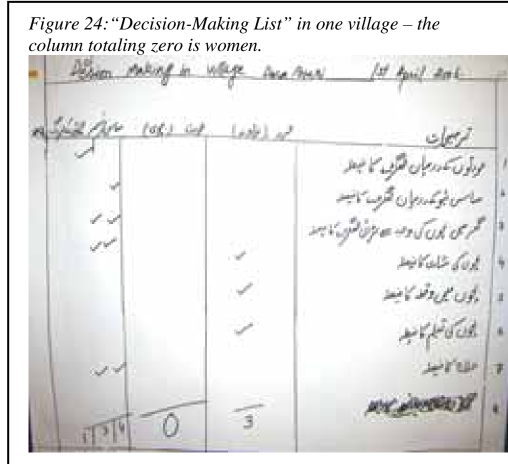


Gender is a theme that cuts across this study, and in this sex-segregated society it is especially essential to incorporate the radically different perspectives of men and women, boys and girls. While gender is incorporated through this entire report, a number of women's issues that are not covered elsewhere in this paper deserve stand-alone discussion.

Almost without exception, men, women, boys, and girls said that both males and females are created and equally valued by Allah and the community, and one group said that females have "more comfort and rights" (probably referring to less pressure on women to earn livings to support families). They expressed strong commitment to ensuring that women and girls led lives of dignity – i.e. seclusion in purdah, which represents the very definition of ideal womanhood. Interestingly, both males and females spoke of the greater comforts and rights purdah bequeaths on women, which is seen as conferring both honor and leisure for females – although the daily routines made in FGDs indicate that in reality women's household workloads are enormous while men's are peppered with spare time. It should also be noted that violations of purdah are dealt with very severely; as women in Gangwal Village explained, "In a quarrel between husband and wife, the husband sometimes beats the wife and the reason for this lashing is going to someone's home without seeking husband's permission and observing lesser amount of purdah...The dispute between husband and wife is settled between themselves because it is deemed shameful if it is made known to elders."

While FGD informants did express demand for greater access to education, employment, and other services for women and girls, it was only insofar as purdah was not compromised in any way. Married women vocalized full acceptance of these restrictions ("we believe that men are powerful"). However a number of younger girls expressed sadness and regret at their situation ("some girls expressed the wish that would that they were boys so that they could go to other cities and countries and they could also play like them, but others felt happy they were girls"); one girl, when asked to draw a picture of a village she would like to live in, appeared only to be able to conceptualize the interior of a single house. Boys, by contrast, "all were happy to be boys because boys can do many things. Boys are the income resources of the families. Boys can undertake hard work and support the families by going out of the village for work whereas girls cannot perform these tasks as they cannot go out alone. Boys stay at their parents' houses whereas girls are married out."

Figure 24:"Decision-Making List" in one village – the column totaling zero is women.



All the girls believed that their lives would be exactly like their mothers', regardless of whether they get an education. Girls expressed regret that they were not allowed to play, go out of the villages, would be married at an early age, had "no right to violate traditions", and must obey their elders under all circumstances. A few in FGDs expressed fear of their male relatives "lest any activity of the girl offends them." Findings confirmed that early marriage and domestic violence are both present and probably widespread; these are discussed in more detail the protection section, as is child labor.

It is noteworthy that females, especially young ones have virtually no direct decision-making power in the household. Young wives in particular often shoulder enormous workloads and there were complaints that they may be treated as drudges; as a woman grows older (and bears children) her household status rises and some work is off-loaded to daughters and other less-senior women in the household. Household disputes are settled internally, but men and elders wield final say (one group laughed heartily and said marital disagreements are settled "automatically," i.e. by the man). Men are described as "powerful;" such adjectives were never used to describe women.

Widows live under exceptionally impoverished circumstances, and the situation is usually dealt with by arranging another marriage for her. Only 1.9% of households surveyed had a female head of household; however FGDs all reported that there were widows living in their communities even before the earthquake, and interviews with them revealed extraordinarily desperate lives if they did not have grown sons. Most worked as tailors, although some performed menial labor in agriculture or tending livestock. Their vulnerability has increased immensely since the earthquake: their few means of livelihoods (including sewing machines and animals) are gone, their neighbors are no longer able to maintain traditional patterns of charity, and they are having immense difficulty accessing relief items unless their sons are old enough to collect them from where men are gathered.

Key Recommendations

- Mainstream female participation at all stages of relief, recovery, and development programs in any sector through:
    - Increasing access of women and girls to government and non-government services, projects, programs, and benefits
        - Increase numbers of female staff to conduct outreach and provide services to females in Allai
        - Open dialogue with men, women, and traditional authorities (including religious leaders) about the importance of equal access to health, education, and other benefits and services
        - Develop action plans together with communities to broaden female access
        - Ensure adequate, private spaces are available to facilitate outreach to women
    - Ensuring that government and non-government services, projects, programs, and benefits are addressing the specific needs of women and girls
        - Close and participatory monitoring to ensure that both males and females are benefiting, whether through joint programs or parallel ones for each gender
    - Increasing female participation at all levels of project and service design, implementation, management, and monitoring
    - Increasing the capacity of government and non-government institutions to implement gender-sensitive programs, including increasing the number of female staff who can conduct outreach to Allai women.

Protection[13]

> "We feel safe in our homes because our men are around. We keep weapons etc. out of fear of big animals not out of vendettas."
> -- Cheeran Bala Women

> "The women do not feel any security in their tents. We can feel safe and secure only when we have a permanent house to live. Not a single house survived the tremors of the earthquake. We live in a protective society and only leave house when we are properly covered. Our burqas got buried under the rubble of our houses and we took small pieces of cloth to cover ourselves

[13] See also sections on Education, Gender, Health & Nutrition, and Psychosocial Health

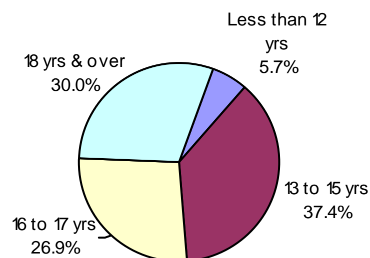
while running to safety. Now we don't have enough money to repurchase those veils to cover ourselves… The tents are unsafe and people cannot go far away leaving behind their children and homes."
-- Bab Women

"I was 12 when I got married to a person whose previous wife had died leaving behind four children. His youngest daughter was my age. I used to do all the work and that young daughter of my husband would share my work….I advise everyone not to marry young girls because it kills their joy."
--Tandool Bala Woman

Any emergency intensifies a population's vulnerability to exploitation, violence, and abuse, including desperate sexual survival strategies. The people of Allai, however, almost without exception said that their overwhelming safety concern was living in tents, which made them vulnerable to theft, bandits, fire, snakes, scorpions, and exposure. The continuing aftershocks were also extremely frightening, especially to children, and triggered flashbacks.

It is abundantly clear that Allai villagers place an enormous priority on safety; indeed, it was not uncommon to hear of exacerbated poverty because men would not leave their women and children behind in tents to out and work. Villagers simply do not do anything to undermine their safety generally, even at grave risk to their own health and livelihoods. Lack of male presence in a household is virtually unheard of, and those women and children in them would be considered to be highly vulnerable to outside threats. Safety was generally described by both males and females in terms of maintaining purdah and being with one's own relatives – although, ironically, some females also expressed fear of their male family members particularly if there was any suspicion of their engaging in impermissible behavior. Women or girls who stray from purdah are subject to potentially extreme punishment. Although there is a tradition of hospitality to guests, there is also a suspicion of outsiders. Women and children especially cannot have any contact other than blood relatives without explicit authorization by husbands or fathers, and they may be subject to violence if they defy any rules.

Figure 25: Women's Age at Marriage
(N=854)



The FGDs confirmed that domestic violence is very widespread and considered quite normal. Girls expressed fear of their older male relatives, and many women's FGDs indicated that husbands beat their wives if they want to; such matters are considered internal and are not subject to any limitation by outside parties, such as the village jirga – although more informal mediation, especially by older household women or between families might occur. Divorce is rare. Early marriage is also common – 37.4% of women surveyed had been wed between the ages of 13 and 15 -- although many said it was becoming less so. The mean age of marriage for women surveyed was 16.5, with a range from 9 to 43; however since widowed or divorced women are usually remarried quickly, the mean is probably skewed as it would reflect second (or more) marriages. In one focus group discussion with girls, a 13-year-old said that she was the only one among her friends who was not married, and she felt very sad for them. One concern that researchers had going into the study was that the disaster would trigger a round of early marriages; however, this was not confirmed by informants – perhaps because winter is not "marriage season" or weddings are costly. One group, when asked, said that "under such testing times we cannot think of marriage and if there is one, it would not be celebrated." However, the physical and economic vulnerability of widows is considered to be extreme and families arrange for their re-marriage almost immediately, often to a relative of her late husband in order not to lose her to another household. Researchers heard several stories of adult women married to boys; one late adolescent who was married to a pubescent boy landed in the Bana Rural Health Center suffering from an extreme nervous breakdown. However, in general boys tend to be married older; as men in Cheeran Bala explained, "the age of marriage…for boys

ranges from 12 to 45 while for girls it depends upon reaching the age of puberty. The latitude for men is due to their going to the city or overseas to work."

None of the FGDs indicated that "tribal enmities" or vendettas as being a particular problem before or after the earthquake, or commented upon any upsurge in violence, trafficking, or substance abuse. What they are extremely fearful of are earthquakes, dangers of tent living (e.g. vulnerability to theft, fire, etc), and perceived threats from strangers. However, as was discussed in the psychosocial health section above, community cohesion has also broken down -- and so have traditional patterns of zakat (charitable alms to the poor) and support from landlords to tenants.

Child labor in the form of chores to support family homes, farms, herds, and small businesses is universal in Allai, and the household burdens of many children is very high. It is not clear how the earthquake has changed this. Young men often go to cities to seek work and it was unclear at what age they do so.

Key Recommendations

- Improved protection of vulnerable populations in Allai through:
    - Improving access to relief, rehabilitation, and development programs so that they can be safely used by all sectors of society in need, including women, children, and other marginalized groups.
        - Ensure that there are means for women, nomads, the handicapped, illiterate people, and other marginalized groups to access government services
        - Establish special programs to protect especially vulnerable individuals, such was widows and orphans
    - Improving quality of government and non-government relief programs and their capacities for mainstreaming protection issues within them
        - Train staff and managers in protection
        - Partner with NGOs and government agencies to develop action plans (including monitoring) to mainstream protection
        - Establish community-based protection monitoring mechanisms
    - Raising awareness of communities and partnering with them to develop culturally-sensitive efforts to discourage domestic violence, early marriage, and child labor
    - Strengthening capacity of authorities to identify and meet the needs of especially vulnerable individuals, including new widows and children orphaned by the earthquake, and address violence and exploitation

Conclusion

Even before the earthquake, life in the Allai Valley was harsh; the area is characterized by unremitting poverty, subsistence agriculture, isolation, daunting terrain, and poor social services. The October 2005 disaster was catastrophic. While relief aid has enabled the population of Allai to survive the 2005 – 2006 winter, lives and livelihoods in the valley have, literally, been shaken to the very core and will never be the same again. Damage was so immense that simply rehabilitating Allai's physical infrastructure will take years. In the short term, there are worries that the population will not have the means to cope with the upcoming winter, nor will there be an adequate humanitarian presence. Less visible but just as destructive is the long-term impact on the local society and economy, including the collapse of government social services and traditional patterns of welfare and support to a community's most vulnerable.

This study has demonstrated that, at the time of research, the basic needs of the population of Allai, including shelter, health care, food security, and protection, were nowhere near being met and in a few areas are at risk of deteriorating (e.g. cessation of food distribution before agriculture is revitalized, and the use of winter tents that are inappropriate for summer or monsoonal climates). Prompt action needs to be taken, especially in the area of shelter, and

agencies should extend long-term commitments to meet the relief, transition, and development needs. However, a bricks-and-mortar approach to earthquake would be entirely inadequate; to truly "build back better" wider issues must be addressed, including the shortage of skilled and educated personnel (especially women), trauma and its consequent self-destructive and anti-social behaviors, the restoration of sustainable livelihoods, protection of the vulnerable from violence and exploitation, and preservation of the environment.

Fortunately, with incoming support from RNE and other donors, PRDA is set to achieve a comprehensive, multi-sector rehabilitation program that is set to achieve real impact on key social sector indicators and set the foundation for sustainable human development in the Allai Valley.

Annex 1
Health and Nutrition Assessment of Allai Tehsil
Dr Riffat Aysha Anis
National Institute of Health
Islamabad

Introduction on Malnutrition and Health? in Pakistan

Like other developing countries, malnutrition remains a major public health problem in Pakistan. The available data shows the major nutritional problems in the country include babies born with low birth weights due to poor maternal nutrition, protein energy malnutrition and anemia across various groups of population and geographic areas. This situation reflects that the entire population is at risk of some form of malnutrition, among the most vulnerable are children under 5 years of age and pregnant and lactating women.

The National Nutrition Survey (NNS) 2001-02 study[14] revealed that among children 6-59 months, 38% were stunted and 13.1% were wasted. Among the non-pregnant women 12.5% were malnourished (Body Mass Index < 18.5). This clearly reflects that rate of malnutrition is high.

The findings of the 1996 National Health Survey revealed that although the proportion of stunted children had declined to 36% between 1990 and 1994, the proportion of wasted children had increased to 14%. The Pakistan Socio-Economic Survey (1998-99) established that the nutritional status of children under 5 had further deteriorated. Despite an increase in the per capita income during the last two decades, increases in numbers living in poverty has exacerbated the prevalence of malnutrition.

The 2006 Nutrition Survey in the Earthquake-Affected Areas of Pakistan, conducted in Northwest Frontier Province (NWFP) and Azad Jammu and Kashmir (AJ&K) communities and camps, revealed that global acute malnutrition (wasting) was high (10.5%) among children 6-59 months of age. Chronic malnutrition (stunting) was also high, (44.5%). The BMI of non-pregnant mothers with children age 6-59 months showed that 15-17% of them were malnourished (BMI<18.5) in each of the survey areas.

Background and Methodology to Health and Nutrition Section of PRDA Survey

The Partnership for Recovery and Development in the Allai Valley (PRDA) was the first time that detailed health and nutrition data had been gathered in that area. This baseline can be used to inform programs and policies to address malnutrition, food security, and health in relief, transition, and long-term assistance.

To assess growth retardation among different vulnerable groups (i.e. children under 5 and women of childbearing age), anthropometric measurements were obtained. It was not possible to assess all the micronutrient deficiencies, but clinical signs for visible goiter were observed and household salt samples tested to investigate iodine deficiencies. Information on food access, consumption, diversity and food aid was collected. Data on diarrhea, acute respiratory infections (ARI), the reproductive health of the women and family health-seeking behaviors was used to assess the health status of the population, especially the most vulnerable.

The PRDA study was a multi-sectoral 30 x 30 cluster survey conducted between March 22 – April 7 2006.

