

**SANEI WORKING PAPER SERIES**

**Economic and Social Impact of Financial Crisis  
on Households: A Case Study of Pakistan**

**No. 11 - 11**

**ZAFAR MUEEN NASIR**



**SOUTH ASIA NETWORK OF ECONOMIC  
RESEARCH INSTITUTES**

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**ZAFAR MUEEN NASIR**

March 2011



**South Asia Network of Economic Research Institutes**

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First Published March 2011

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### ***Recommended Citation***

Nasir, Z. M. 2011, *Economic and Social Impact of Financial Crisis on Households: A Case Study of Pakistan*, SANEI Working Paper Series No. 11-11, South Asia Network of Economic Research Institutes, Dhaka.

### ***Biography***

**Zafar Mueen Nasir** is the Chief of Research and Dean at Pakistan Institute of Development Economics (PIDE), Islamabad. He was born on 20<sup>th</sup> September 1956 in Quetta, Baluchistan (Pakistan). He received his early education from Deny's High School Rawalpindi. After matriculation, he joined Government College, Asghar mall to do his F.Sc and B.Sc. Later on he joined Quaid-i-Azam University, Islamabad to do Masters Degree in Economics.

Dr. Nasir started his career at PIDE as Staff Economist in 1983 and carried out research on many important issues before proceeding for PhD in Economics at Kansas State University (KSU), Manhattan, Kansas, USA in 1990 on USAID Scholarship. He successfully completed his degree in economics with major in labor. He obtained straight A's both in Master and PhD courses work at KSU. After returning to Pakistan, Dr Nasir was posted in the Labor Division of PIDE where he produced number of research articles published in Journal of Labor Economics and Pakistan Development Review. His work is also published by the World Bank, International Labour Organization (ILO), United Nations Development Fund (UNDP), Government of Pakistan, and United Nations Funds for Population Activities (UNFPA). He also contributed a number of chapters in different books. In 2003, he was promoted as Chief of Research and posted as Chief of Human Capital and Innovation Division of PIDE. In 2006, Dr Nasir joined Government as Director Policies in Policy Planning Cell of the Ministry of Labor, Manpower and Oversees Pakistanis. He produced three national policy documents on employment, migration and human resource development. After completion of his assignment, Dr Nasir rejoined PIDE and assigned to work as Dean of Business. He was given additional responsibility as Project Director to manage the infrastructure development and capacity building activity at PIDE besides doing research on different economic issues.

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# Economic and Social Impact of Financial Crisis on Households: A Case Study of Pakistan

ZAFAR MUEEN NASIR<sup>1</sup>

## SECTION I

### 1.1 Background of the Study

The global financial crisis has adversely affected economic growth in many developing countries including Pakistan, Nepal, Bangladesh and Sri Lanka. The effects are more pronounced in labor intensive sectors such as manufacturing, construction, retail trade, transport and SMEs. The latest survey of the Pakistan's economy (Pakistan Economic Survey 2008-09), for example, shows a negative growth of 3.5 percent in the manufacturing sector. Similarly in Sri Lanka, the manufacturing sector grew only by 1.9 percent and 3.0 percent in first two quarters of 2009. The situation in Bangladesh and Nepal is also not different from Pakistan and Sri Lanka. In Bangladesh, the knitwear and garment sectors recorded -7.86 percent and -9.67 percent growth in year 2008-09 respectively.<sup>2</sup> The data from Nepal shows 0.5 percent increase in the manufacturing sector in 2009.

The contraction in the economic activity led to a large number of job losses and/or reduced wages and employment related benefits.<sup>3</sup> The official employment projections using Pakistani data show the job loss of at least one million in the year 2008-09 however the guesstimates by industry experts show the loss of more than 3 million due to negative growth in the economy. According to the Sri Lankan information, there were more than 360,000 job losses in the private sector by the end of April 2009. The job losses in Bangladesh and Nepal are also significant due to the slowing down of their leading sectors. The data on foreign employment also show declining trend in Bangladeshi and Sri Lankan as lower number of workers leaving for foreign countries for employment.

The rise in unemployment rate resulting from stunted economic growth due to global financial crisis has reduced income at the household level and increased their vulnerability to poverty.<sup>4</sup> Even if there were no job losses by definition, income loss due to the reduction in the amount of work is an important adverse effect of the crisis on households. In the formal sector, the workers have encountered reduction in the number of working-days week, over-time work, loss of financial incentives received

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<sup>1</sup> Author is the Chief of Research at Pakistan Institute of Development Economics (PIDE), Islamabad. The other contributors are Dr Selim Raihan, Dhaka University, Bangladesh, Dr. Sirimal Abeyratne, University of Colombo, Sri Lanka, and Dr Bishwambher Pyakuryal, Tribhuvan University, Nepal. The author acknowledges the helpful comments by Dr Rashid Amjad, Vice Chancellor, Dr Muslehu-Din, Joint Director, and Dr Ejaz Ghani, Chief of Research, all of PIDE. The comments of the participants of the ADB/SANEI workshops at Singapore and Dhaka, Bangladesh are also acknowledged. Last but not the least, the financial support by the ADB for the study is also acknowledged.

<sup>2</sup> These two are the major sectors and contribute 82 percent in the overall growth of Bangladesh.

<sup>3</sup> It is projected that world unemployment would increase by 20 million by the end of 2009 and the number of the working poor could rise by more than 40 million (ILO 2008).

<sup>4</sup> According to experts almost 45 percent households live in poverty in Pakistan.

for target achievement, loss of bonus, transport allowances and other benefits, shift in workers to lower ranks and activities within the same organization, and many other changes that have affected income. Informal sector is also indirectly related to the performance in the formal sector. Particularly the poor with irregular work and income streams find that average income per given period has reduced due to the reduction in the amount of work that they can find. The study is an attempt to find the link between global financial crisis and household vulnerability. The results can help in designing policies and programs to address the vulnerability issue. Four countries of the South Asian region i.e. Pakistan, Sri Lanka, Bangladesh and Nepal are chosen for the study due to their similarity in economic conditions and responses to the financial crisis.

The analysis is primarily based on data and information from the primary and secondary sources. Survey reports of the official statistical agencies such as the Census Organizations, Statistics Bureaus and the Central Banks on output, employment, and other aspects of economic performance are the main secondary source. The above mentioned organizations also carry out frequent official surveys representing the socioeconomic conditions of the country. The most comprehensive surveys which are used extensively in this study are the Household Income and Expenditure Surveys and the Labour Force Surveys. The analysis based on the secondary sources are supplemented by unpublished information and data collected from the various government and semi-government agencies in the relevant fields and the interviews with key informants.

In order to analyze the impact of global financial crisis on household vulnerability, a household vulnerability survey is carried out in Pakistan from 1000 households. A survey that identifies the tangible and intangible assets held by a family which can be used to determine the household's level of vulnerability to unforeseen events and its likelihood of being harmed by both endogenous and exogenous shocks is very important. Although a number of household surveys collect information on income, expenditure and other household characteristics but lack information needed to carry out vulnerability analysis in detail.<sup>5</sup> The Household Vulnerability Survey (VHS) is especially designed to collect such information to measure the vulnerability of household to risks.

The detailed and robust analysis of the impact of the crisis on household level is important to understand the dynamics of the crisis at household level. The study discusses the possible policy options to mitigate the impact of crisis at the household level along with the possibility of replicating the policy initiatives at the regional level that are aimed at addressing the plight of the vulnerable groups in different countries. The study also takes into account the regional economic cooperative initiatives at the SAARC level to mitigate the adverse impact of financial crisis on low-income households. It is good starting point in devising a stronger and coherent policy

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<sup>5</sup> Household surveys such as income and expenditure surveys, labor force surveys, demographic and health surveys, and Living Standards Measurement surveys, generally include demographic information (age, gender, schooling, family units) for household members and may include information on the activities being undertaken by household members. This may permit the identification of Household's activities in particular, but usually does not permit this identification in much detail.



response to alleviate the negative impact of economic shocks on the vulnerable families and groups at the national and regional level.

The study is organized in five sections. Following the introduction, the second section presents the transmission mechanism through which financial crisis as affected households. The third section focuses on the household vulnerability in the context of global financial crisis. Pakistan Household Vulnerability Survey and multinomial regression results are also discussed in the same section. The discussion on national and regional strategies in the context of social protection and possible areas of cooperation are discussed in section four. Conclusion and policy options are provided in the last section.

## SECTION II

### **The Global Financial Crisis and Household Vulnerability: The Transmission Mechanism**

The adverse impact of the global crisis on different sectors of the economy ultimately trickles down to the households with an increase in their vulnerability to poverty. Generally, the poor are more vulnerable to the crisis in spite of the fact that adverse effects are heterogeneous among different segments of the poor. As far as the impact assessment in general is concerned, the World Bank (2007) claims that a small shock can push a large number of households who remained just above the poverty line into poverty and who remained poor into extreme poverty. The issue is related to the loss of income, jobs and work at the households level due to the adverse impact of the crisis on the economy at macro level.

The economic slowdown in the US and Europe had negatively affected the demand for their imports. According to the World Economic Outlook (October 2008), world GDP growth has seen significant reduction in 2008 and this trend is going to continue for coming years due largely of the sharp decline in income growth of the industrialized economies. It is impossible for South Asian region to avoid economic slowdown due to its integration with the world economy. The evidence shows that a range of production sectors in these countries that are integrated more with the global economy recorded a contraction in their output in the 2009 than most of the domestic economic activities. These sectors included textiles, minor export crops, food processing, tea, and readymade garments. Slowdown is also recorded in services such as retail trade, hotels and restaurants and port activities. The fall in export demand, decline in export prices, inadequate exchange rate depreciation and increased competition for the available fewer number of orders. Employees have to bear at least part of the burden. Now we look at individual country's exports and see how these are affected due to the changes in the income of developed countries.

#### **2.1 Contraction in Economic Activity**

The decline in poverty and unemployment is ultimately related to the growth of the economy. The growth record of the South Asian region has been good and these countries maintained above 6 percent growth over a long period of time which helped them to raise income at household level. The global financial crisis has however adversely affected the economies of these countries and retarded growth (Table 2.1).



The worst hits were Sri Lanka and Pakistan with (2.2 and 2.4 percent growth in 2008-09). The slowdown in these economies has adverse implications for socio-economic indicators including employment, income and vulnerability to poverty. In the following sections, we will take the case of all these countries individually and study how the financial crisis has affected the households.