Results

Food Security and Nutrition

[14] See references at end of Annex for full citations.

Household Food Consumption, Access, Diversity and Source

The 24 hour food frequency recall data of the surveyed population indicates that almost all eat a staple i.e. wheat / rice every day. Typically one source of protein per day is consumed, and is usually of vegetable origin. Nearly all the households surveyed are consuming cereals with some other food item; the majority of the households (91.2%) fell within the range of consuming a minimum of 2-3 food items and 57.9% consume 3-4 food items excluding sugar and wild foods. On average, consumption of milk / milk products, fresh vegetables, or fruits once a day is relatively limited, whereas consumption of sugar and cooking oil is not. While this survey did not evaluate quantities of food eaten to measure calories, the data does show that households are consuming carbohydrates and fats.

Table 1: Household food consumption (24-hour recall)

Food Items	Valid Percentage
Cereals	98.2 (879)
Legumes / pulses	67.2 (601)
Meat/chicken/fish	35.1 (314)
Egg	15.0 (134)
Cooking oil /fat	95.3 (325)
Vegetables	36.3 (853)
Fruits	12.2 (109)
Milk/milk products	34.1 (305)
Sugar	94.1 (842)
Wild foods	61.9 (554)
N = 895	

Table 2: Food diversity measured by type of food consumed (24 hour recall)

Food items range	Number	Percent
Cereals + 1 food item (Range 1-2) Excl. sugar / wild foods	895	100.0
Cereals + 2 food items (Range 2-3) Excl. sugar / wild foods	816	91.2
Cereals + 3 food items (Range 3-4) Excl. sugar / wild foods	518	57.9

A major source of food insecurity in the Allai Valley is a lack of access to food i.e. availability to either from one's own production or purchased. The data indicates that 1.4% households had less than one day food supply, 16.2% had access to less than one week, 25.3% and 14% had 1-2 weeks and 2-4 weeks access to food stock respectively. Fourty-three percent of the survey sample had access to more than one month of food stock. The food access situation in this remote area is poor when compared with the findings of NWFP Manshera district (Health & Nutrition Assessment of the Earthquake-Affected Areas in Pakistan, 2006.) The distribution of food aid by WFP in the area may mean that these already dismal numbers are inflated as compared to family food stocks once this ended in April.

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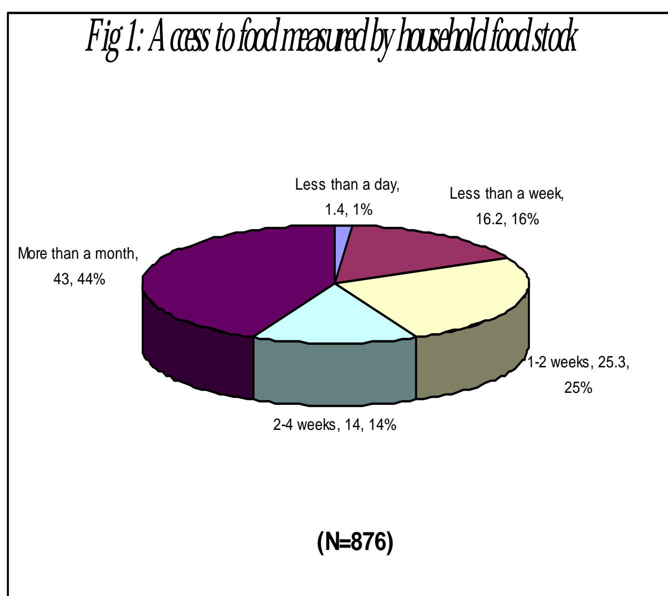
Households' food diversity for consumption of mutton, beef, chicken and fish was estimated using seven-day food consumption recall data. The majority of households fell within the range of consuming meats (36.3%) 1-2 days a week but only 3.3% eat it daily. This finding is similar to the national figures which reported that 33-35% of mothers in both rural and urban areas consume chicken or meat at least once a week and 4% eat meat regularly during the week. The data shows low consumption of eggs as only 3.8% households consume them every day, and 18.4% eat them 1-2 days a week. There is low consumption of fruits by the earthquake-affected families. The poor / low consumption of animal protein and fruits makes the population vulnerable to micronutrient deficiencies (iron, iodine and vitamin A). However, it should also be noted that the time of the survey was the beginning of spring and it can be expected that there would be a good deal of seasonal variation in diets. Fresh fruits, for example, were not in season during the time of the survey.



After the earthquake there was a change in food intake: In 44.4% of households there was a reduction in the quantity of food they consume whereas 32.2% of the household members substituted for less quality foods.

The results indicate that that at the time of the survey the vast majority of respondents were receiving their staple food items (cereals, pulses and cooking oil) in the form of food aid. This is to be expected given the blanket distribution of food of the World Food Program food basket during the survey period. In addition, 47.7% of families produced their own eggs and 57.5% produced their own milk and milk products. The vast majority of Allai residents purchased the meat, vegetables and fruits and sugar that they consumed. As blanket food aid distribution has ended, and many families missed the spring planting season, people will most likely need to purchase at least some staple items such as wheat flower, rice and lentils, leaving even less money for the already under-consumed fruits, vegetables and animal products.

Table 3: Source of food items consumed during the last 24- hrs

Food items	Own Production %	Purchased %	Traded goods / Service %	Kinship / gift / other %	Borrowed/ Credit %	Food aid %
Cereals n=874	1.9	11.0	0.1	0.2	0.9	85.8
Legumes / pulses n=607	0.3	7.4	0.3	1.0	0.3	90.6
Meat/chicken/fish n=327	2.1	93.6	0.3	2.7	0.3	0.9
Egg n= 149	47.7	49.0	0.7	0.0	0.7	2.0
Cooking oil /fat N=848	0.5	14.4	0.1	0.4	1.5	83.1
Vegetables n=330	5.8	91.2	0.0	0.0	1.8	1.2
Fruits n=127	3.9	94.5	0.0	0.0	0.0	1.6
Milk / milk products n=322	57.5	37.9	0.0	2.8	0.0	1.9
Sugar n=835	1.1	72.3	0.0	0.0	0.0	22.9
*Wild foods n=550	95.5	3.5	1.2	0.2	2.5	0.9

* A local wild spinach was in season during the survey period.

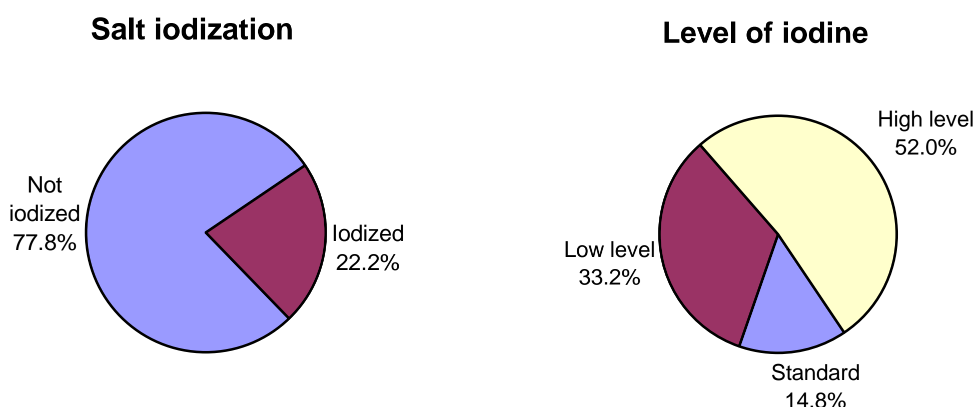
Table 4: Food aid commodities (October 2005- March 2006)

Food items	Oct 2005 %	Nov 2005 %	Dec 2005 %	Jan 2006 %	Feb 2006 %	Mar 2006 %
Wheat / atta	43.9	54.3	55.8	56.8	66.0	57.4
Rice	23.5	20.3	16.0	11.8	13.7	13.0
Pulses	40.2	51.3	52.2	51.2	57.8	49.7
Oil	41.0	50.8	52.1	50.9	58.5	51.7
Sugar	23.9	22.1	20.4	15.9	16.3	18.1
Milk	17.9	13.9	7.7	5.6	7.4	7.8
Other	24.7	32.4	30.8	29.5	35.6	30.1

Salt Iodization

The utilization of iodized salt in the surveyed population at the household level was 22.17 % as compared to the national figure of 17% in 2001-2002 (NNS 2001-02). Moreover, the findings are comparable to the Health and Nutrition Assessment in Earthquake-Affected Areas of Pakistan - 2006 which indicate that less than a quarter of those households were using iodized salt. As far as the quality / level of iodization is concerned 14.8% samples (n=29) were up to the standard. 33.16% (n=65) were with low iodine levels and 52.04% samples (n=102) were with high iodine levels according to Pure Food Rules (PFR) 1965. Of the women surveyed, 7.3 % had visible goiter (swelling in the neck due to enlarged thyroid gland); national figures are higher (12.2% according to NNS 2001-02). It is likely that use of iodized salt is even less under normal conditions, as respondents were receiving salt as part of WFP distributions. Lack of iodine is associated with a range of health problems, including infant mortality, thyroid problems, and cretinism in children.

Fig 2: Households using iodized salt and level of iodization



<u>*Malnutrition*</u>

Anthropometric Survey

In order to obtain a representative estimate of the prevalence of malnutrition, anthropometric measurements must be taken. Data such as weight, height and arm circumference are used to evaluate an individual's nutrition and growth status. The internationally recognized method of reporting the anthropometric survey data for malnutrition is given as Z-scores, a statistical measure of the distance, in units of standard deviations, of a value from the mean. Details of anthropometry for children under 5 years and women of child bearing age and data processing / analysis has been discussed in the methodology section.

Acute Malnutrition

Acute malnutrition reflects recent weight loss and is defined as weight-for-height <-2 z-scores and / or edema (swelling and fluid retention) usually in children aged 6-59 months. At the time of the survey, the prevalence of global acute malnutrition was 12.5% and severe acute malnutrition 5.4%. According to WHO Field Guide for Rapid Nutrition Assessment an emergency occurs when acute malnutrition levels rise above 2.5% of the population

Table 5: Prevalence of Acute Malnutrition/Wasting (6-59 months) with 95% confidence interval

Global Acute Malnutrition (W/H <-2 SD and/or oedema)	12.5 (9.0-16.1)
Severe Acute Malnutrition (W/H <-3 SD and/or oedema)	5.4 (3.3 – 7.4)
N=722	

There were 18 (1.9%) children with edema and no important difference in prevalence by sex was found.

Chronic Malnutrition

Chronic malnutrition reflects a height deficit and is defined as <-2 z-scores height-for-age by NCHS standards, usually in children aged 6-59 months. In Allai children the prevalence of global chronic malnutrition was 60.8%.

Table 6: Prevalence of Chronic Malnutrition/Stunting (6-59 months) with 95% Confidence Interval

Global Chronic Malnutrition (H/A <-2 SD)	60.8 (56.9 – 64.7)

Severe Chronic Malnutrition (H/A<-3 SD)	38.0 (34.0 – 42.1)

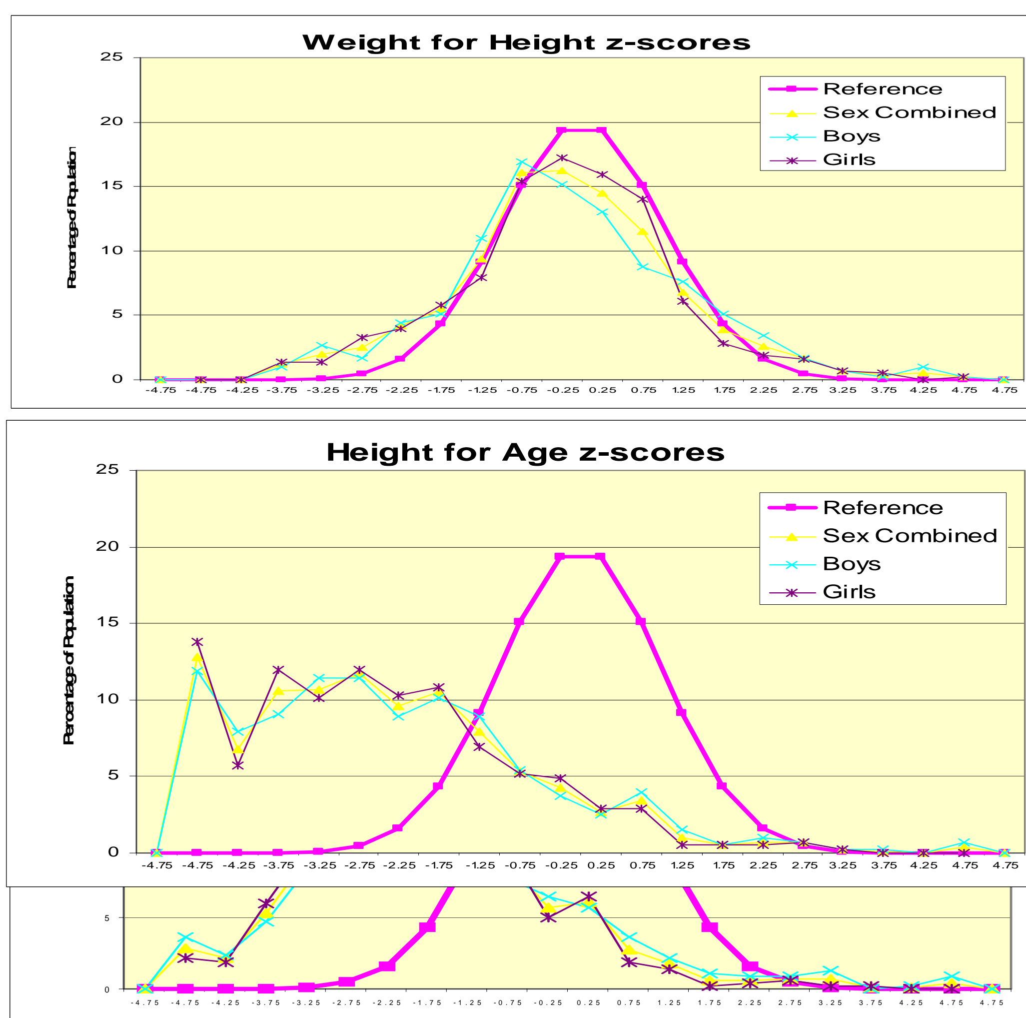
Underweight

Underweight is measured by weight-for-age; a condition that can also act as a composite measure of stunting and wasting. The prevalence of a weight-for-age (WAZ) <-2 SD was 45.4% in the children belonging to Allai community. The prevalence estimates were calculated excluding children with edema.

Table 7: Prevalence of Underweight (6-59 months) with 95% Confidence Interval

Underweight (W/A <-2 SD)	45.4 (41.2 – 49.5)
Severe Underweight (W/A<-3 SD)	14.1 (11.3 – 16.9)

Fig 3: Distribution of malnutrition in children



Distribution of anthropometrics has been compared to the international reference standard (WHO 1995). With relation to acute malnutrition, the sample population is fairly consistent with the reference population, as with reference to underweight, it is skewed to the left by 2.5 z-scores with a fairly even distribution. This indicates that the sample population is more malnourished than the norm. With reference to stunting, the population distribution is

highly skewed to the left. This indicates that the community population is very chronically malnourished.

Malnutrition by Sex

The surveyed children aged 0-24 months include 52.6% male and 47.4% female. The prevalence of malnutrition shows no significant difference by age and sex.

Table 8: Prevalence of malnutrition by sex

Sex	*Weight for Age Z Score*		*Height for Age Z Score*		*Weight and Height for Age Z Score*	
	-2 SD	-3 SD	-2 SD	-3 SD	-2 SD	-3 SD
Male	47.8	18.0	61.9	42.6	10.4	3.9
Female	49.7	17.1	66.1	43.3	9.8	2.6

Anthropometrics of Women

In order to assess the nutritional status of the adult women, the Body Mass Index (BMI) was calculated for those who were not pregnant. The data indicated that the nutritional status of women in Allai was better than those living in Mansehra or Internally Displaced Persons (IDP) camps in NWFP, with 12.1% of Allai women in showing mild, moderate or severe malnutrition as compared to 16.1% of Mansehra women and 15.5% of women living in camps (Health and Nutrition Assessment in Earthquake Affected Areas 2006). These results are not consistent with the PRDA data showing widespread malnutrition in young children. It is likely that these BMI results of adult women reflect cultural constraints that did not allow them to remove clothes before being weighed. The chilly climate at the time of the survey meant that some were wearing heavy garments.

Table 9: Body mass index for adult non-pregnant women

BMI Classification	Percent
Severe Malnutrition (<16)	2.3
Moderate Malnutrition <= 16 to <17	2.4
Mild malnutrition 17<= to <18.5	7.4

Normal/Adequate 18.5+	87.9

*WHO, 1995

Child Nutrition (0-24m)

Breastfeeding / Infant Feeding Practices

The data reveals that 95% of infants were breastfed at some point between 0-24 months. Of the mothers who breastfed, only 42.7% initiated breastfeeding immediately following the birth of their child (within 1 hour), 17.2%, 21.4% and 18.7% of the mothers initiated breastfeeding within eight and 24 hours and after 2 or more days respectively. There was decline in continuation of breastfeeding with age with over one third of mothers stopping breast feeding by six months and over 80% stopping before the child reached 18 months. World Health Organization recommendations are that breastfeeding should commence immediately, infants should be exclusively breastfed until 6 months, and that breastfeeding combined with gradual introduction of complementary foods should continue until the child is 24 months of age.

When mothers asked why they stopped breastfeeding their children, the most common responses were not having enough milk (58.7%) and pregnancy (23.9%). Moreover, 4.3% reported grief or sorrow and 2.2% reported absence of a suitable environment as reasons why they discontinued this practice. 16.2% of mothers answered that semi-solid or other liquids were given to the child before the age of 6 months: usually water, tea, ghutti, or milk, or occasionally semisolid foods.

Table 10: Breastfeeding / Infant Feeding Practices

	Percent
Ever breastfed (0-24mths)	95.0
Children currently breastfed	87.5
Initiation of breastfeeding	
Within 1 hour	42.7
Within 8 hours	17.2
Within 24 hours	21.4
2 or more days after birth	18.7
Breastfeeding duration	
0-5 months	34.1
6 – 11 months	24.4
12 – 17 months	24.4
18+ months	17.1
Reasons for stopping breastfeeding	
Milk not enough	58.7
Child grown up	6.5
Mother pregnant again	23.9
Grief / sorrow / disturbed	4.3
Absence of suitable environment	2.2
Child away/ mother died	4.4
Complementary foods	
Foods other than beast milk given before 6 months	16.2
Water/tea/ghutti	40.0
Fresh milk/formula milk	40.0
Semi-solid food	20.0

These findings of breastfeeding and infant feeding practices are almost the same as those found in the Health and Nutrition Assessment in Earthquake-Affected Areas (2006), except that length of time that mothers breastfeed their children in Allai seems to be shorter than in Mansehra or in the IDP camps.

Access to and Utilization of Health Services

Health Care

The majority of the population surveyed (51%) seeks treatment for ill children from the rural health center, 9.7% from religious / traditional healers and 2.6% said that they consult both. The common practice is to seek advice from the government health facility.

Table 11: Health-seeking behavior

	Percent
Sought advice / treatment for illness of child from RHC	51.0
Religious / traditional healer	9.7
Both	2.6
None	26.5
Not applicable	10.2
N=616	100.00

Mortality

Standardized Monitoring and Assessment of Relief and Transition (SMART) methodology was used to estimate the mortality rates. The mortality rate point estimate in Allai Thesil for the day of earthquake October 8, 2006, was 141 deaths per 10,000/day (95% CI: 90, 192), indicating that 1.4% of the population died on that day. Among those who died on the day of the earthquake, 1.7 % were the children aged 0 – 5 years. The crude mortality rate (CMR), during the recall period after the day of earthquake (October 9, 2005 to April 7, 2006) was 0.183/10,000/day. The average CMR was 0.956/10,000/day.

The main cause of deaths was due to earthquake (77.8%). Of those remaining, 3.7% died due to ARI, 3.7% by suspected Malaria, 7.4% due to earthquake injury related deaths, and 7.4 % were for unknown reasons.

Table 12: Causes of Death in the recall period, Allai, district Batagram

	Percent
ARI	3.7
Suspected Malaria	3.7
Death Due to Earthquake	77.8
Injury related death due to EQ	7.4
Unknown Reasons	7.4
N =34	

Morbidity

In the two weeks prior to the survey 60.5% of the children suffered from one or more illnesses. 32.0% of children had suffered from diarrhea, and 2.4% of them had experienced bloody diarrhea (dysentery). The prevalence of ARI was 23.3% and fever 29.6%. These figures

were low when compared with the other survey conducted in Manshera community and NWFP camps, but again season and humanitarian aid may be factors.

Table 13: Child illnesses during the 2 weeks prior to being surveyed

	Percent
Illnesses	60.5 (546)
Diarrhea	32.0 (176)
Blood in diarrhea (dysentery)	2.4 (13)
Experienced cough with difficultly breathing (ARI)	23.3 (128)
Any fever	29.6 (163)
Other	8.2 (45)
Don't know	4.5 (25)

Illnesses during the Past 2 Weeks: Women

During two weeks prior to the survey almost half of the women survey suffered from either diarrhea or an acute respiratory infection (23.5 and 25.2% respectively).

Women's Health

Fertility and Child Spacing

Fertility is very high in Pakistan and according to the National Health Survey (NHS) 1994 women with less education tend to give birth to a greater number of children. The present data indicates that 15.1% were pregnant on the day of survey, whereas 2.2% women were not sure about their pregnancy status and 82.7% confirmed that they were not pregnant. Among the surveyed women 3.6% had not ever been pregnant and on Total Fertility Rate (TFR) was 6.02% which was higher then the National figures (PIHS 2001-02) 4.4% and 3.9% (PDS 2003). However these figures were in line with those collected in the National Nutritional Survey conducted during the same years. Most women in Pakistan lack ready access to a selection of fertility control methods and basic maternity care. Among the women surveyed 21.8% knew about family planning, 8.5% had ever considered using a family planning method and only 6.9% actually had used modern birth control. Only 6% of women reported ever having had a problem with infertility.

Antenatal Care (ANC)

The findings indicate that among the women surveyed only 18.4% had ever received ANC, indicating poor coverage. Among those who received antenatal care, 88.3% went to rural health center / basic health unit and 79.1% had been attended to by a doctor or a nurse. Since 1990 vaccination of pregnant women has become a part of national immunization campaigns, to prevent tetanus infections. Nevertheless, only 14.9% of the women in Allai who received ANC during their recent pregnancy received a tetanus toxoid vaccination. This indicates that the quality of ANC in Allai is not up to national standards.

Table 14: Antenatal care (ANC) and tetanus toxoid (TT) vaccination of pregnant women

ANC	Percent
Received ANC	18.4
No	81.6
Place of ANC	
RHC/ BHU	88.4
Home	6.2
Other	5.5

ANC Provider	
Doctor/ Nurse	79.1
LHV/ FMT	11.2
TBA / LHW	8.8
Other	1.5
ANC during Recent Pregnancy	
Never	64.1
1-2 times	22.5
3-4 times	9.2
4+	4.2
TT Injection during ANC	
Yes	14.9

Place of Delivery / Assistance

Among mothers only 20.5% women had ever delivered a baby in a health facility and out of those who delivered in the health facility 71.1% were attended by either a doctor or a nurse. 16.1% and 9.4% of the deliveries were supported by Lady Health Visitors / Female Medical Technicians. The NHS-1994 indicates that majority of rural mothers use largely unskilled and untrained Traditional Birth Attendants to assist births.

Table 15: Institutional deliveries

	Percent
Ever delivered in a health facility	
Yes	20.5
If yes: Place of delivery	
District Headquarters Hospital	50.3
Rural Health Clinic	38.1
Basic Health Unit	8.2
Other	2.0
Private hospital	1.4
Times delivered in a health facility	
1-2	83.0
3-4	12.6
4-5	2.5
5+	1.2
Ever assisted by skilled birth attendant during delivery	
Yes	23.2
No	76.8

Immunizations

Measles Coverage / BCG Scars*:*

The measles immunization coverage was 45.8% in the survey area. If measles vaccination by both mothers recall and by documentation is considered, the level of immunization is less than the 70-80% coverage in Manshera communities and NWFP camps – although those were well above the national average of 57%. BCG scars were observed in 24.4% of the children indicating low coverage for tuberculosis prevention in the survey area.

Table 16: Measles vaccination and BCG scar

Measles Vaccination	Percent
Yes	45.85 (438)
a. Card	29.8 (285)
b. Recall	16.0 (153)
No	52.7 (504)
Don't know	1.6 (15)
N=957	100.00
BCG Scar	
Yes	24.4 (229)
No	75.5 (708)
N=932	100.00

Vitamin A Supplementation

Post-earthquake vitamin A supplementation coverage in the survey area was 71.3%, much higher than the 50-60% coverage in Manshera community and NWFP camps (Health and Nutrition Assessment in Earthquake Affected Areas of Pakistan -2006). This data is based on mother's recall, and the question may not have been accurately understood by the informants and/or may reflect emergency interventions carried out by UNICEF and others after the disaster.

Table 17: Child vitamin A supplementation - post earthquake

Received Vitamin A capsule (according to mother's recall)	Percent
Yes	71.3 (685)
No	23.8 (229)
Don't know	4.9 (47)
N=961	100.00

Discussion

Almost all the household surveyed eat staple i.e. wheat/rice every day and one source of protein consumed is usually of vegetable origin. Consumption of milk / milk products, fresh vegetables, or fruits is limited. Majority of the households consumed 2-3 food items per day. These findings are similar with the earlier findings of 2006 survey conducted by UNICEF/WFP/WHO in collaboration with Ministry of Health in earthquake affected areas of Manshera & Balakot in NWFP and Muzaffarabad and Bagh in AJ&K.

Measles coverage is below the national figures of 57%, where as Vitamin- A supplementation coverage in this area is good, which is above 70%. Utilization of Iodized salt in this population at the household level is > 22% and is higher when compared with the national figures of 17%. This high coverage could be attributed to the iodized salt distributed by World Food Program (WFP) after the earthquake.

The prevalence of acute malnutrition (12.5%) in the children of Allai would be categorized as serious. These figures are line with the NNS 2001-02 estimated as 13.1%. According to XXXX the accepted level of acute severe malnutrition for developing countries is 2.5%. More than five fold rate of acute malnutrition compared to the accepted standard rate for developing countries in Allai indicates a serious nutritional problem that needs urgent intervention.

The prevalence of chronic malnutrition i.e. stunting would also be considered critical as this condition develops over a long period of time. The prevalence of >60% would be considered to be "very high" as the figures for Health and Nutrition Assessment in Earthquake-Affected Areas (2006) and NNS 2001-02 reflect 38.0% and 36.2% stunting in children respectively.

The prevalence of underweight (45.4%) is "very high" and indicates that the Allai population had long term nutritional problems.

Total Fertility Rates are also high (> 6%) in the women of Allai valley when compared with the national figures of 4.4% and 3.9% respectively.

The prevalence of mortality was comparable with the figures of Mansehra (168/10,000/day CI. 95%, 133 - 211) as indicated in the Health and Nutrition Survey in earthquake affected areas of Pakistan, 2006.

Diarrhea and other diseases are one of the major causes of malnutrition in children. Diarrhea is associated with unsafe drinking water and poor sanitation and poor health is exacerbated by poverty and lack of education. According to a 1993 World Bank report, in developing countries approximately 3 million childhood deaths occur annually due to diarrhea. Diarrhea and acute respiratory infections (ARI) were less prevalent, however, in Allai Valley when compared with the figures of the earlier Health and Nutrition Assessment in Earthquake-Affected Areas of Pakistan. This may reflect seasonal variation – improvements for spring compared to winter would be expected – or improved health status due to relief efforts.

Treatment outside the home for ill children was high as more than 50 % of the population received treatment through Rural Health Centre (RHC) These figures are due to improved access to services being provided post earthquake to the communities of Allai.

Breast feeding practices are high as 95% of infants were breastfeed as some point before 24 moths of age. There was a gradual decline of breast feeding with age and the reasons for stooping breast feeding were also similar when compared with the national figures NNS 2001-02.

Conclusion

The malnutrition indicators based on z-score estimates shows global acute malnutrition (GAM) is 12.5% and severe acute malnutrition (SAM) 5.4% in children under 5. The high prevalence of stunted (>60%) and underweight children (>45%) clearly indicates that there is high level of malnutrition among this age group. This malnutrition is coupled with disease prevalence (>60%) is undoubtedly contributing to mortality. Food recall data and salt testing indicate that diets are lacking in micronutrients, and often protein. Moreover, lack of education in women and their disadvantaged social position in the remote areas contribute to the continuing poor health status, high fertility and unending cycles of poverty. The present situation, characterized by food insecurity, poor hygiene and sanitation and lack of accessible health services, are contributing to poor health and nutritional status of women and children in the Allai Valley.

Recommendations

1. The high prevalence of Global Acute Malnutrition (GAM) 12.5% and Severe Acute Malnutrition (SAM) 5.4% with the context of multiple aggravating factors requires an urgent action for a community based nutrition intervention to ensure access and high level coverage.

2. The prevalence of high level of stunting of more than 60% and underweight more than 44% in children under five referring to the poor maternal and infancy malnutrition calls for:

   a- Targeted supplementary feeding for children and pregnant / lactating women.
   b- Multiple micronutrient supplementations both for under-five children, pregnant women and lactating mothers.
   c- Improve infant feeding and care practices, including improved breastfeeding.