TABLE 2.1  
Economic Growth

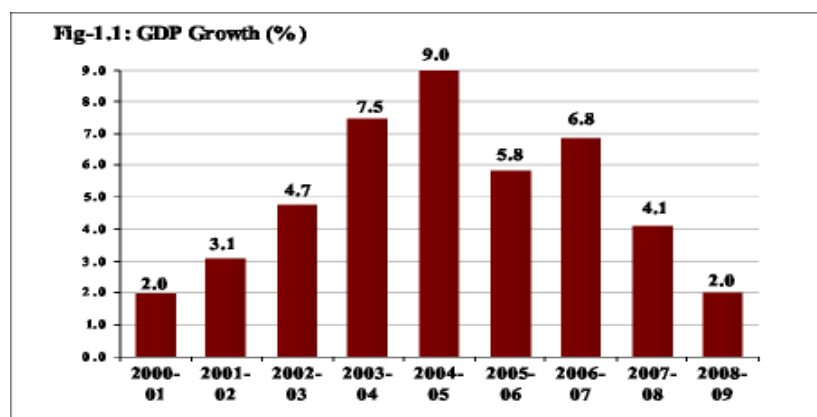
Years	GDP Growth			
	Pakistan	Bangladesh	Sri Lanka	Nepal
2005-06	5.8	6.5	7.5	3.7
2006-07	6.8	6.3	6.8	2.7
2007-08	4.1	5.6	6.0	5.3
2008-09	2.4	5.0	2.2	3.8

Source: Economic Survey 2008-09.

### Pakistan

Pakistan experienced low economic growth in 2008-09 after a long period of high growth from 1999-2008. The economic growth raised the per capita income to US\$1046 in 2008-09 from less than US\$500 in 2003-04. The decline in growth is the result of, beside domestic problems, decline in exports due to the global financial crisis.

Figure 2.1: GDP growth in Pakistan



The composition shows that services sector accounts for a big share (above 50%) in the GDP and therefore the economic performance depends largely on growth in that sector. The two commodity producing sectors, agriculture and manufacturing, combined constitute about one half of the GDP therefore developments in these two sectors also have repercussions for the growth. The data in Table 2.2 shows abnormally low (0.2 percent) growth in these two sectors in 2008-09. The agriculture sector has registered positive growth while manufacturing sector growth was

significantly negative. The manufacturing sector is composed of large and small scale sectors however the major contributing sector is large scale which is measured with actual data while growth in the small scale is assumed constant. The large scale sector is an important sector not for the overall economy but also for exports. The negative growth of 7.7 percent in this sector is one of the sources of reduction in exports.

TABLE 2.2  
Sectoral Growth during 2001-09

Sectors	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Commodity producing sectors	4.6	4.2	9.3	9.5	5.1	6.6	1.4	0.2
Agriculture	4.4	4.1	2.4	6.5	6.3	4.1	1.1	4.7
Major crops	3.5	6.8	1.7	17.7	-3.9	7.7	-6.4	7.7
Minor Crops	4.6	1.9	3.9	1.5	0.4	-1.0	10.9	3.6
Livestock	6.4	2.6	2.9	2.3	15.8	2.8	4.2	3.7
Fishing	3.6	3.4	2.0	0.6	20.8	15.4	9.2	2.3
Forestry	-5.2	-11.1	-3.2	-32.4	-1.1	-5.1	-11.5	-15.7
Mining and Quarrying	2.7	6.6	15.6	10.0	4.6	3.1	4.4	1.3
Manufacturing	4.8	6.9	14.0	15.5	8.7	8.3	4.8	-3.3
Large Scale Manufacturing	3.6	7.2	18.1	19.9	8.3	8.7	4.0	-7.7
Small Scale Manufacturing	7.8	6.3	-20.0	7.5	8.7	8.1	7.5	7.5
Construction	2.6	4.0	-10.7	18.6	10.2	24.3	-3.9	-10.8
Electricity and Gas Distribution	7.4	-11.7	56.8	-5.7	-26.6	4.7	-22.0	-3.7
Services Sector	4.6	5.2	5.8	8.5	6.5	7.0	6.6	3.6
Transport, Storage and Communication	5.1	4.3	3.5	3.4	4.0	4.7	5.7	2.9
Wholesale and Retail Trade	3.7	6.0	8.3	12.0	-2.4	5.8	5.3	3.1
Finance & Insurance	5.8	-1.3	9.0	30.8	42.9	14.9	12.9	-1.2
Ownership of dwelling	5.3	3.3	3.5	3.5	3.5	3.5	3.5	3.5
Public	2.8	7.7	3.2	0.6	10.1	7.1	1.2	5.0
Defence	6.5	6.2	5.4	6.6	9.9	7.9	10.0	7.3
GDP	4.6	4.7	7.5	9.0	5.8	6.8	4.1	2.0

The adverse performance in the export sector has a direct link to household poverty and unemployment. Exports during the fiscal year 2008-09 show a decline of 3 percent- shrinking to \$14.76 billion from \$15.22 billion last year. The textile industry which has remained the major driver of the export growth depicted sluggish performance and it registered negative growth of 9.3 percent. This downward trend in the textile sector is contributed by both significant fall in the unit value of almost all major textile items and supply constraints reflected through

negative growth even in quantity terms. The non-textile exports grew by 18.3 percent on the back of strong performers like chemicals and pharmaceutical (14.5%), engineering goods (70.1%), cement (75.7%). These items have very low weight and thus their huge growth could not impact overall quantum of the exports. The export of petroleum products felt the pinch of falling petroleum prices and they declined by 27.9 percent.<sup>6</sup>

The negative or low growth in large scale manufacturing and other labor intensive sectors such as construction, electricity and gas distribution, finance and insurance, and retail trade have adverse affect on the employment and income at the household level. Composition of employment shows the dominance of agriculture in generating employment by having 44 percent share in the total employment (Table 2.3). Social and community services, trade, manufacturing, and construction sectors are having 19.8, 14.4, 13.4 and 6.6 percent shares in the total employment respectively.

Table 2.3  
Percentage Distribution of Employed Persons by Major Industry

Year	Agri.	Mining, Quar.	Manuf	Const.	Elec, Gas,	Trade	Commu	Finan. Insit	Social	Not Defined
2001-02	42.1	0.1	13.8	6.1	0.8	14.8	5.9	0.9	15.5	-
2003-04	43.1	0.1	13.7	5.8	0.7	14.8	5.7	1.1	15.0	0.1
2005-06	44.1	0.1	13.7	6.2	0.7	14.3	5.7	1.1	14.1	-
2006-07	43.6	0.1	13.5	6.6	0.7	14.4	5.4	1.1	14.4	-
2007-08	43.3	0.1	13.4	6.6	0.7	14.4	5.4	1.1	14.4	-

Source: Labor Force Survey, various issues

The MTDF has projected that about 7.28 million new work opportunities will be created in the economy up to 2010 with an average of 1.45 million jobs annually. These projections were based on the sectoral GDP growth targets and an overall employment elasticity of 0.4 (Table 2.4).

Using elasticities of the MTDF and growth rate of 2 per cent in 2008-09, overall increase in employment is calculated as about half a million (0.49 million) and that too in the agriculture (0.17 million) and services sector (0.66 million) only. The projections based on the growth rates of -3.5% in the manufacturing sector indicate that there will be a net loss of 0.97 million jobs in the sector. Assessment of the textile

<sup>6</sup> Imports registered a negative growth of 1.5 percent in July-February 2009. The imports stood at \$ 23.8 billion as against \$ 24.1 billion in the comparable period of last year. The growth in imports reflects impact of substantial fall in oil and food imports in monetary terms and these two items were responsible for 80 percent of additional imports bill last year. Import compression measures coupled with massive fall in international oil prices have started paying dividends and imports witnessed marked slowdown during the last two months. The merchandise trade deficit improved by 6.9 percent and declined from \$12.5 billion in July-February FY08 to \$ 11.6 billion in July-February FY09.

sector shows that more than a million workers have lost their jobs so far.<sup>7</sup> With the growth of 0.49 million, total employment will reach at 49.58 million in 2008-09. Considering the actual size of labor force as 52.62 million, there is a deficit of 3.04 million jobs this year. This means unemployment rate has increased to 5.8%. The ground realities however show a different picture. A recent survey by a leading daily newspaper “The News” indicated unemployment of hundreds of thousands of people working in different sector of Pakistan’ economy due to the global economic meltdown (The News, 14 January 2009). The survey results show that about 285,000 workers lost their jobs in banking sector, 61,200 in computer industry, 115,000 in construction, 120,200 in electronic industry, 37,000 in media and publication while about 69,000 workers have been laid-off in telecom sector.<sup>8</sup> There are indications that textile industry, an important sector of Pakistan’s economy (almost 67% Pakistani exports consist of cotton and textile products), is also shedding employment due to lower export demand of Pakistani products. An assessment by industry experts show that more than one million workers have lost their jobs so far in this sector. Such a huge job loss in a leading sector is alarming because the sector employs more than 4 million workers; 2.2 million alone in Faisalabad city (Pakistan and Gulf Economist, January 2009). These indications suggest that unemployment rate in Pakistan has touched new heights and may have crossed the highest rate observed in 2001-02.<sup>9</sup>

A large number of Pakistani also goes to the other countries for employment. Pakistani manpower export has been mostly to the oil rich Middle Eastern countries including Kingdoms of Saudi Arabia, Kuwait, Oman and UAE. The official statistics show that about 4 million Pakistanis have proceeded abroad for employment during the period 1971-2009. The monthly data shows a slight decline in the number of workers going abroad for employment the decline is however not very significant (Table 2.5).<sup>10</sup> The exodus of laid-off expatriate workers back to Pakistan is yet to come. Experts believe that many Pakistanis returning from abroad were employed in the IT related occupations and software designing departments, while majority of construction labor working in Dubai was from India and Bangladesh and not Pakistan. That is the reason we did not see lot of Pakistanis returning.

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<sup>7</sup> The textile sector is very important for Pakistan’s economy as 67% Pakistani exports consist of cotton and textile products. More than 4 million workers are employed in this sector; 2.2 million of them in Faisalabad city only (Pakistan and Gulf Economist, January 2009).

<sup>8</sup> No details are available of the survey methodology and reliability of the results. However this clearly indicates that the major job loss is in those sectors which have strong linkage with international economic system.

<sup>9</sup> The unemployment rate reached at 8.1 percent in 2001-02 which was the highest in the last twenty years (LFS; various issues).

<sup>10</sup> There is no information available on return migrants therefore it is not possible to capture the volume of return migrants. However recently, Ministry of Labor, Manpower and Overseas Pakistanis have prepared National Emigration Policy which recommends collection of information on different aspects of migrants and return migrants.

TABLE 2.4  
**Employment Elasticity and Sectoral Growth Rates (Projections)**

Sectors	Employment Elasticity	GDP Growth Rates (percent)					
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Agriculture	0.24	4.0	4.1	4.2	4.3	4.4	4.5
Mining	- 0.32	5.5	5.6	5.7	5.8	5.9	6.0
Manufacturing	0.16	10.2	9.9	10.0	10.2	10.3	10.4
Construction	0.90	9.5	10.6	10.8	11.0	11.8	12.8
Elect & Gas	0.34	10.0	10.8	11.0	11.2	11.6	12.4
Transport	0.58	4.5	4.8	5.0	5.2	5.4	5.5
Trade	0.71	8.4	8.9	9.6	9.6	9.7	9.8
Finance	0.52	3.5	3.6	3.7	3.8	3.9	4.0
Services	0.92	5.1	7.0	7.3	7.5	7.7	7.7
<b>Overall</b>	0.40	6.5	7.0	7.1	7.3	7.5	8.0

Source: MTDF, Planning Commission of Pakistan, 2005

TABLE 2.5  
**Monthly Data on Pakistani Workers**

Month	2007	2008	2009
January	18,669	31,010	33,913
February	19,481	30,969	35,922
March	20,527	33,141	71,844
April	21,137	38,174	143,688
May	24,496	40,664	35065
June	23,424	39,032	37647
July	25,653	39,387	33600
August	29,542	38,401	33308
September	25,011	35,027	
October	26,320	38,180	
November	30,872	37,515	
December	21,979	28,814	
<b>Total</b>	<b>287,111</b>	<b>430,314</b>	<b>279,055</b>

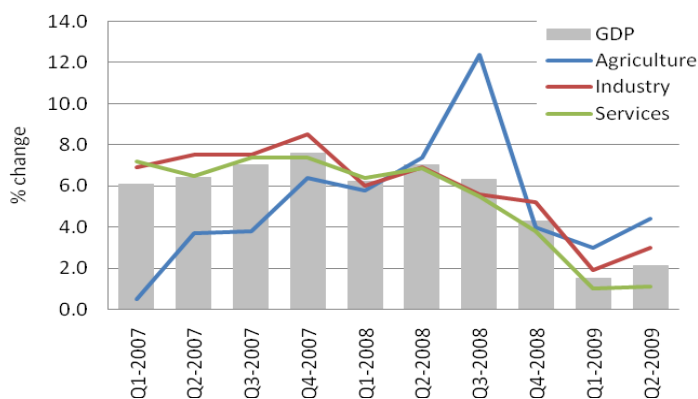
Source: Bureau of Emigration and Overseas Employment (BE&OE), 2009.

### *Sri Lanka*

Sri Lanka has maintained over 6 percent annual growth of real GDP, on average, over the past five years (2004-2008). The annual growth of industrial and service sectors remained significantly above that of agriculture until 2007. As the share of these two sectors account for over 85 percent of the total output, the growth of GDP moves closely with the growth of industrial and service sectors and, not with that of agriculture. The agriculture sector consists of two segments as export-oriented agriculture sector producing tea, rubber, coconut and other export crops, and domestic

agriculture sector producing rice, vegetable, fruit and other. The two sectors contribute roughly an equal share to total output of the country.

**Figure 2.2:** Quarterly Rates of GDP Growth (%) 2007-2009



The growth of real GDP showed a steady decline from 7.0 percent on the second quarter of 2008 to 1.5 percent in the first quarter with a slight increase to 2.1 percent in the second quarter of 2009 (Table 2.6). In consistent with the contraction in sectoral employment, the worst growth performance was recorded by industrial and service sectors. The industrial sector has grown only by 1.9 percent in the first quarter, and by 3.0 percent in the second quarter. The service sector has grown only by 1.0 percent in the first quarter, and by 1.1 percent in the second quarter.

Many sectors showing higher growth are related more to the domestic economy than to the world economy. The construction industry has performed better mainly due to remarkable increase in public investment in the recent past.<sup>11</sup> The agriculture sector continued to record an accelerating rate of growth until the third quarter of 2008. This was led by the government’s policy priority placed on domestic agriculture, the positive impact of the world food crisis on food production and the post-conflict revival of agriculture production in the Eastern province. Even against the global economic crisis, the agriculture sector has performed relatively well recording 3.0 percent and 4.4 percent rates of growth in respective first two quarters of the year. And this was led mostly by the expansion in domestic agriculture. Unlike domestic agriculture sector, most of the economic activities in industrial and service sectors are likely to be affected by the global economic crisis as they are integrated more with the global economy. When the sectoral growth performance of the first and second quarters of 2009 compared against the corresponding quarters of 2008, it shows that the economic activities integrated more with the world economy are severely affected by the crisis (Table 2.6). These sectors include tea, textile and apparel, other manufacturing sectors, and international trade.

<sup>11</sup> The government investment in infrastructure increased three times from LKR 78 billion in 2003 to 229 billion in 2008 or as a percentage of GDP from 4.3 to 5.2 percent (CBSL 2008: 60). These infrastructure projects included large-scale investment such as ports, airports, highways, coal power and hydro power, irrigation schemes as well as a series of rural infrastructure development projects.

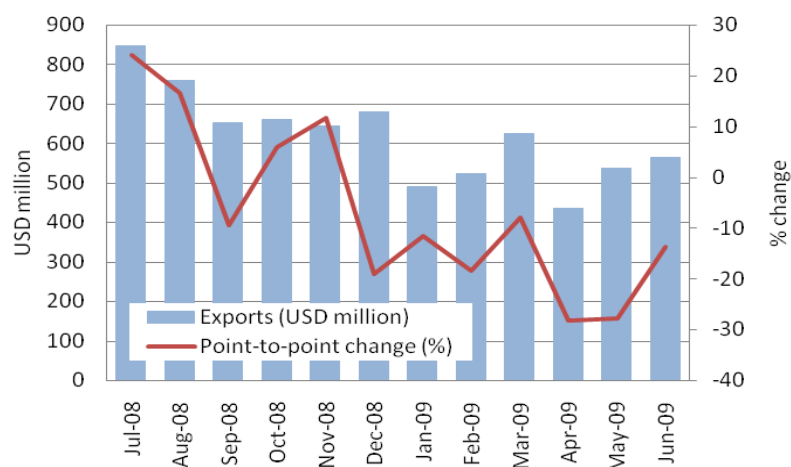
TABLE 2.6  
Sectoral Growth Performance, First Half of 2009

Sectors with worse performance	Q1-2009	Q2-2009	Sectors with better performance	Q1-2009	Q2-2009
Tea	-40.9	-11.7	Rubber	2.6	4.5
Minor export crops	-5.3	-2.0	Coconut	15.1	2.7
			Paddy	10.1	12.2
			Livestock	2.9	6.1
			Other food crops	6.2	7.6
Gem mining	-27.1	-6.0	Other mining	14.4	18.5
Export crop processing	-12.0	3.0	Food and beverages	4.7	5.6
Textile, apparel and leather	5.4	-8.9	Fabricated metal products, machinery and equipment	2.6	3.4
Chemicals, petroleum, rubber and plastic	0.2	-0.9	Cottage industry	2.9	2.8
Non-metallic mineral products	-8.7	-1.9	Construction	3.0	5.4
Import trade	-12.1	-15.9	Domestic trade	3.8	6.7
Export trade	-0.7	-12.0	Transport,	3.9	5.8
Hotels and restaurants	-16.7	-0.4	Post and telecommunication	10.1	10.5
Cargo handling and aviation	-10.1	3.0	Banking, insurance and real estate	3.8	5.4
			Government services	4.0	6.3

The global financial crisis appears to have produced devastating adverse impact on the country's export sector. During the period after July 2008, export growth has slowed down recording negative rate of growth in the first half of 2009 (Figure 2.3). The main export sector – textiles and garments – which account for about 43 percent of total exports has sustained around 6 percent in the third and fourth quarters of 2008 as well as in the first quarter of 2009, recorded a contraction by 13.5 percent in the second quarter of the year. Other manufacturing exports which account for one-third of total exports showed a growing contraction in all four quarters reaching the highest contraction by 41 percent in the second quarter of 2009. The main agricultural export crop – tea – has also recorded negative rates of quarterly growth since the fourth quarter of 2008. Total exports, which recorded a 10 percent growth in the second quarter of 2008 began to shrink by 2.8 percent in the fourth quarter of 2008. In the first two quarters of 2009, total exports have decreased by 12.6 percent and 23.3 percent respectively.



**Figure 2.3: Monthly Export Performance, 2008 – 2009**



**TABLE 2.7  
Point-to-Point Change in Major Exports (%), 2008 – 2009**

	Jul-Sep 2008	Oct-Dec 2008	Jan-Mar 2009	Apr-Jun 2009
Tea	28.3	-7.2	-20.8	-17.4
Rubber	20.7	2.8	-37.4	-16.3
Minor export crops	47.8	-26.0	-27.7	-35.6
Gem and jewelery	3.7	72.7	-20.6	-13.3
Textile and garments	5.5	6.6	5.9	-13.5
Other manufactures	-10.8	-17.0	-27.3	-41.0
Total exports	10.0	-2.8	-12.6	-23.3

**Source:** Export Development Board, Sri Lanka

The adverse developments in the economy have reduced the employment opportunities in the country. According to the information compiled, there were more than 360,000 job losses in the private sector by the end of April 2009. Furthermore, during this period about 50 factories including 35 firms in the apparel sector were closed down. The prevailing labor market conditions need to be taken into consideration in an analysis of job losses due to the crisis. First, due to the labor market rigidities constraining ‘worker-firing’ practice it is not easy for the firms to reduce the number of workers. The firms need to seek the approval of the Commissioner of Labour for lay-offs, voluntary retirement schemes (VRS) and terminating employment even in the case of closing down operations.<sup>12</sup> Therefore, firms tend to implement other means of cost-cutting practices without going for

<sup>12</sup> By the beginning of April 2009, the Commissioner of Labour has received 32 applications from the firms seeking approval to terminate employees temporarily or offer VRS, while most of these firms were in apparel, ceramics, leather and tourism sectors (*The Island*, April 3, 2009). However, firm level information suggests that many firms do not wish to adopt VRS, because it results in a loss of the ‘best employees’.

reduction in the number of workers. This point can be substantiated further by the opinion of the employers who consider VRS and retrenchment of employment as the last option for them, because its cost on the firm in terms of losing best employees, business and credibility can be even higher. Other cost-cutting practices adopted by many Sri Lankan firms include voluntary reduction in high salaries and allowances of the executive staff, reducing working time, reducing over-time work, shifting workers among different activities and reducing other operating costs.