3. Due to high levels of several types of malnutrition together with the high food insecurity, should lead to the establishment of a nutrition surveillance through health facilities to monitor the situation and act as an early warning system and referral mechanism for malnourished children.

4. Household food insecurity should be ensured through the establishing of food for work programs and agricultural extension activities.

5. Access to quality health services should be ensured through strengthening existing services and facilities and providing ones.

6. Health and Nutrition education programs should be implemented to improve personal hygiene and household sanitation practices.

7. Access to routine immunizations for both mothers and children should be strengthened through better outreach to communities and the establishment of more functioning health facilities.

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ANNEX TWO

HOUSEHOLD SURVEY PROTOCOL
PARTNERSHIP FOR RECOVERY AND DEVELOPMENT
IN THE ALLAI VALLEY (PRDA)
SPRING 2006

Rationale for the survey

Prior to the devastating October 2005 earthquake, conditions in Batagram District, which includes Allai Tehsil (sub-district), were among the poorest in Pakistan's Northwest Frontier Province (NWFP) and ranked in the bottom 10% nationwide. Social sector indicators were also extremely low, highlighting the enormous challenge not only to rehabilitate what was lost in the earthquake, but to bring real and lasting change to the lives of children and their families. The purpose of this survey was to gather baseline data and assess the needs of the population of Allai Tehsil for interagency rehabilitation programs. Pre-earthquake data and emergency rapid assessments all indicated that acute malnutrition had persisted as a chronic health problem among children under five years of age in the area – a situation that had been expected to deteriorate due to the damage or destruction to stock grain, disconnection with markets, and increased unemployment and other economic stress leading to reduced food consumption, poor general health conditions, and increased morbidity with lack of access to health services due to damage of water/health/sanitation infrastructure. Accurate figures of overall and under 5 mortality, malnutrition prevalence, relevant health information and baseline indicators for food security, shelter, livelihoods, education, and water and sanitation have helped in designing appropriate interventions and provided baseline information for program monitoring and evaluation.

Objectives of the survey

The main purpose of the survey was to inform a multi-sectoral program design for the population in Allai Tehsil and to collect baseline data for later monitoring and evaluation, covering multiple sectors. Qualitative research was also conducted to further flesh out and triangulates the survey results, together with use of secondary sources, such as rapid assessments and progress reports by various agencies.

- Mortality
  - To determine the crude mortality and under 5 mortality rates on the day of earthquake, and in the time period subsequent to the earthquake.

- Nutritional status
  - To determine the prevalence of global and severe acute malnutrition among children aged 6-59 months.
  - To determine the prevalence of stunting and underweight among children aged 6-59 months.
  - To determine the nutritional status of the women of reproductive age, including pregnant and lactating mothers of children under 6 months of age.

- Morbidity
  - To determine the prevalence of diarrhea including dysentery, fever and acute respiratory infection (ARI) in the two weeks prior to the survey, among children aged 6-59 months.

- Water and Sanitation
  - To determine local sources of drinking water and household treatment practices
  - To determine self-reported hygiene and sanitary practices among households

- Health

- To estimate the proportion of households using iodized salt
    - To determine the proportion of children aged 6-59 months vaccinated against measles
    - To determine the proportion of children aged 6-59 months who have received vitamin A supplementation since the earthquake
    - To determine the proportion of women seeking antenatal health care
    - To determine the proportion of women receiving TT (tetanus toxoid) vaccinations at antenatal care appointments
    - To determine the proportion of women delivering in health care facilities with trained assistance
    - To determine the proportion of knowledge about and use of Family Planning methods
    - To determine the proportion of women of child-bearing age with diarrhea or ARI (acute respiratory infection) in the last two weeks

- Livelihoods
    - To ascertain main sources of income
    - To identify landholding patterns
    - To identify reasons for indebtedness
    - To assess liquidation of assets due to earthquake

- Food security
    - To determine the coverage of food aid in the six months following the earthquake in the survey areas.
    - To understand dietary patterns and sources of food in the survey area

- Infant and Young Child Feeding
    - To gain a better understanding of infant and young child feeding practices, including the average duration and exclusivity of breastfeeding for children 0-24 months.

- Education
    - To ascertain the proportion of girls and boys under 5-18 attending school
    - To determine why children were *not* attending school

- Shelter
    - To ascertain nature and type of housing, including earthquake damage and displacement.

Material and Methods

Sampling population:

The survey covered all eight union councils of Allai sub-district. The assessment targeted households, children 6-59 months, and pregnant and lactating women. SC used a list of 134 villages with numbers of households in each that was developed in 2002 by a Pakistani NGO (and PRR member), Sungi, as a basis for random sampling. This list was the most comprehensive available with household population data, although it does not capture recent population movement and it is likely that some especially tiny and remote villages were omitted. For the purposes of this survey a "cluster" was defined as a village; however there was a good deal of variability in size and structure of villages, which is discussed in further detail below. It should be noted that the population of Allai during the survey period (late March and early April) was still mobile as temporary winter IDP camps closed, although most of those displaced had returned to their communities of origin for spring planting by the time of the survey. The exact population is not known; estimates vary considerably from 120,000 on the low end to 190,000 at the high. The last census (1998) put the population of Allai Tehsil at 134,955 with a negative growth rate of -0.61%.

It should be understood that Allai Tehsil is one of the most remote and isolated pockets of Pakistan, and quite possibly one of the most difficult contexts in the entire world to conduct a survey (much less relief operations!) in. It is high in the Himalayan Mountains, and what little physical infrastructure there was had been severely damaged by the earthquake. Households and entire villages were perched precariously on very steep mountainsides. Villages were often very distant from roads and survey teams spent a great deal of time hiking in sometimes terrible weather, forging streams, creeping across precarious handmade bridges, and even crossing mountain valleys in rickety local "flying fox" cable cars – with only oranges and biscuits for lunch. Often the surveyors' "hikes" more closely resembled climbs up and down mountains; one village was four hours straight up a precarious track ravaged by landslides. The survey team lived in very basic conditions and slept in tents for the month of training and data collection, with temperatures sometimes plunging below freezing at night and amidst pouring spring rains. We are very proud to say that we never skipped or replaced a remote or isolated community because of inaccessible terrain – the survey teams proved to be intrepid trekkers.

Cultural norms in Allai Tehsil are extremely conservative and closed. Outsiders have never been welcome in the Allai Valley, and only the earthquake opened up external access. Women strictly abide by *purdah*, with highly restricted movement, heavy veiling, and prohibitions against any interaction with unrelated men. Employment outside the home (except a very few teachers and health workers) is unheard of. This survey with its large contingent of female staff asking questions from local women, therefore, represented quite a novelty to say the least -- and not all of it was welcomed by any means. In the most serious incident, one villager was verbally abusive to a survey team's female enumerators and threatened violence to the entire staff because of their "immorality." The issue of measuring adult women proved especially thorny and while consent was always taken, follow-up visits to villages by PRR staff indicated that this triggered suspicion and resentment. Nevertheless, overall the survey implementation went smoothly and the communities were friendly and cooperative, and many quite delighted to be visited. Sometimes women from all over the village would appear and asking to be measured!

For the HH survey the population was:

1. Adult males and females for general and demographic data
2. Children 6-59 months for anthropometry, edema, morbidity and vaccination coverage
3. Mothers of children 0-24 months for feeding practices
4. Women of childbearing age (15-45) for reproductive health, food and nutrition, and anthropometric measurements.

Sample size calculation:
International health and nutritional assessment guidelines accept the 30x30 cluster method, with 900 households total visited.

The sample size for young children <24 months, pregnant women, and lactating mothers of children <6 months was smaller as not all households had young children or a pregnant or lactating woman. However, the sample size is nevertheless large enough to obtain statistically significant results.

For anthropometric measurements, all children 6-59 months present in the household were selected, until a minimum of 30 children total in each cluster were measured.

Survey sampling:
A multiple-stage cluster survey using the standard EPI cluster method was applied. Clusters were randomly selected using the probability proportional to population size (PPS) method.

If a village was composed of separate hamlets, one hamlet was randomly chosen by ballot, also proportionate to estimated size (although in some cases the two pairs of enumerators simply went to separate hamlets). As data for numbers of households per hamlet was not available, relative proportions of different hamlets were determined by consulting with village leaders.

Two separate male/female teams in each village went in different trajectories, according to the directions identified in two pen spins, always bearing to the right. "Villages" were sometimes compact, sometimes individual households were completely spread out (including across great distances and steep mountainsides), sometimes divided into distinct hamlets, other times small groupings of a few of habitations scattered here and there over a large expanse. It was not unusual for survey teams to hike 20 or 30 minutes between individual households, or groupings of households. Many villages were several hours' hike from a road in extremely rugged terrain.

If a cluster had to be excluded it was replaced with the next-closest village. Also, if not enough children and / or households was available in one cluster, the survey team continued to gather data in the next closest village with the same method. In two cases village elders refused to permit access to women, and in a third the leaders of the village's two hamlets each insisted we *only* go to *their* hamlet and absolutely not enter the other one! These three clusters were replaced altogether. In two other cases, surveyors were allowed to work for the first day but unable to continue after that, so the teams finished the 30 households in the closest cooperative village.[15]

A next stage random sampling for households was applied. A household was defined as people who sleep under the same roof and prepare food in the same kitchen. Members of a household were not necessarily related to one another. If there were several structures within the same compound but each had their own kitchen they were regarded as separate households even if they were related to each other or shared a common head of household (e.g. a man with two wives, or several adult brothers living with their families in their father's household); however in this case only one of the two households was interviewed even if the other house was to the right of the first. A polygamous or extended family living and eating together and sharing one kitchen was considered to be one household. Families who were displaced by the earthquake and were temporarily staying with another family were also considered to be separate households, irrespective of their dependence on the host family or sharing of their kitchen.

Children between 6 and 59 months living in the household were selected for anthropometric measurements. Age was assessed by recall of the mother (sometimes not very accurately). Age of children over 5 was recorded in the general household demographic data. It should be noted that most of these respondents' ages were estimates.

The questionnaire was divided into "head of household" (however that was defined by the family) and "women's" sections. If the head of household was not available (for example, working away from the village), the questions were directed to the "acting head of household," which could be male or female, depending on circumstances. The "women's" questionnaire was directed to adult married females. If there was more than one such woman in the household, typically the dominant woman in the household answered sections 5 and 6 (wat / san and health / nutrition)[16], and then a child under 24 months was selected at random and his / her mother interviewed for sections 7 and 8 (reproductive health and child care / feeding practices). If there were no children under 24 months in the household, then a married woman of reproductive age was selected at random to interview for section 8 only. In the event that there were no adult married women present in the household, for example if the mother died in the earthquake or was away visiting relatives, then the food / nutrition sections of the questionnaire were directed toward an adult unmarried woman (such as a teenage daughter), or if none were present then an adult male answered selected sections: water/sanitation (section 5), food sources and consumption (section 6), and children's anthropometry/measles vaccination/morbidity (section 9). No questions regarding

[15] In one village the team could not continue due to threats of violence from a villager objecting to the use of female enumerators; in the other because the local *mullah* became concerned that the bathroom scales used to measure women were in fact cameras photographing them in violation of purdah!
[16] It proved necessary to divide the women's questionnaire in this way for cultural reasons.

reproductive health or history were directed towards the latter two groups.[17] "Adult" was defined as 15 or older.

In each cluster, village and religious leaders were first contacted and introduced to the survey to obtain permission from them for the group to proceed. When the survey team arrived on a later day, each greeted the authorities and then proceeded to the centre of the village (or hamlet) to spin a pen.[18] Surveyors face the direction of the pen and count the number of houses / tents that could be seen within the line the pen is pointed in. A random number was selected within that range to identify the first household to be surveyed.[19] Subsequent households were selected by the surveyors going to the next inhabited house / tent towards the right. All selected households will be interviewed whether or not children of 6-59 months were present. A minimum of 30 households and 30 children age 6-59 months were included in every cluster, except one where security concerns prevented finishing all 30 children. Children in the household age 6-59 months were measured until a total number of 30 were completed; after that the questionnaire continued to be administered but no more children in that cluster were required to be measured.[20] The questionnaires of households that refused to participate, were absent, or only answered some of the questions were counted among the 30; responses were simply recorded as missing – although it was rare that a household did not have someone present to interview. However, houses that were uninhabitable because of the earthquake were simply skipped and replaced with inhabited ones. Nearly everyone was living in tents or other temporary permanent structures.

All selected households were interviewed, whether or not they contained a child of 6–59 months of age. If the household members were not present during the survey, the team revisited the household later to interview the missing household. Teams attempted to re-visit a skipped households three times although security or logistical constraints did not always make that feasible. If contact could not be obtained on subsequent visits, these households' responses were marked as missing in the questionnaire. In case the members of a household had departed permanently or were not expected to return before the survey team had to leave the village, that particular household was skipped and not replaced.

Survey teams:

Fieldwork was conducted by 5 survey teams, each composed of the following 7 persons minimum:

- 1 team leader
- 2 male enumerators
- 2 female enumerators
- 1 community facilitator from the area
- 1 driver

Due to uneven numbers of personnel, some teams were supported by assistant enumerators or anthropometric measurers. Teams largely stayed the same although some re-shuffling was required, for example to cover for ill members. A number of male surveyors were also transferred to the qualitative research team.

The PRR inter-agency survey was designed and managed and by team from Save the Children: Earthquake Rehabilitation Consultant (Colleen McGinn), Pakistan Earthquake Response Team

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[17] If an unmarried adult woman is answering the questionnaire in the absence of her mother or other adult married female, "number of pregnancies" was automatically recorded as "zero" and no reproductive history questions are asked. Local culture is extremely conservative about sexual relations outside of marriage and inquiring would be taken as extreme offense and dishonor and represent a security threat to the team.

[18] As many villages had no defined center or even borders, "center" was defined by community leaders.

[19] It is recognized that standard methodology would be to count houses in that direction until the end of the village and then randomly select; however this was simply not possible given the terrain, distances, unnavigable rivers, lack of defined borders to determine whether outer houses are "in" or "out" of the village, etc.

[20] In most cases, however, survey teams continued to measure children, particularly when the two enumerator pairs on each team were in different parts of the village and thus unable to keep track of the total of how many children in the cluster had been measured.

Leader (Rod Snider, replaced by Raheel Chaudhary), Survey Operations Manager (Ajmal Khan), and Program Support Unit Advisor (Jessie Bay). Saleem Khan served as survey logistician, lead community mobilizer, and all-around miracle worker. Technical and training support was conducted by Islamabad-based specialists: Dr. Abdul Bari (who also served as chief technical advisor for methodology), Amama Ambreen, and Dr Riffat Anis, a nutritionist consultant from Pakistan's National Institute of Health. In addition, two qualified members of the survey team were selected as overall survey supervisors, reporting to the survey management team. During survey design stages considerable assistance was also gained from Consultant Jon Mitchell and SC's Global Nutrition Advisor, Hedwig Deconinck.