Secondly, there was in fact a prolonged labour shortage in many production sectors in Sri Lanka, including the plantation sector.<sup>13</sup> As a result the firms having labour shortage did not encounter the problem of excess labour arising from the contraction in output. Thirdly, even though there were job losses, they were not reported in labour force surveys as 'unemployed' because they did not actually remain unemployed during the reference period. This also explains why different agencies claim significantly different numbers of job losses. Perhaps, for the same reason the number of employed in agriculture increased with the decline in employment in industrial and service sectors as reported in the *Labour Force Surveys* in the first half of 2009.

Interviews with working-class household members, employed in manufacturing firms confirmed the loss of income and employment and revealed how it has affected their households.<sup>14</sup> Many of the employees are from rural areas and are working in the firms located in Colombo and suburbs. Even though many of them have not lost their jobs, they encountered a substantial reduction in their income due to the changes within the firm affecting their employment. As a consequence, the workers attempt to reduce their expenditure and to change the expenditure patterns. Particularly, they have reduced the amount of money sent to their families, reduced the frequency of visiting home, and altered regular expenses such as those on food, clothing, transport, and medical care. The household impact of the crisis as such is equally applicable to the workers in the informal sector that experienced a reduction in the amount of work available for a given period of time leading to a corresponding reduction in income.

The absence of data on returnees who may have suffered from untimely terminated contracts, informal termination in the form of unpaid holidays, and the changes in work conditions of those continuing work abroad precludes conclusions on this issue. It is known that the Gulf countries in the Middle East and Malaysia in East

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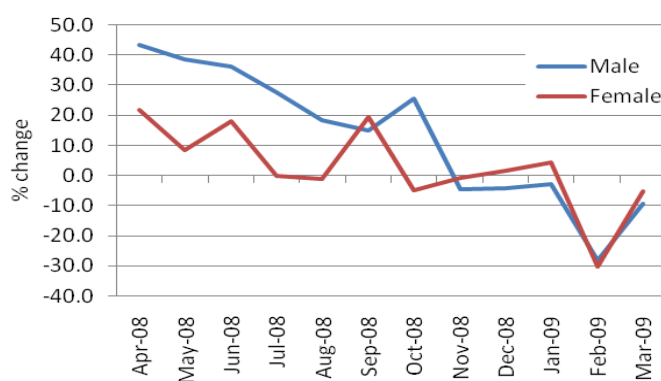
<sup>13</sup> According to the information from individual companies as well as from the Board of Investment (BOI), there is labour shortage in many firms. Some big companies producing for the export market conducted promotional campaigns to attract labour. According to the information from the Employers Federation of Ceylon (EFC), there is acute labour shortage of about 100,000 workers in the plantation sector and some 10,000 job vacancies in the Free Trade Zone (*Sunday Times*, June 28, 2009). Market mechanism does not appear to be capable of making short-term adjustments to the problem due to both economic and social factors. The wage rates in the plantation sector are determined by collective agreements. The wage rates in other sectors continued to remain higher than the minimum wages set by the Wage Boards. The prices and hence the profit margins, are governed by the competitive world market conditions constraining further hikes in wages. Apart from these economic factors, the young generations with increased levels of education have a tendency to seek job opportunities with higher social recognition.

<sup>14</sup> This information is based on a Household Survey of working-class families for the United Nations Development Programme (UNDP), Regional Centre, Colombo, 2009.

Asia – countries that hold the bulk of Sri Lankan migrant workers – are facing an economic downturn that has affected large industries specially the construction sector. Informal inquiries from 50-60 returnees showed categories of housemaids, skilled workers, professionals, hotel workers of all levels whose contracts had not expired but had been instructed to take a long holiday and await their recall. Most expressed optimism about being called back but were indefinitely without employment currently.

According to the information from the Foreign Employment Bureau of Sri Lanka, the point-to-point changes in departures for foreign employment recorded a declining trend throughout 2008/2009 compared with the previous year (Figure 2.4). Particularly, during the first three months of 2009, the number of male departures reported an average negative growth by 13 percent and that of female departures by 10 percent. This can be attributed largely to the contraction in foreign employment opportunities.

**Figure 2.4:** Point-to-Point Change in Migration for Employment, 2008 – 09



The fact that most of these were from low income households that were already vulnerable both domestically and abroad and had migrated to these jobs to get relief from deprivation for their families leaves these households more acutely vulnerable. They have in the first place lost the regular income from migration that they had relied on. Many had commenced on long term activities such as house building, paid educational courses for children, children’s school transport, commencement of advanced medical treatment that would have been unaffordable had it not been for migrant earnings. These were all now interrupted with no hope of being revived. The shrinking employment opportunities abroad appear to have added a new dimension since those from vulnerable groups now find it hard to get foreign employment opportunities.

There is no evidence of declining remittance inflows in the first half of the year. The absence of an immediate impact on remittances appears to lull the authorities making them tardy about seeking information on the job situation in these countries. From informal inquiries it appears that much of this increase could be attributed to remittances by the Tamil diaspora through formal channels compared with the informal channels that may have been preferred in the past, mainly for reconstruction of housing in the North and East. The functioning of banks in the north and East after the military operations could have enhanced remitting through formal routes.

*Bangladesh*

Although the economy of Bangladesh has become increasingly integrated with the global economy in recent years, the country's financial sector is not as globally integrated as its neighboring countries. Earlier this year, there were some debates on Bangladesh's projected GDP growth rate for FY 2009. Table 2.8 shows some of the estimates from international organizations such as the International Monetary Fund (IMF), World Bank (WB), Asian Development Bank (ADB) as well as the Bangladesh Bureau of Statistics (BBS).

TABLE 2.8  
**Growth Projections FY 2008-09**

Organisations	Projected rate %
Asian Development Bank (ADB)	5.6
International Monetary Fund (IMF)	5.0 – 5.5
World Bank (WB)	4.5
Bangladesh Bureau of Statistics (BBS)	5.88

The Bangladesh Bureau of Statistics (BBS) projection was the most optimistic of all because it considered the country's agricultural sector to be the most accurate barometer of overall economic strength, and this sector had been experiencing robust growth in 2009. Also there was no significant loss of agricultural output during that fiscal year as a result of natural disasters; in contrast to 2008 when two floods and Cyclone caused millions of tons of losses in food grains and other essential crops. Table 2.9 shows the growth rate of some sectors in 2009 as compared to the previous one.

TABLE 2.9  
**Growth Rates by Sectors, 2008 vs. 2009 (%)**

Sector	FY 2008	FY 2009
Overall GDP	6.19	5.88
Agricultural	2.93	4.81
Manufacturing	7.21	5.92
Wholesale & Retail	6.82	6.35
Construction	5.68	5.72
Electricity, Gas & Water Supply	6.77	4.52
Transport & Communication	8.55	7.67
Financial	8.89	8

**Source:** Bangladesh Bureau of Statistics

It can be observed from Table 2.9 that apart from agriculture, no other sector has shown significant growth and most of them had lower growth in FY 2009 than the previous fiscal year. Sectors where growth was lower were manufacturing, electricity,

gas and water supply, wholesale and retail trade, transport and communication, and the financial sector. The robust growth in agriculture is a positive development, as agriculture makes up around 16 percent of GDP and employs the most labour, particularly in rural regions. However, the sharp drop in the growth of the electrical, gas and water supply sectors as well as the manufacturing sector can be viewed as a setback in the country’s efforts towards industrialization. Infrastructure to supply power and water is woefully inadequate and continues to inhibit overall economic growth. The decline in the manufacturing sector is most directly tied to the global economic meltdown, as some export-oriented industries have been hit hard by the sharp drop in international trade.

The percentage change of export performance during July-June, 2008-09 over the same period of 2007-08 is recorded 10.31 per cent higher, where the percentage change of export performance over export target is -4.50 per cent. In June 2009, the merchandise export shipment stood higher than the month of May by US\$1.42 billion. Table 2.10 demonstrates the overall development of the export amount and the percentage change of export performance during July- June 2008-09 as compared to the same period of 2007-08. A gradual fall is observed in the growth rate in exports from 15.9 per cent to a negative 3.44 percent.

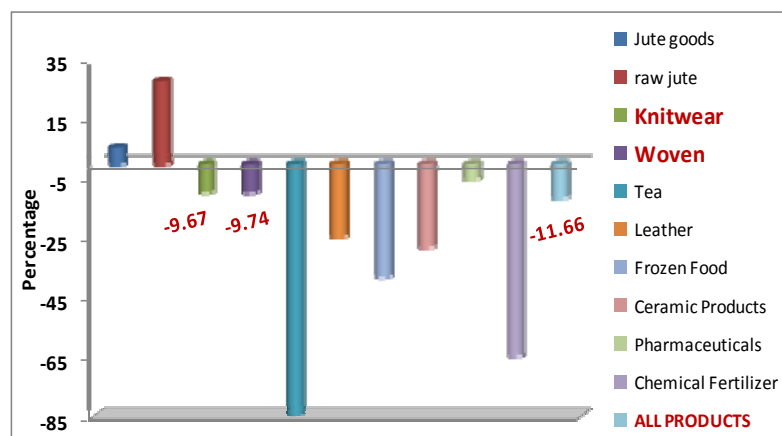
TABLE 2.10  
Export Performance over the Times for Bangladesh on 2007-08 and 2008-09

Export performance in different periods	Amount of export (US \$ in billion)	% change in exports
July-February 2008-09	10.35	July-Feb 2008-09 over
July-February 2007-08	8.93	July Feb 2007-08 = 15.9
July-April 2008-09	12.81	July-Apr 2008-09 over
July-April 2007-08	11.36	July-Apr 2007-08 = 12.76
July- June 2008-09	15.56	July-June 2008-09 over
July- June 2007-08	14.11	July-June 2007-08 = 10.31
July- August 2009-10 <sup>P</sup>	2.8	July-August 2009-10 over
July-August 2008-09 <sup>R</sup>	2.9	July-August 2008-09 = -3.44

Source: Export promotion bureau, Bangladesh

The overall growth performance of Bangladesh is predominantly depended on the growth performance of woven garments and knitwear as these two sectors contribute almost 82 per cent of the overall growth. Knitwear recorded -9.67 per cent growth over the last year’s performance while it was short of -7.86 per cent from the target of July-September 2009-10. Again, woven garments are suffering negative growth during July-September 2009-10 as compared to the same period of the preceding year. The growth rate was recorded -16.33 per cent short from the export target and -9.67 per cent downside from the preceding year. Sectors such as leather, frozen food, and tea, are suffering severe slump due to ongoing global demand plunge as well. Figure 2.5 shows the product wise performance of Bangladeshi export base, where most of the exportable items are now in the crisis zone.