Training of survey teams:
The four-and-half-day training covered survey objectives, sampling methods, anthropometric measurements, interviewing techniques, role play, and administration of the survey tools. A pilot survey was conducted in order to pretest the survey tools and methods, after which adjustments were made accordingly. The questionnaire was translated into and recorded in Urdu but administered in the local tongue, Pashto, which in Pakistan is not generally a written language.

Data collection:

The data collected covered a range of topics:

- Household demographics
- Health, nutrition, and food security
- Water and sanitation
- Child care and feeding practices
- Livelihoods, agriculture, and environment
- Education
- Shelter

Routine field-editing of all questionnaires was conducted by the team leaders and checked again by survey supervisors. Final review and editing of the completed questionnaires was conducted by the chief technical advisor in Islamabad together with other senior staff. Systematic and consistency checks of the database were run to detect and correct data entry errors. Double-entry of data was conducted.

Each salter weighing scale and height board was numbered, and calibrated prior to data collection.

Data cleaning and systematic checks were made to help reduce transcription errors. Extreme and incorrect values were removed and marked as missing. Data cleaning was carried out in SPSS by sorting records to filter out extreme values and SQL queries to check logical errors. Data analysis and entry was done in Epi Info 6.04b and SPSS. Mortality data was analyzed in a pre-prepared Excel sheet.

Anthropometry:
Anthropometric indicators of height-for-age, weight-for-age, weight-for-height were determined for the children using Epi Info (Epi Info 6.04d). The following extreme values in anthropometry were converted to missing values:

- Weight-for-Height (WFH) <-4.0 or >5.0
- Weight-for-Age (WFA) <-5.0 or >5.0
- Height-for-age (HFA) <-5.0 or >3.0

Measuring Protocol

Weight: Salter scale to the nearest 100 grams for children; bathroom scales for Women

Height: Portable height boards, measuring length/height of the child to the nearest cm for children; measuring tape for women

MUAC: Mid upper arm circumference was measured to the nearest mm with a MUAC tape.

Weight in kg:
The weight of the children was measured using salter scales to the nearest hundred grams; women were weighed on bathroom scales to the nearest kg. Heavy clothing such as jumpers, shoes, and jewelry was removed. For cultural and security reasons, however, it was necessary for everyone to be weighed while wearing their basic clothes (shalwar kameez and, for women, chador).

Height, in cm, measured to the nearest:
Portable height boards were used for measuring the length of children under 85 cm of height (lying position) and the height of children of 85 cm or above (standing position). Children's height was measured to the nearest decimal point.

Women were measured by standing against a wall and their height marked with a clipboard and pencil. The distance from the ground to the pencil mark was measured with standard measuring tape to the nearest whole centimeter.

Presence of bilateral pitting edema:
The presence of bilateral pitting edema was assessed for all children, by applying pressure on the dorsal side of both feet for 3 seconds. If the pit remained after removing the pressure, the outcome was considered to be positive.

Indicators

Mortality:
The retrospective current household census methodology was used to estimate mortality. Information was collected on all household members present on the date of the interview. Persons who were present members in the HH were registered, indicating who was born or in-migrated since the start date of the recall (earthquake day). Persons who were present in the HH at the start date but out-migrated or died were also registered. Age of all was registered, although in most cases were estimates. Causes of death, based on self-diagnosis, were marked.

Table: Emergency threshold of Mortality Rates according to international guidelines (WHO)

Total Population CMR:
- *Emergency* *above 1/10 000 persons/day*

Children under five years of age U5MR
- *Emergency* *above 2/10 000 children/day*

Age, in months:
For all children under 59 months without a birth certificate or vaccination card, the age was assessed by the mother.

MUAC: Mid-Upper Arm Circumference (MUAC) was measured for all children 6-59 months.

MUAC, combined with the presence of edema, is an indicator used to measure undernutrition. However, there are no internationally agreed cut-offs for MUAC. MUAC is a good predictor of mortality as research has shown that MUAC is closely correlated with mortality. For the purposes of this research, the authors have used 2005 Sphere standards for MUAC.

Table: MUAC as risk of death (Sphere Standards 2005)

Risk of death	Indicator
Moderate Risk	MUAC 11.0 to <12.5 cm (110 to <125 mm)
Severe Risk	MUAC < 11.0 cm (110mm)

WHM:
Weight-for-height as % of the median (WHM) is calculated using EPI NUT (international reference population tables (NCHS/WHO/CDC)).

WHZ:
Weight-for-height z-scores (WHZ) were calculated in EPI NUT. WHZ is a more statistical correct indicator for malnutrition as besides the actual and the median measurement it takes into account the standard deviation of the specific measurement, i.e. the variation in standard deviation. Hence, the number of children classified as malnourished is higher than if the median is used. The reason for this is that a greater number of taller children will be defined as malnourished because at greater heights, the variation of weight is greater.

Table: Indicators of Acute Malnutrition as Weight for Height Z-score (WHZ) and % of the Median (WHM) of the reference population

	Weight for Height Z-score	Weight for Height % of the Median
Global Acute Malnutrition	< -2 SD and/or edema	< 80% and/or edema
Moderate Acute Malnutrition	< -2 SD and ≥ -3 SD	< 80% and ≥ 70%
Severe Acute Malnutrition	< -3 SD and/or edema	< 70% and/or edema

Anthropometry of Women
Weights and heights were measured in women. Body Mass Index (BMI) was calculated as weight (kg) divided by height (m) squared (Wt kg/ [Ht m]^2). The following values were considered extreme and changed to missing values:
Weight: <12.9 kg >140kg
Height: <110cm >200cm
BMI: <3.2 >55

The interpretation of BMI is presented below:

Table: Interpretation of BMI for adult non-pregnant women (WHO 1995)

BMI	*Interpretation*
<16	*Severe Malnutrition*
<=16- <17	*Moderate Malnutrition*
>=17 to <18.5	Mild Malnutrition
18.5+	Normal/Adequate

Table: Classification of severity of Acute Malnutrition Rates

Severity of nutritional situation	*Prevalence of wasting (<-2 z-scores and edema) (GAM)*

Acceptable	*<5%*
Poor	*5-9%*
Serious	*10-14%*
Critical	*15%*

Table: Relative Prevalence of Low Anthropometric Values (WHO 1995, using <-2 SD)

Index	Low	Medium	High	Very High
Low WFH	<5.0%	5.0-9.9%	10.0-14.9%	15.0%
Low HFA	<20.0%	20.0-29.9%	30.0-39.9%	40.0%
Low WFA	<10.0%	10.0-19.9%	20.0-29.9%	30.0%

Morbidity

The mother of the child was asked for episodes of illness in the last 2 weeks prior to the survey based on clinical definitions and self-diagnosis:

- diarrhea
- bloody diarrhea
- fever with difficult/rapid breathing/ARI
- fever of unknown origin
- other (specified)

The prevalence of illness was calculated as follows:

$$\text{Prevalence of illness} = \frac{\text{Number of children reported illness}}{\text{Number of children surveyed}} \times 100$$

If the child had more than one episode of illness, then the causes of illness were recorded accordingly. The number of episodes of illness may thus be higher than the number of children that have been reported ill.

Measles Vaccination Coverage

For children above 9 months, measles vaccination status and the source of information (i.e. health card or mothers recollection) were recorded. Measles vaccination coverage was calculated in two ways: either as coverage verified by the vaccination card or as stated by mother. This will yield two percentages; probably the true coverage to falls between the two. The international recommendation for measles vaccination coverage is 90%, as this ensures population immunity.

Measles vaccination coverage by vaccination card:

$$\frac{\text{Number of children with vaccination recorded on health card}}{\text{Number of children eligible for vaccination: 9-59 months}} \times 100$$

Measles vaccination coverage (mother's statement or vaccination card):

$$\frac{\text{Number of children with vaccination recorded on health card or mother stated}}{\text{Number of children eligible for vaccination: 9-59 months}} \times 100$$

Vitamin A Supplement Coverage

For Children 6 to 59 months of age, the mothers were asked if the child ever had received a Vitamin A supplement.

Vitamin A supplementation coverage (mother's statement):

$$\frac{\text{Number of children received Vitamin A supplement as mother stated}}{\text{Number of children eligible for vaccination: 6-59 months}} \times 100$$

BCG Coverage

For children 6 to 59 months of age, the left lower arm was checked if a BCG scar was visible.

BCG coverage (BCG scar)

$$\frac{\text{Number of children with BCG scar}}{\text{Number of children eligible for vaccination: 6-59 months}} \times 100$$

Addendum 1. Survey implementation schedule:

Activity	When	Where	Who
Protocol and draft questionnaires development with stakeholders	1 – 10 March	Islamabad	Survey Management Team
Consent of MOH and community	2nd week of March	Allai Valley	SC Community Mobilizers
Plan and organize equipment, transport, training venue and staff	1-14 March	Islamabad, Allai	Ajmal
Training of team leaders, household interviewers and anthropometric measurers	15 - 22 March	Allai	Dr Bari and Survey Management and Technical Teams
Pilot test and finalize questionnaire	17 March	Allai	Ibid (part of training)
Data collection	22 March-7 April	Allai	Survey Team
Data cleaning	23 March – 26 April	Allai and Islamabad	Survey Team Leaders, Supervisors
Data entry	17 – 28 April	Islamabad	Eyecon
Analysis	24 April – 5 May	Islamabad	Technical and Management Teams
Presentation of final report	17 May	Islamabad	Management and Technical Teams

Addendum 2. Definition of variables

Acute malnutrition: reflects recent weight loss and is defined as a weight-for-height less than -2 z -scores or <80% weight-for-height median (by NCHS standards) and / or edema for children 6-59 months. This is known as global acute malnutrition.

ARI: cough, difficult, or rapid breathing with or without fever

Cluster sampling: is a sampling technique that organizes a population into smaller geographical areas for which the population size is estimated. Clusters are randomly selected from these geographical units according to their proportional population size. Individuals are then selected with in each cluster.

Complementary feeding: foods given to young children in addition to breast milk or formula milk

Confidence interval: an interval that has a specified probability of covering the true population value of a variable or condition.

Cross-sectional nutrition survey: a one-off assessment of the nutritional situation of a population, a snapshot in time.

Diarrhea: three or more loose or watery stools per day.

Distress assets sale: selling of valuable belongings to meet the misery expenditure
Dysentery: three or more loose or watery stools with blood in them per day

Epi Info Software: a microcomputer program produced by the CDC and WHO, for handling epidemiological data in questionnaire format, and for organizing study designs and results into text and tables that may form part of written reports.

Feeding practices: mode of feeding infants and young children

Global acute malnutrition (GAM): a child who has weight-for-height <-2 z-scores or <80 % weight-for-height median and/or edema is acutely malnourished.

Household: a group of people who routinely eat out of same pot and live on the same compound (or physical location). It is possible that they may live in different structures.

Loan: money borrowed to meet the expenditure, which has to be returned in due course of time.

Malnutrition: adequate nutrition is the means, by which people thrive, maintain growth, resist and recover from diseases, and perform their daily tasks. When nutrition is inadequate, people become malnourished.

Morbidity: a condition resulting from or pertaining to disease; illness.

Mortality rate: death rate; frequency of numbers of death in proportion to a population in a given period of time.

NCHS reference: growth percentiles developed by the National Center for Health Statistics in the USA, that provides standards for weight-for-age, weight-for-height

Edema: Retention of water in the body due to severe macro-micronutrient deficiency

Severe acute malnutrition (SAM): a child who has weight-for-height <-3 z-scores or <70 % weight-for-height median and/or edema is acutely malnourished.

Standard deviation: a measure of variability, whose size indicates the dispersion of a distribution.

Stunting: reflects height deficit that develops over a long period of time and is defined as <-3 z-scores usually in children aged 6-59 months

Underweight: a condition measured by weight-for-age; a condition that can also act as a composite measure of stunting and wasting.

Wasting: a condition results from loss of both body tissue and fat in children 6-59 months of age and is defined as weight-for-height <-2 z-scores or <80 percent weight-for-height median by NCHS standards.

Weight-for-age: a composite index of weight in relation to age.

Weight-for-height: an index of current nutrition status also referred to as wasting

Z-scores: a statistical measure of the distance, in units of standard deviations, of a value from the mean.

ANNEX THREE: SURVEY FORM (ENGLISH)

ALLAI TEHSIL
Needs Assessment, 2006
- Questionnaire for Head of Household -

COMPLETE BEFORE THE INTERVIEW		
Date :	|__|__| / |__|__| / 2006 Day Month	TEAM Cluster Household
Interviewer Name :		
Team Leader Name:		
Name of Respondent:		
Language Spoken in Household:		Union Council: ___________________

Consent: We are conducting a survey on the health, nutrition and food security of your family. I would like to ask you some questions about your family and we will also weigh and measure your children who are younger than 5 years of age. The survey usually takes about one hour to complete. Any information that you provide will be kept strictly confidential and will not be shown to other people. This is voluntary and you can choose not to answer any or all of the questions if you want. However, we hope that you will participate since your views are important. Do you have any questions? May I begin?

YES______ NO______

SECTION 1 – DEMOGRAPHY						
A household is defined as a group of people currently living and <u>eating</u> together and living in the same compound (or physical location. It is possible that they may live in different structures)						
1.1	What is the sex of the head of household?	1	Male		2	Femal
1.2	What is the marital status of the head of household?	1	Marri	1.	2.	
		2	Divorced			
	Circle only one option	3	Living apart (Separated)			
		4	Widow or widower			
		5	Never married			
1.3	How many people currently live in your household?	|___|___|				

1.4 Household Census:

A. List all persons that are **now** present members in the HH, give age and sex and indicate (with x) if present, born or in-migrated since start date (date of the earthquake, 8 Oct 2005).

B. Name all persons that were present in the HH at the start date but **not anymore now**, give age and sex and indicate (with x) if since then, out-migrated or died. If died, please give cause of death.