**Figure 2.5:** Percentage change of export performance July-Sept, 2009-10 over July-Sept, 2008-09



Source: Export Promotion Bureau, Bangladesh

L/C openings for industrial raw materials, as a share of total L/C openings during July- August 2009, as compared to the same period of the previous year are showing a declining position. However, a significant increase in capital machinery and consumer goods is observed that would have direct and circuitous positive impact for attaining the industrial target and output. On the other hand, the fall of Petroleum & petroleum products (8.17 % in July-August 2009 and 11.45 % in July-August 2008) are indicating the lower international price impacted by ongoing global crunch while rise of consumer goods (15.12% during 2009 and 6.31% in the same period of 2007-08) are focusing the higher demand of seasonal extra consumption in Ramadan. However, Table 2.11 states that the sector-wise changes during July-August, 2009 over July-August, 2008 where total fresh LCs opening and outstanding LCs are showing the positive value though settlement of LCs is recorded at US\$ -598.73 million.

TABLE 2.11  
Sector Wise Changes during July-August, 2009 over  
July-August, 2008 (in million US\$)

	Fresh LCs opening	Settlement of LCs	Outstanding LCs at the end of the period
Consumer goods	+398.26	-34.58	+272.58
Intermediate goods	-39.92	+42.65	-101.13
Industrial raw materials	-224.22	-336.98	-114.92
Capital machinery	+23.36	-65.67	-113.48
Machinery for misc. industry	-43.07	+11.16	+85.68
Petroleum & petro. products	-128.58	-198.79	+54.10
Others	+155.01	-16.52	+725.73
<b>Total</b>	<b>+140.84</b>	<b>-598.73</b>	<b>+808.56</b>

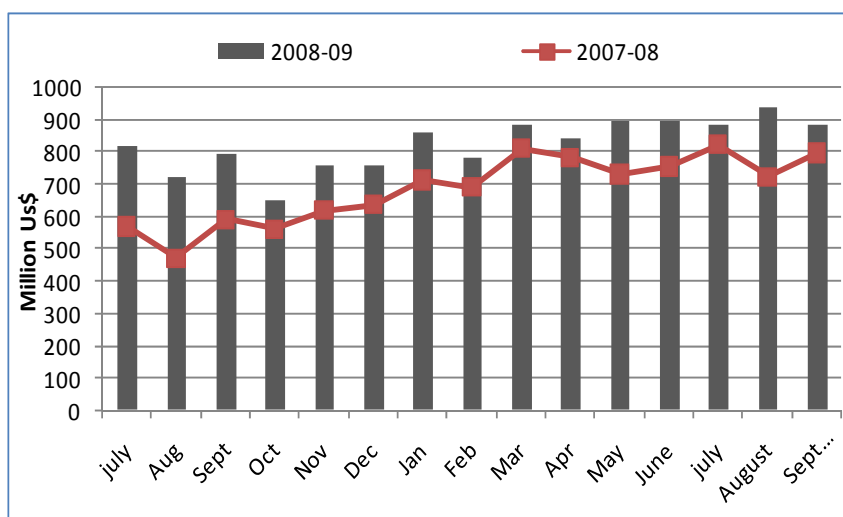
Source: Major economic indicators, Monthly updates, Bangladesh Bank, October 2009

For understanding the stance of remittance, total remitted amount of currency and higher growth rate of remittances are not sufficient as the numbers of exported workers to different regions from Bangladesh must have an important influence for further reserve money. According to the ministry of expatriates’ welfare and overseas employment the bureau of manpower, employment and training (BMET), a sluggish trend is found of total migrant people from January-October 2009. It may have severe adverse affect for the upcoming years.

In these 8 months (January-October 31, 2009) the numbers of overseas employments were 327,559 while in the same time of 2008 it was higher by 290,721 persons. It implies that almost 50 percent of the overseas employees were short in this time gap. On the other hand, the numbers of returning persons are also higher from the last year. According to the Bangladesh association of international recruiting agencies (BAIRA) Saudi Arabia and Malaysia are the two countries where numbers of returning persons are high enough. In 2008, the numbers of remit persons from Bangladesh to Saudi-Arabia was 132,124 while in the last eight months it was only 10,777. In case of Malaysia, the numbers of remit persons in 2008 was 131,762 and it was only 12,213 during January-August 2009.

Remittances in September stood at US\$ 887.92 million lowers than US\$ 937.91 million during August 2009 though it was higher by 11.80 percent compared to the figure in September 2008. On the other hand, total remittances receipts during July 2008 to June 2009 increased to US\$ 9689.26 as compared to US\$ 7914.78 million during the corresponding period of 2007-08. In Figure 2.6, inflows were higher in every month against the corresponding months of previous fiscal year. It implies that remittance inflows continue to exhibit robust growth with and expansion of 22.41 per cent of FY 2009 over the same period of the preceding fiscal year.

**Figure 2.6:** Monthly Inflow of Remittances, July-Sept 2009-10 over July-Sept 2007-08



Source: Major economic indicators: Monthly and weekly updates, Bangladesh Bank



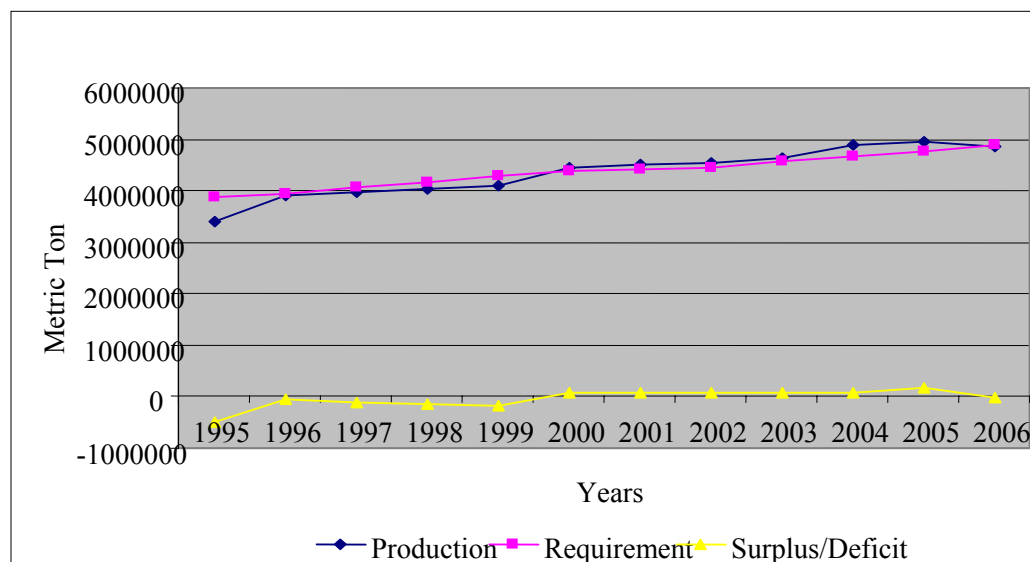
*Nepal*

Nepal's economy grew by 3.9 percent during 2008-09 and GDP expanded to Rs 960 billion. The GDP per capita touched US\$473 mainly due to increased remittances. Economic Survey 2009 shows dismal performances of industries and agriculture -- the mainstay of semi and unskilled rural as well as urban employment. During the year, agriculture grew by 2.1 percent, contrary to the growth of 4.7 percent recorded last year. Non-agriculture sector also expanded at low 4.8 percent, compared to 5.7 percent of last year. The drop caused the economy to grow at low 3.9 percent, which was mere about half of what the government had targeted to achieve for the year. The growth was also lower than 5.3 percent recorded a year before. At the grassroots level, low agriculture productions along with sharp rise in commodity prices -- highest of past two decades -- is feared to have raised the incidence of food insecurity in the country.

The growth is witnessed in real estate, construction and telecommunication services. The protracted load-shedding, coupled with labor stirs and general strikes, dragged down contribution of manufacturing sector by 0.50 percent to the GDP. Poor industrial security drove the new investors away, even as the existing manufacturing industries operated with highly underutilized capacity. This caused the situation of employment in the industrial sector to deteriorate. "Likewise, the lack of commercialization of agriculture too failed to create new employment opportunities in the rural areas," says the survey. The construction sector, which grew by 5.7 percent, nonetheless, helped to absorb unskilled and semi-skilled workers who joined the labor market during the year.

Globally, the food grain price has more than doubled since January 2006 and over 60 per cent of such increase occurred since January 2008 alone (WBG, 2008). Food price inflation is therefore, inevitable to increase the severity of food deprivation and malnutrition. The study conducted by FAO shows during the 1-year period ending in March 2008, wheat export prices increased by 130%, rice by 98%, and maize by 38% (FAO, 2008). Nepal had high levels of food insecurity even before the food and fuel price hikes as it relied heavily on imported food and fuel commodities. The weight of food expenditure is 44.1 per cent in rural areas and 35.8 percent in urban areas. With regards to the percentage share of the food expenditure to the total expenditure is 60.7 per cent for the first quintile compared to just 30.0 per cent for the last quintile indicating the fact that volatility of prices and supply of food affected more severely to the rural poor (Khanal, 2009). The average amount of food deficit is 47 kg per capita in mountain regions and 32 kg in the hills. The recent data available from World Food Program Nepal office reveals that Nepalese struggling with food security has reached to nearly eight million. The poor people are compelled to reduce consumption when prices are up due to global financial crisis. More than 60 per cent of the incomes in Nepal are spent on rice, maize, and wheat, incidence of poverty is highly sensitive to the changes in economic availability of these crops.

**Figure 2.7:** National Food Balance Sheet of Nepal



The economy of Nepal is integrated with global economic mainstream especially after the entry in WTO, the integration with world's troubled market is minimal. On the contrary, it is practically integrated with Indian economy indicating the fact that the level and extent of financial woes in Nepal depends on the success and failure of the safeguard measures taken in India. The Reserve Bank of India's standard regulation and meticulous supervision has been successful to maintain capital adequacy requirements by limiting the financial institutions to exceed given limits of exposure to stock markets. The moderate growth and manageable level of wholesale price index in India has helped price stability in Nepal to a greater extent as India constitutes 58 per cent of Nepal's overall global trade.

During the FY 2007/08, there were 368255 tourist arrivals from air. There has been 0.9% decline for the period 2008/09 bringing the number down to 277011. Excluding India, the decline in the number of tourists from other countries was 0.5% but it declined to 2.3% from India indicating the impact of crisis in sending country (NRB, 2009). This sector is witnessing a slowdown as Nepal Tourism Board reported 16 per cent decline in February, 2009 compared to the same period in 2008 last year. As most of the tourist who come to Nepal from Japan, Europe, USA, and Germany are facing severe financial crisis, it is believed that there will be major decline in the Number of international tourists; this sector could suffer the brunt of the economic slowdown during the fiscal year 2009/10. This sector has also become the victim of political factors. Tibet bound tourist through Nepal from third countries are facing trouble because of China's stringent conditionality in the movement of international tourists. Additionally, U.S.A. has not yet lifted its directives to US citizens by branding Nepal as unsafe destination. It also makes negative impact on the tourism movement from Europe, which constitutes almost 23 per cent out of the total tourist inflows in Nepal. Including America these tourists constituted almost 40 per cent in 2008 (MOF, Mid-term Budgetary Review 2009).

According to Department of Labor and Employment Promotion, Government of Nepal, the number of workers going abroad for employment had decreased by almost 23 per cent in 2008/09 as compared to 2007/08 (Table 2.12). This decline is observed in those countries which are more linked with global economy and affected by the global financial crisis such as Malaysia, UAE, Qatar and Saudi Arabia.

TABLE 2.12  
Outflow of Nepalese Workers (Excluding India) (In Number)

	Upto 2004	2005	2006	2007	2008	2009
Malaysia	154215	66,291	82,798	73,743	49,445	30,036
Qatar	106200	42,394	58,266	58,828	83,888	66,031
Saudi Arab	118324	13,366	18,261	36,916	42,214	39,406
UAE	51,082	12,726	15,441	24,588	43,828	26,890
Kuwait	7,074	1,789	655	2,093	1,459	1,608
South Korea	5,155	327	131	679	0	56
Oman	453	330	28	556	2,120	3,143
Others	11,219	2,473	6,463	16,961	18,150	20,613
Total	453722	139,696	182,043	214,364	241,104	186,783

Source: MoF and MoLTM

Nepal received US\$ 1,126 million as remittance in year 2005 through 753,622 emigrants (Development Prospects Group, NA). This means, on average, each individual remitted US\$ 124.5 per month. This amount is about 2.5 times higher than the monthly wage received by a worker with higher education or a trained worker<sup>15</sup> and about four times higher than average GDP per capita per month. Nepal Living Standard Survey 2003/04 (NLSS II) mentions that about eleven percent of total household income is from remittances. Similarly eight percent of total income of poorest twenty percent people is from remittance. More importantly, share of remittance in total household income among recipients is about 35 percent. Poor people's dependency on remittance is increasing every year as NLSS II suggest that the percentage of poorest households receiving remittances increased from 19% in 1995/96 to 29% in 2003/04.

<sup>15</sup> Data given in Biggs et.al (2000)

TABLE 2.13  
Contributions of Remittances

Remittance	2001/ 02	2002/ 03	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09
Total remittances (in Rs. Million)	4722	4754	5420	5859	6554	9769	10014	18301
Share of remittances to current a/c receipts excluding grants (in %)	33.6	37.8	36.6	38.2	46.7	45.3	50.8	-
Ratio of remittances to GDP (in %)	10.3	11.0	10.9	11.1	14.9	13.8	17.4	19.1

Source: Research Division, Nepal Rastra Bank, 2008

At present, the contribution of remittances to GDP is 17.4 per cent (NRB, 2008). Its share in total foreign exchange earnings increased from 36.6 per cent in 2003/04 to 46.7 per cent in 2005/06 at a time when corresponding share of exports dropped to 29.4 per cent in 2005/06 from 34.5 per cent in 2003/04 (NRB, 2007). The share of remittances in current account has also increased to 46.7 per cent from 29.8 per cent between 2005/6 to 2008/09. The 26 per cent growth in convertible currency reserves of Nepal's banking system is also credited to remittances (Ibid). It indicates remittance playing crucial role in savings, investment, growth, consumption, and poverty and income distribution (for details see NLSS II, 2003/04). The set back in this front would mean a great loss to the nations' economy and livelihood of the poor.

The flow of remittances has started to decrease due to global financial crisis. For instance, in mid-November to mid-December 2008, remittance income stood at 67 per cent but this growth rate declined to 65 per cent in mid-December 2008 to mid-January 2009 and 57 per cent in mid-February to mid-March 2009 (NRB, 2009). The world is now showing some signs of gradual economic recovery. If such recovery sustains, falls in agricultural prices and in the production and consumption of farm goods are likely to be moderate. The foreign employment opportunities will increase and the households are expected to receive more remittances. We know as the global crisis situation eases and lowers food prices, creates more employment opportunities, pressure is expected to ease on recession-hit consumers who have less money to spend.

## SECTION III

**Global Financial Crisis and Household Vulnerability****3.1 Introduction**

The economic impact emanating from the global financial downturn has hit hard at the poor segments of the society through a number of channels. The official estimates claim that poverty in the last eight years came down to 22.3 percent from 35 percent in early 2001. These figures were however not accepted at their face value and stirred discussion among various circles. It was claimed that the figures did not show a true picture of the situation and the real figures were much higher. Although the lack of full integration of Pakistan's financial markets with international markets is expected to prevent the country from the adverse impact getting imported, the low growth of domestic economy has affected the households more. During the economic boom, all efforts were concentrated on the demand management which pushed up the prices of various essential items and made the life of the common people difficult.

The rise in the food prices has affected the poor and middle class the most as they spend a major portion of their income on essentials of life. The recent report of Oxfam states that due to food inflation the number of poor increased from 60 to 77 million.<sup>16</sup> As a result of increased prices, people are forced to cut their expenditure; even on food. According to another estimate, the poorest one-fifth of the population spends 50-58 per cent of its income on buying cereal. A recent survey indicates that 32 per cent people have to cut their expenditure on food due to rise in prices.<sup>17</sup> The survey further shows that rising cost of food, fuel and electricity have put 56 per cent households in a vulnerable situation in the country.

Because the country has to comply with the IMF stabilization program, it is feared that brunt of adjustment would fall on the social sectors, in particular on education and health as happened in the past under IMF program resulting in reduced opportunities for the poor households and increasing their vulnerability. Rise in the interest rate under the IMF program is already hurting industry with increase in the cost of borrowing. This has set in the recessionary trend in the country and forced businesses to lay off labor resulting in higher unemployment and poverty level.

In the absence of reliable household vulnerability estimates, it is difficult to identify factors increasing household vulnerability. An attempt is made in the present study to fill the gap by estimating the household vulnerability from the latest data collected from 1000 Pakistani households. The study is going to increase our understanding of the micro level impact of global financial crisis. In the context of Pakistan, various studies are available which analyze poverty in a dynamic framework (see McCulloch and Baulch, 1999 and 2000; Mansuri and Healy, 2002; Kurosaki and Hussain, 1999; Jamal and Lohano, 2008). These studies are based on household panel

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<sup>16</sup> Food crisis in Pakistan: real or artificial, Oxfam 2008.

<sup>17</sup> Living Standard Measurement Survey (LSMS), 2008

data which is rarely available in developing countries. The data used for these study is not representative of Pakistan or of rural Pakistan.

The study by Ninno et al (2006), on the contrary used data from the Household Income and Expenditure Survey (HIES), which is nationally representative and traditionally used to determine poverty indices or aggregates in Pakistan. They utilized methodology developed by Chaudhuri et al (2002) to assess the vulnerability to poverty from cross sectional data, mainly due to the absence of panel data. The authors found that the estimates of vulnerability range between 47 to 67 percent, depending on the choice of the time horizon of the analysis and the threshold of vulnerability. About one third of the population is vulnerable due to a low level of resources, regardless of the time horizon, while for 24-34 percent of the population, vulnerability to poverty stems from a high volatility of consumption.

The objective of this chapter is to see how global financial crisis has affected the welfare at the household level and increased their vulnerability to poverty. The multinomial logit model is utilized to determine the factors increasing the likelihood of the households to vulnerability. The chapter is organized as follows: Section 2 presents the review of literature on vulnerability; Section 3 describes the dataset and methodology adopted for modeling household vulnerability; Section 4 presents the general poverty and vulnerability situation in Pakistan; Section 5 introduces the variables utilized in the regression model; Section 6 presents the results of the multinomial logit regression and Section 7 concludes.

### **3.2 Review of Literature**

It is difficult to determine the factors related with vulnerability and risk directly by simply asking a household whether or not it is vulnerable to risk due to these factors. Because the range of unforeseen occurrences is very broad, any individual household could be vulnerable to some events and not to others. Vulnerability must be measured through proxies which can be defined as those assets that will allow a household to manage risks which, in turn, can be defined as the household's ability to withstand shocks using the assets available to it. Assets can be tangible, such as land, labor capital, and savings, or intangible, such as social capital, access to employment opportunities and health and education. Both types of assets are important in being able to determine the vulnerability of households and individuals (Siegel and Alwang (1999)). In terms of determining the household's ability to cope with risks, the more assets a household has access to and the more diversified those assets, the better the household's ability to cope with the risks they face. Poor households have limited means of managing risk even though there are many different mechanisms and strategies. Some of the mechanisms and strategies are drawn from household resources, both financial and physical, and some are drawn from governmental organizations designed to provide assistance when households are unable to manage risks with their own resources.

It is important not only to know the assets that households possess, but also the attributes of those assets in order to determine the usefulness of a given asset for risk management. Attributes of household assets such as security of access, rights to use and/or transfer, interactions of the assets, liquidity and mobility, need to be

understood in order to fully exploit the information known about the asset. It is important to note that when using assets as a proxy for determining vulnerability and risk without panel or very good retrospective data analyses/studies, it is difficult to know the extent to which a specific asset is linked to protecting against vulnerability. This can sometimes be determined through qualitative observations. For example, if there is no land market, selling land will not be an option.