A								
#	Name	Age (years for those >5yrs, months for those <5yr)	Sex (F/M) 1=M 2=F	Present in HH since start date 1=Yes 2=No	Born since start date 1=Yes 2=No	In-migrated since start date 1=Yes 2=No	If member is a child 5-18 yrs, is currently attending school? 1=GPS/GGPS 2=GMS 3=GHS 4=Madrassa 5=Not	If not, attending school, why not? 1=Child is sick 2=Child is frightened 3=There is no school 4=Child does not normally attend school 5=School is too far away 6=Child must work either at home or for

							Currently attending school 6=Private School 7=Other (specify)	money, so unable to attend school 7=Other (specify)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

B	Name all persons that were present in the HH at the start date but **not anymore now**, give age and sex and indicate (with x) if since then, out-migrated or died. If died, please give cause of death. Indicate children born during the recall period and died.								
#	Name	Age (y)	Sex (F/M) 1=M 2=F		Born since start 1=Yes 2=No		Out-migrated during recall date 1=Yes 2=No	Died during recall period 1=Yes 2=No	Cause of death (See coding below)
1									
2									
3									
4									
5									

Causes of death (using local terminology):
1= Episode of fever and cough and at least one of the following signs sputum, chest pain, breathlessness, wheezing, fast breathing/ARI
2= Episode of 3 or more watery stools per day/ Diarrhoea
3= Episode of 3 or more watery stools with blood per day / Bloody Diarrhoea
4= Episode of fever accompanied by skin eruption (rash and/or runny nose and/or cough/and or inflamed eyes)/ Measles
5= Episode of fever with chills/Suspected Malaria
6= Excessive thinness (wasting) and or swollen appearance (bilateral oedema)/Malnutrition
7= Death on day of Earthquake
8= Injury related to Earthquake, after day of earthquake
9= Fall, vehicle accident, burn, bite etc/ Non-intentional Injury
10= Violence, homicide, strife etc /Intentional Injury
11= Muscle spasm/Tetanus
12= Related to pregnancy and delivery: during pregnancy/during giving birth/within 6 weeks post delivery
13= Old
14= Unknown
15=Other (Specify)

TALLY PER HH (THE TALLY IS DONE BY THE DATA ENTRY PERSON ON DATA ENTRY ONLY)

Current HH members total	
Current HH members <5y	
Current HH members total male	
Current HH members <5y male	
Current HH members total female	
Current HH members <5y female	
Births during recall	
Births during recall that died during recall	
Current HH members in-migration total	
Current HH members in-migration <5y	
Past HH members out-migration total	
Past HH members out-migration <5y	
Deaths total	
Deaths <5y	
Deaths total male	
Deaths <5y female	
Deaths total male	
Deaths <5y female	

SECTION 2 – HOUSEHOLD INFORMATION

2.1	Is this your permanent place of residence?	1	Yes (resident) **If yes, skip to 2.3**
		2	No
2.2	Where is your family living now?	1	Tents
		2	Relative
		3	Camp
		4	Other (specify):
2.3	Has your house been damaged by the earthquake?	1	Yes (damaged)
		2	No **If no, skip to 2.5**
2.4	The level of house destruction (ask/observe)	1	Partial destruction
		2	Complete destruction
		3	Don't Know
2.5	What type of housing are they living in? (Major portion)	1	Mud/mud brick
		2	Stone/concrete/brink
		3	Thatch
		4	Plastic shelter
		5	Other (specify):
2.6	Who owns the land you are currently living on?	1	Self-owned
		2	Rented house
		3	Zamindar (Land owner)
		4	Other (specify)
2.7	If you are currently cultivating agricultural land, who owns it?	1	Self-owned
		2	Zamindar (Land owner)
		3	Brokerage
		4	Other (specify)
2.8	Do you plan to reconstruct your previous house?	1	Yes
		2	No
2.9a	Do you keep any animal inside your living quarters?	1	Yes
		2	No **If no, skip to 2.10**
2.9b	If yes, how often?	1	Frequently
		2	Occasionally
		3	Rarely
2.9c	If yes, what type of animal?	1	Poultry
		2	Livestock
		3	Pets

2.10	What kind of fuel do you primarily use for cooking/heating in your home?	1	Wood
		2	Gas
		3	Other (specify)
2.11	What kind of stove do you primarily use for cooking in your home?	1	Gas
		2	Electric
		3	Open fire/stove without chimney
		4	Open fire with chimney
		5	Closed stove with chimney
		6	Other (specify)
2.12	Has there been any added member/s to your family after the earthquake? (Not counting births to the previous members of the household)	1	Yes (added)
		2	No **If no, skip to 2.16**
2.13	How many added members?		|__|__| members
2.14	Do added members arrange food themselves or dependent on your family?	1	Totally dependent
		2	Partially dependent
		3	Totally independent
		4	Other (specify)
2.15a	Has the household taken any child in the household after the earthquake?	1	Yes
		2	No **If no, skip to 2.16**
2.15 b	If Yes, where are the parents of this child?	1	Died in the earthquake
		2	Living in other locality
		3	Don't know
2.15 c	What is the relation between the child and you, the care provider?	1	None
		2	Relative / friend
		3	Other (specify)
2.16	What is the main occupation of Household Head only; before Earthquake and after Earthquake		01 Agriculture (Only own land) 02 Farmer (Only leased land) 03 Farmer (Own & Leased land) 04 Wage labourer down-country 05 Works overseas 06 Horse/Donkey/Cow cart driver/Mechanical transport driver 07 Agri-labour/Day labour/Unskilled labour 08 Potter/Blacksmith/Cobbler/Tailor/ Construction worker/Fisher etc. 09 Petty or middle class business 10 Big business man (Whole seller) 11 Govt. or non-govt. official 12 Professional (Teacher/Lawyer/Doctor) 13 Beggar 14 House work/ House wife 15 Retired officer / staff 16 Unemployed 17 Other
			________**Before** ________**After**
2.17	If the family farms land, do you sell or trade any of your yield?	1	Yes 2 No
2.18	Do you receive money from family members outside the Allai Valley?	1	Yes 2 No
2.19	What is your monthly cash income?		Before Earthquake ________rs
			After Earthquake ________rs

2.20	Is your monthly income enough to cover your costs?	1 Yes 2 No	
2.21	What is the education of head of household	1	No education
		2	If educated write exact years of education__
		3	Can sign only
		4	Non formal education
		5	Other
		6	Don't know

SECTION 3 – HOUSEHOLD ASSETS	
3.1	How many of the following animals do your family own before and after the earthquake? (If 'None', write '0')

Horse/Mule/Donkey **Goat/Sheep** **Duck/Chicken**
Cow/ Buffalo
Past Past Past Present Past Present
Present Present

	Before After		
3.2	Do you have vegetable garden for home use before and after the earthquake? Yes= 1 No= 2	Before	After
3.3	If yes, what do you do with your vegetables?	1=sell	
		2=eat	
		3=trade	
		4=other (specify)	

SECTION 4 – HOUSEHOLD STRESSES			
4.1a	Has your household taken any new loan due to the earthquake?		
		1	Yes
		2	No
		3	Don't Know
		4	Other (specify)
4.1b	Has your household extended a previous loan due to the earthquake?	1	Yes
		2	No
		3	Don't Know
		4	Other (specify)
4.2	What was the purpose of borrowing the money? (Multiple Response Possible)	1	Purchase food
		2	Medical costs
		3	Replenish Assets
		4	Repair of damaged house
		5	Transport/travel costs
		6	Repay previous loan
		7	Support additional members to the household
		8	Marriage of any member
		9	Other (specify)
4.3	Does your family have any outstanding brokerage loan?	1	Yes
		2	No
4.4	Has your family sold any valuable assets after the earthquake?	1	Yes
		2	No **If no, skip to 4.6**
4.5	Which valuable assets have been sold?	1	Jewelry
		2	Land

		3	Livestock:_______Buffalo/Cows
			_______ Sheep/ Goats
			_______Horse/Mule/Donkey
		4	Household items
		5	Farming Equipment
		6	Stock seeds or others
		7	Trees/Lumber/Firewood
		8	Other (specify)
4.6	How many days after the earthquake did you start selling the valuable assets?		|__|__| days
4.7	Did your family receive any financial assistance after the earthquake? (Donation, Zakat, family remittance, etc)	1	Yes
		2	No
		3	Private loan
		4	Govt. Assistance

Complete after the interview:

Status of interview: ________

1=Complete
2=Partially Complete
3=Refused
4=Not Available/Not Home

Interview starting time: _______

Interview completion time: _______

Signature of Interviewer___________________

Signature of Supervisor____________________

ANNEX FOUR: QUESTIONNAIRE (ENGLISH)

ALLAI TEHSIL
Needs Assessment, 2006
-Household Questionnaire for Women-

COMPLETE BEFORE THE INTERVIEW

Date : |__|__| / |__|__| / 2006
Day Month

Interviewer Name :

Team Leader Name:

Name of Respondent:

Language Spoken in Household:

TEAM Cluster Household

Union Council: ____________________

Consent: We are conducting a survey on the health, nutrition and food security of your family. I would like to ask you some questions about your family and we will also weigh and measure your children who are younger than 5 years of age. The survey usually takes about one hour to complete. Any information that you provide will be kept strictly confidential and will not be shown to other people. This is voluntary and you can choose not to answer any or all of the questions if you want. However, we hope that you will participate since your views are important. Do you have any questions? May I begin?

YES______ NO______

SECTION 5 – WATER AND SANITATION FACILITIES

No.	Question	Code	Response
5.1	What is the **main** source of **drinking** water for your household?	01	Hand pump
		02	Tap stand
		03	Tap in the house
		04	Open well
		05	River
		06	Spring (unprotected)
		07	Spring (protected)
		08	Irrigation Channel
		09	Other (specify)
5.2	Did your water source change after the earthquake?	1	Yes
		2	No
5.3	How many minutes does it take you to reach your primary water source?		_____minutes
5.4	Do you treat your drinking water in any way on a regular basis at home in order to make it safer to drink?	1	Don't treat
		2	Boil
		3	Filter
		4	Chemical treatment
		5	Other (specify)
5.5	How are the excreta disposed?	1	In open space
		2	Buried
		3	Pit Latrine
		4	Water Toilet (Sewer Connected)
		5	Other
5.6	When do you wash your hands? (More than one answer possible)	1	Before eating
		2	After defecation
		3	Before feeding baby /children
		4	After disposing of children feces
		5	Before preparation of food
		6	Other (specify)
5.7	Do you use soap for washing your hands?	1	Always

		2	Sometimes with soap		
		3	Never		
5.8	How often do you take bath before and after the earthquake?	**Before**		**After**	
		1	Daily	1	Daily
		2	Twice a week	2	Twice a week
		3	Once a week	3	Once a week
		4	Fortnightly	4	Fortnightly
		5	Once a month	5	Once a month

SECTION 6 – FOOD SOURCES AND CONSUMPTION

Could you please tell me how many times in the **LAST 24 HOURS** your household has eaten the following foods?
(Tick=Yes for items eaten and write 0=No for items not eaten during the last 24 hrs) Then, determine the sources for each item eaten

	Food Item	*Source*	*Last 24 hrs*		*Food Item*	*Source*	*Last 24 hrs*
6.1	Cereals *(wheat, Maize, rice)*			6.6	Vegetables		
6.2	Legumes, dhal, beans, groundnut			6.7	Fruits		
6.3	Meat/chicken, fish			6.8	Milk, and milk products (not including tea)		
6.4	Egg			6.9	Sugar		
6.5	Cooking oil/fats			6.10	Wild foods (including leaves)		

Source Codes for 6.1-6.10
1=own production
2=purchase
3=traded goods or services
4=kinship/gift
5=borrowed/credit
6=food aid
7=other (specify)

6.11 In which month did your family receive food aid? If yes, tick the months you received it. If no, skip to 6.12

6.11a	**Food Aid Commodity**	Oct 2005	Nov 2005	Dec 2005	Jan 2006	Feb 2006	March 2006
6.11b	Wheat / Atta	|___|	|___|	|___|	|___|	|___|	|___|
6.11c	Rice	|___|	|___|	|___|	|___|	|___|	|___|
6.11d	Pulses	|___|	|___|	|___|	|___|	|___|	|___|
6.11e	Oil	|___|	|___|	|___|	|___|	|___|	|___|
6.11f	Sugar	|___|	|___|	|___|	|___|	|___|	|___|

6.11g	Milk	|___|	|___|	|___|	|___|	|___|	|___|
6.11h	Other Specify	|___|	|___|	|___|	|___|	|___|	|___|

6.12	For your family how long will your current stock of food will last? 1= < one day 2= <1 week 3= 1-2 weeks 4= 2-4 weeks 5= 1 month 6= other (specify)
6.13	How many times this week did your household eat meat of any kind (mutton, beef, chicken, fish)? __________ # times
6.14	How many times this week did your household eat eggs? __________# times
6.15	How many times this week did your household eat fruit? ____________# times
6.16a	Since the earthquake has any household member reduced the amount of food eaten? 1=Yes 2=No 3=Don't know
6.16b	Since the earthquake has any household member substituted for less quality food? 1=Yes 2=No 3=Don't know
6.17a	When you are moving from light to dark, do you bump into furniture? 1=Yes 2=No 3=Don't know/Not applicable
6.17b	When you are eating dinner after sunset, can you see the food on your plate in the dusk light? 1=Yes 2=No 3= DK/Not applicable
6.18	Interviewer, assess neck for visible goiter only: 1=No goiter 2=Yes goiter (Observation)
6.19	We would like to take a sample of the salt in your household to check whether or not it is iodized. May I have a sample of the salt used to cook the main meal eaten by members of your household last night? Interviewer should collect approximately one teaspoon of salt.

SECTION 7 – CHILD NUTRITION FOR CHILDREN 0-24 MONTHS

Qs. for mother/adult caretaker of child. If there is more than one child under 24 months, randomly select (by ballot) one of the children between 0-24 months, (fix age with event on events calendar). Then interview the child's mother in section 8. If there is no child under 24 months, skip to section 8.		**CHILD Name ------------ ID # of child____ ID # of mother___**	
7.1	Relationship of respondent to child	1	Mother
		2	Father
		3	Other Caretaker
7.2	Sex of child	1	Male
		2	Female
7.3	Age	|__|__| months	
7.4	Are you currently breastfeeding?	1	Yes
		2	No
7.5	Has this child ever been breastfed at any time in his/her life?	1	Yes
		2	No
		3	Don't Know
7.6	How long after delivery did you start breastfeeding the child?	1	Within one hour
		2	Within 8 hours

		3	Within 24 hours
		4	2 or more days after delivery
7.7	If mother is no longer breastfeeding:, what was the age of the child when she stopped breastfeeding?	|__|__| months	
7.8	Why did you stop breastfeeding?	1	Milk not enough
		2	Child away
		3	Grief/sorrow/ disturbance
		4	Absence of suitable environment
		5	Child grown up
	If child is more than 6 months of age, skip to section 8 now.	6	Other specify-----
7.9a	**For children up to 6 months only:** Since this time yesterday, was this child given any semi-solid food or fluids other than breast milk? **If No, skip to section 8**	1	Yes
		2	No
7.9b	If yes what was given?	1	Water/tea/ghutti
		2	Fresh milk/ formula milk
		3	Semi solid food
		4	Honey
		5	Other (specify)
7.9c	Since this time yesterday, how many times was this child given any thick mashed / solid food or liquid?	1	None
		2	Once
		3	Two to three
		4	Four to five

SECTION 8 – NUTRITION AND HISTORY OF ANTENATAL CARE OF PREGNANT WOMEN AND LACTATING MOTHERS

Questions for one mother of child-bearing age (15-45 years). You should use the same woman interviewed in section 7. If no woman in the household has a child less than 24 months, use any woman of child-bearing age. If there are more than 2 women of child-bearing age, randomly select one by ballot.

8.0	**Name of Mother:** **ID# of Mother ______** **Age (Yrs):** |__|__|				
8.1	Level of Education	1	No education		
		2	If educated, write ___________# years		
8.2	Are you literate?	1	Yes	2	No
8.3	Age of Marriage:	________Age (yrs)			
8.4	Are you currently pregnant?	1	Yes		
		2	No		
		3	Don't Know		
8.5	Number of pregnancies?	__|__|			
8.6a	Have you ever received antenatal care from a trained health worker? **If no, skip to 8.9**	1	Yes	2	No
8.6b	If yes, where?	1	RHC/BHU		
		2	Home		
		3	Other (specify)		
8.6c	If yes, from whom?	1	Doctor/Nurse		

		2	LHV/FMT		
		3	TBA (govt. trained and certified)		
		4	LHW		
		5	Other (specify)		
		6	Don't Know		
8.7	How many times did you see a health worker for your most recent pregnancy?	_______Number of times			
8.8a	Did you ever receive any vaccinations (tetanus toxoid vaccine) at an antenatal care appointment? **If no, skip to 8.9**	1	Yes	2	No
8.8b	How many times did you receive this vaccination?	________Number of times			
8.9a	Have you ever delivered a baby in a health facility? **If no, skip to 8.10**	1	Yes	2	No
8.9b	If yes, where?	1	DHQ		
		2	RHC		
		3	BHU		
		4	Other (specify)		
8.9c	How many times have you delivered at a health facility?	_________Number of times			
8.10a	Have you ever had assistance at a delivery from a trained health worker? **If no, skip to 8.11**	1	Yes	2	No
8.10b	If yes, what was their level of training?	1	Doctor/Nurse		
		2	LHV/FMT		
		3	TBA (govt. trained and certified)		
		4	LHW		
		5	Other (specify)		
		6	Don't know		
8.11a	Do you know what Family Planning is?	1	Yes	2	No
8.11b	Have you ever considered using a family planning method?	1	Yes	2	No
8.11c	Have you ever used a family planning method?	1	Yes	2	No
8.12	Have you ever had a problem with infertility?	1	Yes	2	No
8.13	Have you had diarrhoea in the last 2 weeks? (Diarrhoea is three or more loose or watery stools per day)	1	Yes		
		2	No		
		3	Don't Know		
8.14	Have you had a respiratory infection in the last 2 weeks? (Coughing, difficulty breathing, fast breathing etc)	1	Yes		
		2	No		
		3	Don't Know		
8.15	MUAC		|__|__|.|__|	cms	
8.16	Weight of Mother	__________ kg			
8.17	Height of Mother	__________ cm			

Complete after interview:

Status of interview: __________ 1=Complete
2=Partially Complete
3=Refused
4=Not Available
5=Other (specify)

Interview starting time: ________

Interview completion time:________

Signature of Interviewer ______________________

Signature of Supervisor ______________________

SECTION 9 – CHILDREN 6-59 MONTHS

Qs. for mother/adult caretaker of child.

#	Name of Child	Status: 1 = Refusal 2= Absent 3= Present	Sex M/F 1=M 2=F	Birthday dd/mm/yy (If not known, SKIP)	Age (months) (Use local events calendar)	Measles vaccination 1=Yes card 2=Yes no card 3=no 4=Don't know	Vit A Capsule supplementation (Post earthquake) Y/ N/ DK 1=Yes 2=No 3=Don't Know	BCG mark Yes/No 1=Yes 2=No	Illness in the last 2 weeks 1=Yes 2=No	If illness yes, cause was: 1=diarrhea 2= bloody diarrhea (dysentery) 3= fever with difficult/fast breathing/ARI 4=fever of unknown origin 5= other 6= DK (more than one option possible)	If illness yes, did seek assistance? 1=Yes, RHC 2=Yes, religious/traditional healer 3=BOTH 4= None 5= Not applicable	Weight (kg)	
1												_ _ ' _	
2												_ _ ' _	
3												_ _ ' _	
4												_ _ ' _	
5												_ _ ' _	
6												_ _ ' _	
7												_ _ ' _	
8												_ _ ' _	

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9												_ _ ' _	
10												_ _ ' _	
11												_ _ ' _	
12												_ _ ' _	

Attention:
Include ALL children age 6-59 months
Age is assessed correctly in years with birth certificate or vaccination card: give birth date. -- If no certificate: assess the age with the **local events calendar**: give age in months Hence, children with a height under 65 cm or above 110 cm will be included in the survey sample if their age is ranging from 6 and 59 months

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ANNEX FIVE: FOCUS GROUP DISCUSSION SEMI-STRUCTURED INTERVIEW OUTLINE – MEN

Focus Group Discussions with Men

Date:

Name of Facilitator:

Name of Recorder:

Union Council:

Village:

Elevation:

Access:

Mother Tongue of Focus Group Participants:

Ethnic Groups of Focus Group Participants:

Name of Village Traditional Leader:

Verbal Consent given: ______Yes
______ No

Names of Participants (10 – 12 in number) and Estimated Ages:

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Step One: Introductions (15 minutes)

- *Please introduce yourself and the 5-agency consortium.*
- *Explain the purpose of the focus group discussion, how the information will be used, and get verbal consent of participants.*
- *Emphasize we are here to listen to them, but do not promise that we will help them directly. Do everything you can to not raise expectations.*
- *Members of the FGD should say their names, rough ages.*

Step Two: Village Mapping Exercise: Livelihoods, Natural Resources, and Decision-Making (1/2 hour)

- Ask the men to draw a map of their village and surroundings that support their livelihoods. As they develop it, talk to them about what they are drawing and why. Probe the following issues in particular*:*
    - Where and what do they farm?
    - Where are livestock kept and grazed?
    - What about other natural resources, especially water and trees?
    - Who owns these lands and resources?
    - How are decisions made about them? Where are those decisions made, and by who?
    - Do they have anything to do with the trees and forests – whether managing them, using forest products as part of livelihoods, or logging them? Who owns the trees and who is benefiting from logging?
    - How are land and resources owned and distributed?
    - What has been the impact of the earthquake on these issues?

Step Three: Daily schedule (work load/contribution)

- Ask men to list the daily activities as an example
- Ask the group if any one can add or do different then others.
- Ask if they had different daily activities before the earthquake.

Step Three: Group Discussion (1 hour)

Facilitate the group in a discussion focusing on decision-making about the following topics – and how these decisions affect their lives. It is likely that the discussion will go in different directions which, to a certain extent, are not only acceptable but especially useful. Use these questions as guidelines to explore the topic. Ask lots of "why, how, when, who" follow up questions.

Do you feel your home and village are safe for you and your family? Why or why not? What would make you feel safer? What can you do about the safety of women and children in their homes and villages?
When there is illness in the family, what do you do? When someone is sick, what kind of healers (traditional, religious, professional) does your family consult with and why? At what point do you decide to go? Are decisions about getting medicine or health care the same for the whole family, or different for different members (adults vs children, males vs females, etc)
Why are your children going to school, or why not? Are there differences between sons and daughters and why? Who is making those decisions? How do you participate? How do you feel about the schools in your community, and what can you do to support children's education?
When there is a dispute in the village between families – for example a land conflict -- how is it resolved?

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Are tribal enmities a problem in your area?

Do women play any role in resolving disputes?

When there is a problem between a husband and a wife, how is it worked out?

What do you want for your sons' futures? What do you expect?

What about your daughters?

When there is a dispute in the village between families – for example a land conflict -- how is it resolved?

Are tribal enmities a problem in your area?

Do women play any role in resolving disputes?

When there is a problem between a husband and a wife, how is it worked out?

What are you doing to help your community recover from the earthquake?

What is the role of women in earthquake recovery?

Who are the poorest people in your community?

How are they helped?

What happens to widows?

Who makes decisions about getting married?

What is the process?

Who is involved?

How are problems or disagreements about this resolved?

At what age do young people get married?

Do you think there are problems with people getting married too young? Why or why not?

Do you come across problems in getting relief items or cash, How?

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Step Four: What is Your Priority? (1/2 hour)

Each individual is given *one* card each with the following pictures, representing various sectors:

- Governance
- Health
- Education
- Environment
- Shelter
- Livelihoods
- Food
- Water / sanitation
- Other

He should be given a few moments to think about which is his priority. Each should drop the card he chooses into a box, then they are tallied up and counted to see what are the first, second, and third choices of the group as a whole. The facilitator should lead the group in a discussion of what is the group's top priority, and why.

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ANNEX FIVE: FOCUS GROUP DISCUSSION SEMI-STRUCTURED INTERVIEW OUTLINE – WOMEN

Focus Group Discussions with Women

Date:

Name of Facilitator:

Name of Recorder:

Union Council:

Village:

Elevation:

Access:

Mother Tongue of Focus Group Participants:

Ethnic Groups of Focus Group Participants:

Name of Village Traditional Leader:

Verbal Consent given: ______Yes
______ No

Names of Participants (10 – 12 in number) and Estimated Ages:

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Step One: **Introductions (15 minutes)**

- *Please introduce yourself and the 5-agency consortium.*
- *Explain the purpose of the focus group discussion, how the information will be used, and get verbal consent of participants.*
- *Emphasize we are here to listen to them, but do not promise that we will help them directly. Do everything you can to not raise expectations.*
- *Members of the FGD should say their names, rough ages.*

Step Two: **Village Mapping Exercise: Female Access and Mobility (1/2 hour)**

- Ask the women to draw a map of their village the way it is now, and where in it they go. As they develop it, talk to them about what they are drawing and why. Probe the following issues in particular:

- o Where in the village do women go: how far, and how often?
- o Who, if anyone, accompanies them?
- o What about girls? Do they go out more or less than older women?
- o How has the earthquake changed both the things in the village and women's movement in it?
- o Where do women gather together, why, and how often?
- o What livelihood activities do women engage in, and where do they do them?
- o What about widows?

Step Three: Daily schedule (work load/contribution)

- Ask women to list the daily activities as an example
- Ask the group if any one can add or do different then others.
- Ask if they had different daily activities before earthquake.

Step Four: Group Discussion (1 hour)

Facilitate the group in a discussion touching about <u>*decision-making and roles of women*</u> *and others on the following topics – and how these decisions affect women's lives. It is likely that the discussion will go in different directions which, to a certain extent, is not only acceptable but especially useful. Use these questions as guidelines to explore the topic. Ask lots of "why, how, when, who" follow up questions.*

Do you feel safe in your home, and village? Why or why not? What would make you feel safer? What can women do about the safety of women and children in their homes and villages?
When there is illness in the family, what do you do? When someone is sick, what kind of healers (traditional, religious, professional) does your family consult with and why? At what point do you decide to go? Are decisions about getting medicine or health care the same for the whole family, or different for different members (adults vs children, males vs females, etc)
Why are your children going to school, or why not? Are there differences between sons and daughters and why? Who is making those decisions? How do you participate? How do you feel about the schools in your community, and what can you do to support children's education?
When there is a dispute in the village between families – for example a land conflict -- how is it resolved? Do women play any role? How are disputes between women resolved?

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When there is a problem between a husband and a wife, how is it worked out?
What do you want for your sons' futures? What do you expect? What about your daughters?
How has the earthquake changed your household and community? Not just physical changes – those are obvious – but social attitudes, beliefs, livelihoods?
What are you doing to help your community recover from the earthquake? What is the role of women in earthquake recovery?
Who are the poorest people in your community? How are they helped? What happens to widows?
Who makes decisions about getting married? What is the process? Who is involved? Who make decision about bringing children/spacing?? How are problems or disagreements about this resolved? At what age do young people get married? Do you think there are problems with people getting married too young? Why or why not?
Did you come across problems in getting relief items or cash, how?

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Step Four: What is Your Priority? (1/2 hour)

Each individual is given *one* card each with the following pictures, representing various sectors:

- Governance
- Health
- Education
- Environment
- Shelter
- Livelihoods

- Food
- Water / sanitation
- Other

She should be given a few moments to think about which is her priorities. Each woman should drop the card she chooses into a box, then they are tallied up and counted to see what are the first, second, and third choices of the group as a whole. The facilitator should lead the group in a discussion of what is the group's top priority, and why.

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ANNEX SEVEN: FOCUS GROUP DISCUSSION SEMI-STRUCTURED INTERVIEW OUTLINE – CHILDREN

Focus Group Discussions with Youths Age 10-14

Date:

Name of Facilitator:

Name of Recorder:

Union Council:

Village:

Elevation:

Access:

Mother Tongue of Focus Group Participants:

Ethnic Groups of Focus Group Participants:

Gender of Children in FGD:

Name of Village Traditional Leader:

Verbal Consent given: ______Yes
______ No

Names of Participants (10 – 12 in number) and (Rough) Ages:

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Step One: Introductions

- *Please introduce yourself and the 5-agency consortium.*
- *Explain the purpose of the focus group discussion, how the information will be used, and get verbal consent of participants.*
- *Emphasize we are here to listen to them, but do not promise that we will help them directly. Do everything you can to not raise expectations.*
- *Members of the FGD should say their names, rough ages.*

Step Two: Songs and Poetry

- Ask the children to share any songs or poems they have heard or written about the earthquake. The note-taker should write the words as accurately as possible.

Step Three: A Village I Would Like to Live In

Divide the youths into groups of 3 and ask them to draw a picture of a village they would like to live in. Share and discuss how their pictures and similar or different from their villages now.

Step Four: Daily Schedule

Ask the youths to develop a schedule for a typical day.

Use the schedule to further explore work, education, and recreation. Use flipcharts with a "happy face" and "sad face" column to explore what they do and do not like about their work, education, and recreation activities. You can write their answers using words and pictures in the columns

Step Five:

Lead the children in a short, loose discussion on protection and their futures:

Do you feel safe in your homes and villages? Why or why not?
What would make you feel safer?
What would you like to be when you grow up? Why?
Do you think your life will be like your mother or father's? Why or why not?
When you think about growing up, how do you feel?
Do you like being a boy / girl? What are the good and bad things about that?

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ANNEX EIGHT: EXAMPLE FOCUS GROUP DISCUSSION WITH GUJUR MEN

Name of Facilitator : Babar Khan

Name of Recorder : Kifayatullah Khan

Union Council : Biari

Village : Dara Biari

Access : By road and a 45 minutes walk

Ages of Participants[21]

- 35 years
- 28 years
- 35 years
- 40 years
- 41 years
- 49 years
- 50 years
- 60 years
- 55 years
- 25 years

MAIN PROBLEM

The main problem of our area is that there was a school in our area which got destroyed. Even prior to the earthquake there was only one teacher deployed at that school. The teacher is still there but there is no shelter in the school and our children cannot get education in rain and snow.

WHY IS EDUCATION NECESSARY?

Education brings about enlightenment and awareness in the people. One can understand and communicate languages properly, and it is only through education that we can distinguish between the right and wrong, permissible and impermissible. It is strange that there is no girls school in our area and our girls cannot acquire education. If a primary school is established for girls then at least our girls can get education in this vicinity i.e. at their doorstep, and if a high school for girls is established in our surrounding then it be extremely helpful, for our girls will be able to get education within the village surroundings. Most of the boys of our area have already obtained primary school education and due to non-existence of any high school for boys, they are deprived of further education. There was a high school in Biari but it also stands destroyed in the earthquake.