Risks often manifest themselves in the form of shocks to households. Shocks can be thought of in terms of predictable events (seasonal drought) and unpredictable events (accidents, natural disasters, economic crises). These events can be at the country level (economic crisis), community level (earthquakes) or at the household level (unemployment or death of an economically active household member). The household's response to those shocks can be measured in one of two ways. The first way requires the use of panel data. In the first round of the survey, households are asked about the assets they currently possess. In the second round of the survey the same households are asked about the assets they possess at the time of the second round and any shocks they may have experienced between the two rounds of the survey. Additional questions on the disposition of the assets will be included so that ex-post analysis can be done to see what the responses to the shocks were. The second way uses retrospective questions about the occurrence of shocks. Households are asked about the assets they currently possess. Households are also asked if they experienced any shocks during a time period in the past and what the household's reaction was to those shocks in terms of their behavior and the disposition of assets. This behavior can be some re-distribution of real assets or human capital.

Following on this, an assessment of vulnerability should examine the nature of the shock (Sinha and Lipton, 1999), how this is transmitted to the household as well as the coping mechanisms available at the household or community level (Holzmann et al., 2001; Moser, 1996, 1998; Shaffer, 2001; Dercon, 2001). At the same time, a methodological criterion is needed for identifying the households unable to secure their living standards in the face of a negative event<sup>1</sup>. The literature proposes two main approaches to household vulnerability.

In the first approach, vulnerability is defined as a downturn in consumption which can be attributed to an "uninsured exposure to risks" (Hoddinott et al. 2003) or, more generally, to the lack of effective coping mechanisms. Glewwe and Hall (1998) provide one of the earliest applied analyses of household vulnerability defined as variability in household consumption. They identify the socio-economic groups experiencing positive or negative changes in their consumption value between 1985 and 1990. The literature has also analyzed vulnerability by looking at the covariance between income changes and consumption changes (Amin et al. 2001). Vulnerability is estimated by looking at the response of household consumption to household-specific (idiosyncratic) income shocks. Higher covariance means higher vulnerability of consumption to income risk. The application of this methodology to the participants of micro-credit programs in Bangladesh shows that households below the poverty line have significantly higher average vulnerability than those above the poverty line.



This approach provides evidence of the incapacity of existing risk coping mechanisms to protect household consumption from income fluctuations (Hoddinott and Quisumbing, 2003). However, this literature does not provide information on what creates vulnerability. The study by Dercon and Krishnan (2000) linked consumption fluctuations to shocks experienced by rural households. The authors analyzed movements of household consumption along an 18 month dataset in Ethiopia. The authors found that shocks have a negative effect on household welfare: harvest failure is the most frequently quoted cause of hardship; other problems are related to public policy, labor and livestock. The second approach to vulnerability looks at the decline in living standards below a certain threshold, such as the poverty line. In both approaches, vulnerability manifests itself in terms of downward fluctuation in living standards. However, the second approach exclusively looks at the households whose decline is such that the poverty line is crossed. This definition of vulnerability excludes those households among the non-poor who are well- enough off so that when they experience the decline in welfare provoked by the shock they remain non-poor.

Within this framework, various methodologies have been proposed in literature. Chaudhuri et al. (2001) define vulnerability as the ex-ante risk of facing poverty in the future, conditional on the current observable household characteristics. They estimate the probability that a currently non-poor household will fall below the poverty line and the probability that a currently poor household will remain in poverty even if it does not experience any large adverse welfare shock. It must be specified that Chaudhuri et al (2001) utilize a cross-section survey. The utilization of a cross-section survey forces the establishment of very stringent hypothesis regarding the process generating household consumption. The authors assume the consumption generation process in which a mean-zero disturbance term captures idiosyncratic factors (shocks) that contribute to different per capita consumption levels for households that are otherwise observationally equivalent. The idiosyncratic factors that contribute to different per capita consumption levels are identical and independently distributed over time for each household. And the uncertainty over future consumption stems solely from the uncertainty about the idiosyncratic shock, *eh*, that a household will experience in the future.

Similarly, Christiansen et al. (2000; 2001) define vulnerability as the probability statement regarding failure to attain a certain threshold of well-being in the future. The methodology elaborated in Christiansen et al. (2000; 2001) requires the definition of the time horizon (set by the authors at one period ahead) and of the indicator of well-being (consumption). The household's ex-ante distribution of future consumption is obtained from a flexible heteroskedastic regression specification, which allows the prediction of the ex-ante mean and variance of future consumption for each household based on its current characteristics and assets. The methodology also requires the definition of the poverty line and of a probability threshold such that a person or household is considered vulnerable if its probability of shortfall exceeds the given threshold. Prichett et al. (1998) instead expand the analysis on a multiple time horizon and they define vulnerability as the probability of observing at least one episode of poverty in the future.

However defined, the identification of vulnerable household is a very delicate task. Because of the intrinsic uncertainty that features human life, it is impossible to find exact factors which push households into risk of falling below the poverty line or at risk of experiencing welfare downturns in the future. Nobody can predict what it is going to happen in the future: the size, the persistency and the severity of the negative event are unknown. Similarly, the household reaction and the capacity to cope with the shock are unpredictable. Most of the methodologies (Chistiaensen et al, 2000; Prichett et al, 1998; Glewwe et Hall, 1998) proposed for measuring household vulnerability identifies vulnerable households when they have already fallen into poverty or when they have already experienced welfare downturns. By doing so, assessing vulnerability does not lead to the identification of today's households at risk of experiencing poverty, but of those who were at risk of poverty who are currently in a poverty status.

In this chapter, an attempt is made to identify the factors pushing households into adverse situation. This way the occurrence of shocks can be modeled and their impact on household living standards explored. The paper uses multinomial logit model in estimating a household's vulnerability to poverty due to economic or demographic factors. This approach looks at "vulnerability to poverty" of the households which fall into poverty after the shock. This methodology produces relevant policy implications since it allows identifying factors and households categories that needs special attention.

### 3.3 Methodology and Model of the Study

The methodology of the study is based on two steps. In the first step, households are categorized into four different groups based on the monthly per capita consumption expenditure. This is the same approach adopted by the PSLM in defining four groups i.e. extremely poor, poor, vulnerable and non-poor groups. The cut-off points of these groups are defined as:

HH1= Extremely poor–Per Capita monthly consumption less than 50% of the Poverty line

HH2= Poor–Monthly expenditure required for 2250 calories

HH3= Vulnerable Per Capita monthly consumption greater than Poverty line but less than or equal to double poverty line expenditure

HH4= Non-poor Per Capita monthly consumption above the double of Poverty line

In the second step, Multinomial Logistic Regression (MNL) is used to ascertain the factors pushing households into the vulnerable situation. Although a number of other estimation techniques such as Ordinary Least Square, Logit or Probit Model are also available to be applied on the cross-section data but MNL is the most appropriate technique for our study due to its multi-dimensional focus. The model is explained in more detail in the following section.

3.1.1 Multinomial Logistic Regression

The family vulnerability is assessed through their spending on different goods and services. Assume that households are rational decision-making units who make choices between consumption of goods to maximize their perceived utility subject to budget constraints. The households utility function is

$$U = U(C_i, L_j) \quad i = 1,2,3 \dots n \quad \& \quad j = 1,2,3 \dots m \quad \dots \quad \dots \quad \dots \quad \dots \quad (1)$$

where  $C_i$  is household consumption of good “i” and  $L_j$  represents the leisure hours for family member “j”. The households maximize their utility subject to their budget given by

$$W_1L_1 + W_2L_2 + W_3L_3 + P_yY = M \equiv I + W_1\Omega + W_2\Omega + W_3\Omega \quad \dots \quad \dots \quad (2)$$

where  $W_1$ ,  $W_2$  and  $W_3$  are wage rates of family members, respectively,  $P_y$  is price of good consumed,  $Y$ ,  $I$  is non labour income,  $M$  is full income and  $\Omega$  is total number of hours available for work and

$$L + \Omega = T$$

where  $T$  is the total time.

Maximizing utility function subject to the constraint (2) yields the demand functions for leisure and the composite good of the household members.

$$\begin{aligned} L_i &= F_i(W_h, W_w, W_c, P_y; M) \quad i = 1, 2, 3, 4 \dots \\ Y &= F_y(W_h, W_w, W_c, P_y; M) \quad \dots \quad \dots \quad \dots \quad \dots \quad (3) \end{aligned}$$

Substituting these optimized demand functions into the utility function yields the indirect utility function for each household. Households maximize their indirect utility functions given prices and incomes. Following McFadden (1973), we assume that due to imperfect information, knowledge and perception of the households there are errors in the maximization process which makes household utility a random function. Following Maddala (1983), we suppose that our households face  $p$  situations for allocation of resources and define a latent variable  $V_k^*$  denoting the level of indirect utility attached with the  $k$ th situation. The variables  $V_k$  are given by

$$\begin{aligned} V_k &= 1 \quad \text{if } V_k = \text{Max}(V_1^*, V_2^*, \dots, V_m^*) \\ V_k &= 0 \quad \text{otherwise} \quad \dots \quad \dots \quad \dots \quad \dots \quad \dots \quad (4) \end{aligned}$$

where we also assume that there are no ties. The variables  $V_k$  are decomposed into a non-stochastic component,  $V_k(X_k)$  and a stochastic component,  $\epsilon_k$ , written as

$$V_k = V_k(X_k) + \epsilon_k \quad k = 1, 2, \dots, m \quad \dots \quad \dots \quad \dots \quad \dots \quad (5)$$

where  $X_k$  is the vector of attributes of the  $k$ th situation and  $\epsilon_k$  gives the errors in perception and optimization. More specifically, we assume that a typical household falls among four mutually exclusive and exhaustive alternatives. These include (i) poor and head unemployed, (ii) Poor and head employed, (iii) non-poor and head unemployed; and (iv) non-poor and head employed. We categorize these alternatives as HH1, HH2, HH3 and HH4, respectively. A household maximizes its utility function subject to the constraints imposed by each of the alternatives. The household, therefore, modifies its budget constraints to reflect respective costs and returns of each alternative. This results into four indirect utility functions. The household

compares the levels of indirect utility, which can be achieved from the various alternatives, and choose the alternative that maximizes the household's indirect utility. The probability that household  $i$  falls in  $k$ th category is the probability that the indirect utility from  $k$ th choice is greater than that derived from other alternatives

$$P_{ik} = P_r (V_{ik} > V_{ij}) \quad \forall j \neq k, j = 1,2,3,4 \quad \dots \quad \dots \quad \dots \quad (6)$$