SECOND PROBLEM

Our village is without electricity, which is urgently needed. There was generator functioning in this area which was catering to the requirements of some families but in the earthquake the same got defunct. There are 400 families residing in our village and if four generators are installed in our area, our electricity requirement can be fully met. Additionally, we all are unemployed and if some employment opportunities are made available to us then we will be able to lead a better life.

HEALTH

Since there is no health facility in our area, so if someone falls ill then the decision regarding the treatment is carried out by family head. Initially, some indigenous treatment is administered and if the same does not work then the patient is taken to Bana, RHC by a procession of 20 to 30 people who hold the patient aloft on bed. This whole exercise entails financial liability amounting to Rs. 2000/- If there is

[21] All names of FGD participants have been removed from these annexes.

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no convalescence in the condition of the patient at Bana, RHC, then we take the patient to Battagram or Abbottabad.

COMMON DISEASES

The commonly reported diseases in our area are hepatitis, Tuberculoses, Coughing, Fever, Diarrhea and Itching. If any humanitarian agency wants to establish hospital in this area then we will have to consult the Khan because this land belongs to him.

WATER & SANITATION

There is no drinkable water available in our area and if some water is available that is contaminated. There is no water even in our Masjids. There is no water supply scheme whatsoever in this village nor is any such scheme in the offing by the government or any humanitarian agency, as the entire land belongs to Khans who do not take care of us. This area receives very heavy snowfall in winter and in that weather we are faced with immense difficulties.

ELECTRICITY

There was only one generator which is completely destroyed. Some people previously benefited from the generator. In total, we require four such generators for the entire populace of this village but on urgent basis if the defunct generator is functionalized then our problems can be solved to some extent.

ROAD

There is no road access to our village except one trail path which has a number of landslides at varying distances. Some eight years ago, a contractor had made a jeepable track for timber business, but that road is no longer existent. If any organization intends constructing road in our area, then we assure maximum cooperation to them and are willing to deploy a workforce of 200 people on daily basis.

ENVIRONMENT

Since the entire land is in the ownership of Khan and if we will construct our houses, we will seek permission from the Khan to cut the wood from his forest, and if he does not accede to our request then we will try to find some other place to construct our houses. We are living on the land of the Khan since ages. Our ancestors were the subjects of the Khans and so are we. We have planted trees on these lands so that we may get fruit as well as shade. We pay Rs. 2000/- to the Khan annually and also a portion of our maize yield. Additionally, if there is a service that is to be rendered at the residence of the Khan then we do that as well. In return the Khan facilitates us in civil courts and police station issues.

FOREST

Forests are gradually decreasing in our area. We have ourselves planted trees in this area but the government department has not taken care to plant trees. Recently, Care International has initiated a drive of reforestation.

GOVERNANCE

Usually petty issues are sorted out at village level but if the issue is of graver intensity then it is referred to the Khan.

DECISION OF MARRIAGE

It is customary in our village that we go at night with the marriage proposal to the girl's house. Most often engagements are done at young age and if some issue arises at the time of the marriage then the girl party demands money. The commonly practiced marriageable age in our area is between 16 and 20.

GENDER DISCRIMINATION

Usually we do not discriminate girls against the boys and treat them equitably. Rather daughters are loved more since they have to be married and sent to the other house.

DECISION BETWEEN WIFE AND HUSBAND

Generally, if a dispute arises between husband and wife, then both of them decide it between themselves without allowing for any third party to intervene.

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ROLE OF WOMEN IN COMMUNITY DECISIONS
Our womenfolk generally collaborate with to solve any conflict that erupts at community level because they do not like stifling and quarrels. Since we are Khan's tenants, and if the Khan is pitched against anyone in a battle then we party with the Khan and wage battle for him, for he has given us weapons.

AGRICULTURE
Ours is a monocrop land and we only crop maize once a year. In winter, we are rendered jobless and travel down country to earn the living as there is no source of livelihoods in winter in this area. We work as day-labourers down country and whatever we earn during that period, we consume it in summer.

SENSE OF INSECURITY IN TENT LIVING
We feel extremely unsafe in the tents because of the fear of theft, fire breaking out, wind uprooting the tent altogether and caving in of tent under snow. Besides, in summer these tents will be extremely hot.

SOCIAL BONDING AFTER THE EARTHQUAKE
Ever since the earthquake, there is not a single untoward incident reported in our village. No one has quarreled with the other since then.

VULNERABLE FAMILIES
We all are impoverished people because of absence of employment opportunities. There is no business in this area. We do not own any land and the luggage that we had before the earthquake is no more. There are about 35 widows in our village and almost 20 handicapped people. We can physically help them out but we are unable to contribute materially, as we are ourselves poor people.

FUTURE OF THE CHILDREN
We want our children to see getting education, becoming good professionals such as doctors, engineers, teachers and advocates. We also want them to become religious clerics.

DAILY ROUTINE
We get up with the morning prayer's call. After prayers and breakfast, mostly men leave their houses for work. Some go for wood cutting, some for day-labor and others for agricultural activities. At noon we return back and take our lunch and offer noon prayers, and then after some rest and cut wood for household usage. In the afternoon, we offer prayers and tend our livestock. Then we offer evening prayers and after taking dinner, we offer night prayers and sit down for gossip. We generally go to sleep between 9 and 10 in the night.

DECISION ABOUT MEDICAL TREATMENT
If someone falls ill, then the family head decides as to what should be done. Medicines are brought from the medical store and if there is no recover then we bring TAVEEZ from the religious elders and in case of no recover in that case either then the patient is taken to the doctor.

RELIEF AND CASH PAYMENT
In our village, some people received the cheques promised by the government but most of the people have been left out in the cheque distribution. In this relief exercise, we were troubled a lot. Some people did get the relief but others did not get anything. Care International gave us tents and Save the Children provided us with food items. We have been receiving relief from both the NGOs and the government.

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ANNEX NINE: EXAMPLE FOCUS GROUP DISCUSSION WITH PATHAN WOMEN

Name of Facilitator : Saeeda Shah

Name of Recorder : Shazia Taj

Union Council : Batkool

Village : Cheeran Bala

Access : By Road

Ages of Participants:
- 45 years
- 40 years
- 20 years
- 30 years
- 55 years
- 28 years
- 20 years
- 21 years

Upon reaching the village when we introduced ourselves to the male members first and sought their permission to engage the women of their village in a group discussion, they made us wait for about half an hour assigning the reason that some elder should come and he would accord approval to our request. This exercise revealed the fact that the women of this area are forbidden to meet even with any other lady without the prior permission of their men. The women gleefully greeted us and we initiated the discussion by explaining the modus operandi and purpose of the discussion.

DISCUSSION
We usually do not interact with each other unless there is a need to sit together such as on deaths and marriages etc. After the earthquake, we have further restricted this interaction because the devastation was so heart-rending that we don't feel like going anywhere.

The young girls go outside and have some interaction with their peer group but as they grow up their freedom is restricted. We take girls to the homes of our own relatives and bring them back. Before the earthquake, the girls would sit together for embroidery and sewing machine work, but after the earthquake our girls and the elderly women all are busy removing the rubble and rocks and keep trying to set the house in order which is in complete disarray.

As regards widows, we cannot do anything as we ourselves are poor. No help could be extended to them before the earthquake and after the earthquake, we ourselves have retrogressed in all aspects. The widows beg for their basic amenities, and those who have sons they take care of them. In our village there is only one widow who is being looked after by her son.

We feel safe in our homes because of the fact that our men are around. We keep weapons and other gadgetry due to the fear of big animals otherwise it is not out of vendettas.

Prior to the earthquake, we had brick homes with doors but now we are in tents, so we want such homes to be constructed where we can live with ease. The summer season is afoot and in view of the absence of any proper shade provided by permanent structure, we feel it would be too hot in the tent without any veranda or shade.

Before the earthquake, if somebody would fall ill, we would give household treatment but since now hospital is close by, so we take the patient to the doctor. The men take the boys and women take the girls. The doctor himself or herself segregates the patients and treats them accordingly. If need be, we go to the religious scholar as well requesting him to pray for the ill, but it takes two hours to reach the cleric.

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We send our children to school so that after acquiring education they should be able to earn an honourable living. Since our area is extremely poor so without adequate education, it would be difficult to make both ends meet. By referring to the discussion facilitators deputed by NGOs, the women said it is because of education that you people are earning a good salary as well as serving humanity and we who are without education are sitting in your feet. The decision to educate the children is taken by the parents.

The only differentiation carried out between boys and girls is that they are taught is separate schools because we don't want to teach them in the same school. However, very young girls receive their first two years' education with the boys on account of absence of girls school in our village before and after the earthquake. The existing school is staffed by our tribe's male members and our children study there. We prefer to educate our daughter in the seminary because the girls study separately there and if a similar arrangement is made in regular school, we would like to send our daughters there too. We want to send our children to a school where the quality and methodology of teaching is effective but in our village neither the schools are good nor are the teachers who could burnish the skills of the children. For instance, if the children know how to write, they do not know how to read. We cannot do anything about it. Had we been capable of improving the school structure and quality, we would have first improved our houses. However, as a final solution, we can offer land to the government for school construction on payment because we also have our needs.

Decisions are usually taken by the elders but in case of a problem extending the capacity of the elder, it is reported to the local police station and the government. At most efforts are made to solve the disputes locally within the precinct of the village. Factually speaking, we have never come across any such situation up till now.

In a husband-wife conflict, the husband generally beats the wife and then makes the compromise as well because he is powerful.

FUTURE OF THE SON

For our sons, we want to see him getting stabilized and making his own home, but all that requires education. He should seek knowledge of the Holy Quran so as to become a good human being. He should also focus on other formal education and try to become a doctor, pilot or engineer. This is all possible with education, which in turn heavily depends on financial inputs which poor people like us cannot afford because in order to get high profile education, one has to go out of this area and bear those expenses as well. We are already too much preoccupied with fulfilling the basic food and shelter needs of the family let alone to think of higher education.

FUTURE OF THE DAUGHTER

We want her to live happily with her husband. There is a tradition of early marriages in our area but after the earthquake now we want them to first get education and become professionals like you.

GENERAL OUTLOOK OF LIFE AFTER THE EARTHQUAKE

Our faith and attitude towards religion has not changed. We are thankful to Allah that we got some shelter to protect us. However, many people in our village is psychologically traumatized. We constantly pray to Allah because of the fear of another earthquake lest the remaining population is also killed therein.

IMPROVEMENT OF THE VILLAGE

The village can be improved only if we learn something. That's why we are ready to offer you our land on payment whereon some sewing centre should be made because the tailors charge Rs. 100/- for any common stitching of the clothes and we are too poor to afford that price. If we are provided sewing machines, at least we can manage out own clothes stitching and we can also earn some livelihoods from that. We also want that till the time schools are established for girls, some arrangement should be made for the education of our girls so that they can learn something.

WIDOWS

There is a widow living in our village who is not helped by us because we ourselves are in deep trouble. She has a young son and a disabled daughter. Nobody can extend any assistance to her. She herself works

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on the fields of other to earn her bread. Previously we used to cultivate our land and give her some Zakat but now we ourselves are receiving Zakat from the government.

DECISION MAKING

The decision about the marriage is taken by the parents. In this decision, no consultation form outside is sought.

The family head takes to decision for the treatment of the patient.

The decision to educate the children including girls is taken jointly by the parents.

Decisions of the village are taken by the elders.

The decision regarding family planning and gap in pregnancy is taken by the husband and wife.

The decision about the marriage is taken by the grandparents and parents.

RELIEF

We got all the relief goods conveniently.

MAIN PROBLEMS

We need a home at the first place to spend life properly because living in tent is not easy. In summer, this area abounds in snakes and scorpions and since we sleep on the ground so we need beds as well.

Electricity is also the basic requirement of the village.

Both the boys and girls should have separate schools with trained teachers.

Women should be given sewing centre with sewing machines.

Water supply system should also be improved.

Hospital should be constructed because health is a very critical problem of our village.

DAILY ROUTINE

We get up early in the morning and offer morning prayers and then those who can read the Holy Quran recite some verses from it. After milking the animals and cleaning their barn we put fodder in front of them, we prepare tea and breakfast. After serving breakfast to the men and children, women take theirs. Then we prepare our children for the schools, wash the pots used in the breakfast and tend the livestock. Before the earthquake the women would go to pick green vegetable from the fields for cooking but nowadays they get busy in clearing the rubble from the house. The women help in reconstruction of the houses which have fallen in the earthquake. Before the earthquake, the girls used to do the embroidery work between 9 to 11 AM and they used to do sewing as well, but now they just do the embroidery work in this time.

We prepare meal for lunch for the family members. After serving meal, we wash the crockery and then make ablution. Then we prepare tea and serve to the family members as well as take ourselves. After prayers we visit those people who are falling back to their homes from relief camps. Then we remain busy in menial tasks of the house and then offer afternoon prayers. Thereafter we become busy with preparing meal for the dinner. In between that time we also assist our men in the reconstruction of the fallen houses. After evening prayers, we serve the meal, eat ourselves, wash the pots and then after night prayers we go to bed. Since due to non-availability of electricity, the entire social system has got disturbed so we serve the dinner earlier.

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ANNEX TEN: EXAMPLE FOCUS GROUP DISCUSSION WITH PATHAN GIRLS

CHILDREN FOCUS GROUP DISCUSSION

Village : Bab

Union Council : Batkool

A large number of population of this village has recently returned from Meira Camp. The girls used to attend a school in Meira Camp but there is no school facility for girls in this village.

The girls drew the map of their village in which all the houses are destroyed except for one or two odd houses standing. Thereafter they drew a revised map of what their village should look like where they incorporated hospital, school, play field, and particularly community kitchen which one of the girls had seen in Meira Camp established by Save the Children, for their family was there for many months.

Despite being mindful of all-pervasiveness of death and also the fact that death can come at any place, they are afraid to live in their houses. However, they wish to live in permanent houses. The girls expressed a sense of happiness while they stayed in Meira Camp, and also told that they left the camp reluctantly, for they could go to school, play and could also get basic necessities which are absent in their village. The girls make clay pots and play with the broken pots of their houses and dolls. The girls take care of their siblings and their mothers perform the household tasks with comfort.

All the girls are married at an early age. One of the girls whose age is 13 yeas informed that all her friends have got married and only she is not. She feels sad for her friends. Most of the girls in the village have aptitude for housekeeping; only a few wish to receive formal and religious education.

The girls think that their life would be no different than that of their mother. Even if they acquire education, their responsibilities and daily routine will not be changed.

The girls here are disallowed to go to the marketplace whereas boys are allowed to go there. If the girls fight with each other then they get punishment from heir mothers so that they refrain form fighting in future.

The girls wish to have the same basic facilities to be available in their village as were in Meira Camp. Additionally, for the betterment of their lives, there should be a community centre along with other things.

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