This implies that the probability of household  $i$  falling in category  $k$  is the probability that the difference between the stochastic components is greater than the difference between the non-stochastic components.

$$P_{ik} = P_r (\varepsilon_{ik} - \varepsilon_{ij} > V_{ij} - V_{ik}) \quad \forall j \neq k, j = 1,2,3,4 \quad \dots \quad \dots \quad (7)$$

Assuming that the errors are independently and identically distributed with Weibull distribution then the difference between the errors has a logistic distribution [Greene (2007)] and the Multinomial Logit is the appropriate technique of estimation. The probabilities in the multinomial logit model are therefore given by

$$\text{Prob}(Y = j) = \frac{e^{\beta_j x_i}}{1 + \sum_{k=1}^J e^{\beta_k x_i}}$$

$$\text{Prob}(Y = 0) = \frac{1}{1 + \sum_{k=1}^J e^{\beta_k x_i}} \quad \text{for } j = 1,2,3,4. \quad \dots \quad \dots \quad \dots \quad (8)$$

where coefficients  $\beta$ 's are normalized to zero, and  $x$  is the vector of explanatory variables. The Multinomial Logit Model is identified by normalizing the coefficients of one of the choices to zero. Hence we normalize the coefficients of the alternative of poor and head unemployed (HH1) to zero.

To interpret the effect of the independent variables ( $x$ ) on the probabilities of each category, we calculate partial derivatives as

$$\frac{\partial P}{\partial X} = P_j(1 - P_j)\beta_{xj} - \sum_k P_j P_k \beta_{xk} \quad \text{where } j, k = 1,2,3,4. \quad \dots \quad \dots \quad (9)$$

where  $P$  is the probability of falling in each alternative. The log of likelihood function is derived by defining for each household,  $d_{ij} = 1$  if households  $i$  falls in alternative  $j$ , and 0 if not, for the possible outcomes. Then, for each household  $i$ , one and only one of the  $d_{ij}$ 's is one [Greene (1992)]. The log likelihood function is given by

$$\ln L = \sum_i \sum_j d_{ij} \ln \text{Prob}(Y_i = j) \quad \dots \quad \dots \quad \dots \quad \dots \quad (10)$$

Our model is based on the assumption that the four categories of household are independent of each other. The model will help us in identifying factors which increase the vulnerability of the families and put them in a situation where they have to solicit protection.

### 3.3 Pakistan Household Vulnerability Survey

The data for the analysis of household vulnerability is collected from a sample of 1000 randomly selected Pakistani households. The size of the sample limits our ability to disaggregate results to small geographic levels. The village list published by

the population census organization in 1998 was taken as sampling frame for drawing the sample for rural areas. For urban areas, sampling frame developed by the Federal Bureau of Statistics (FBS) was used. In this frame each city/town has been divided into enumeration blocks of approximately 200 to 250 households. Cities having population of half a million or more such as Karachi, Lahore, Faisalabad, Rawalpindi, Multan, Hyderabad and Peshawar were treated as self-representing cities (SRCs). Islamabad and Quetta, being federal and provincial capitals respectively, were also considered as the SRCs. Each of these cities constituted a separate stratum and also further sub-stratified according to low, middle and high-income groups. The remaining urban population in each division of all the four provinces was grouped together to form a stratum. A division thus was treated as an independent stratum. Rural population of each district in Punjab, Sindh and NWFP was grouped together to form a stratum. For Balochistan province a division was treated as a stratum.

Two stage stratified sample design was adopted for the Pakistan Household Vulnerability Survey (PHVS) 2009. Enumeration blocks in urban domain and Mouzas/Dehs/villages in rural domain were taken as primary sampling units (PSUs). Households within the sampled PSUs were taken as secondary sampling units (SSUs). Within a PSU, a sample of 6 households from urban domain and 10 households from rural domain was selected. As noted above, the main objective of the PHVS-2009 was to examine the impact of global financial crisis on poor and vulnerable groups. The survey was carried out in low income PSUs so that the impact of shock on vulnerable households is captured properly.

Distribution of the PHVS-2009 sample by province with rural/urban breakdown is reported in Table 3.1. The PHVS-2009 survey was carried out in 200 PSUs; 127 from rural areas and 73 from urban areas. Table 3.1 shows the distribution of sampled households covered during the PHVS-2009. A total of 1000 households were selected from selected rural and urban PSUs of all the four provinces. Keeping the share of rural areas in total population; 635 households are selected from there which are more than the households selected from urban areas (365).

TABLE 3.1

**Distribution of the Sample PSUs and SSUs with their Urban/Rural and Provincial Break-down, PHVS-2009**

Province	Number of sample PSUs			Number of sample SSUs		
	Total	Rural	Urban	Total	Rural	Urban
Punjab	89	59	30	445	295	150
Sindh	56	36	20	280	180	100
NWFP	35	20	15	175	100	75
Balochistan	20	12	08	100	60	40
Pakistan	200	127	73	1000	635	365

A questionnaire is designed to collect information on household's different activities including income, consumption and assets. The questionnaire was divided into five major sections consisting of household roster, labour force and employment,

income and expenditure, savings and assets and adverse shocks to households.<sup>18</sup> The set of questions pertaining to shocks that family has experienced and the response to that shock helps in analyzing the vulnerability of the households to shocks. Before launching the survey, the questionnaire was tested in both urban and rural areas. Pre-testing of the questionnaire provided an opportunity to understand the field problems and shortcomings of the questionnaire. In general its structure was found to be good with minor problems in some parts of the questionnaire such as household roster, employment and household assets. The field teams were trained in Karachi and Islamabad before sending them in field. The filled questionnaires were edited and data was entered in the SPSS program. An extensive data cleaning was also carried out before analyzing it.

As with all survey data, there are limitations on the analysis that can be done with the Household Vulnerability Surveys. Most importantly is the sample size of the survey. When a survey has a long complicated questionnaire, there is often a trade off needed between the length of the questionnaire and the number of respondents in order to keep costs as reasonable as possible. This tradeoff for obtaining the detailed information may be to have a smaller sample size. Small sample sizes, however, are not necessarily an obstacle to analyses. They provide the ability to limit non-sampling errors such as refusals, respondent fatigue, and interviewer errors which cannot be predicted and for which statistical tests do not exist. The sample of the study is therefore enough to generate good estimates.

Beside cost, the time is also a critical factor to collect information from a large number of people. If there are a large number of interviews to be done in a small time period, the emphasis is often to get a response from any household member who is available at the time the interviewer is at the dwelling. This is not the ideal solution to gather information on household vulnerability but best alternative under the given conditions. Moreover, the random sampling technique is used so that more reasonable results are obtained in a limited time frame.

### **3.5 Poverty and Vulnerability in Pakistan: Some Stylized Facts**

Pakistan has experienced a sharp decline in the poverty during the period 2000-07. But situation changed drastically afterwards mainly due to the inflationary pressures. The trends in the prices of essential items during 2007-08 show steep rise especially of the goods consumed by poor household such as wheat, flour, rice, edible oil, vegetables and pulses. A price hike of 200 percent is witnessed of palm oil; 150 percent of wheat, while over 100 percent of oil in the international market. Besides, economic growth has slowed down considerably during the last three years. Two main sectors, the industry and construction, have contracted due to the slowdown in the domestic economy, energy shortage and global recession. These developments adversely affected the local and foreign job markets and absorbing capacity of the economy and points towards a strong likelihood of a sharp increase in the poverty incidence in Pakistan.<sup>19</sup>

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<sup>18</sup> The questionnaire is provided in Appendix 1.

<sup>19</sup> The poverty estimates based on the Pakistan Social and Living Standard Measurement (PSLM) Survey data by two public sector agencies (Centre for Poverty Reduction and Social Policy

The Pakistan Social and Living Standard Measurement (PSLM) Survey established a poverty line in 2005-06 which amounts to Pak Rupees (PRs) 944.47 per person per month. The extreme poverty line (half of the poverty line) in this country amounts to PRs 472.23 per person per month. The poverty line is based on the household consumption and according to the estimates about 1.0 percent population was living in extreme poverty in Pakistan in 2005-06 while 23.5 percent were living below the general poverty line (PSLM, 2005-06). At the same time, significant regional differences in poverty incidence were present: 13.1 percent population in urban areas compared to 27 percent in rural areas. There are no official estimates available after 2005-06 however the World Bank has recently estimated poverty by using same methodology adopted by Center for Poverty Reduction and Income Distribution. Their estimates indicate that poverty head count ratio could rise to over 25 percent by 2009-10. The estimates based on the data collected for the present study and on inflation adjusted poverty line of PRs.1290.52 per person per month in 2009-10 shows 31 percent population living below poverty line.

In Pakistan, together with the poverty figures, terms like “vulnerability” and “risk of poverty” often recur in the social policy debate. It is assessed that a sizeable proportion of the population faces the risk of falling into poverty. Therefore “the percentage of population classified as poor on the basis of the current consumption levels is only a fraction of those in Pakistan who must worry about, and struggle to avoid becoming poor at some point in the relatively near future” (World Bank, 2003). There is something more than the official poverty figures to be said on the household exposure to shocks, their weak endowment of productive assets, the uncertainty of income, etc.

Households are defined vulnerable whose per capita consumption is slightly above the poverty line (PES, 2008). A vulnerability line, set at 100 percent above the general poverty line, is drawn and a household is defined vulnerable if its per capita consumption falls in the interval determined by the two lines. The households termed vulnerable if they fall between PRs 1290.52 and 2581.04. Those having per capita consumption above PRs 2581.04 are termed as non-poor. This approach is highly useful in the identification of the vulnerable households by simply counting the number of households falling in the pre-determined interval. The data presented in table 3.2 shows that about 56 percent population in 2009 is living in the vulnerable situation.

However, the counting of the households whose living standard is slightly above the poverty line is a measure of the welfare distribution rather than household vulnerability. This way of looking at vulnerability identifies the vulnerable without explaining why they are vulnerable. In other words, why should policy-makers look at those households who are slightly above the poverty line? Why does being slightly above the poverty line matter? These questions are of central importance because households defined as vulnerable according to the Pakistan Economic Survey

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Development (CPRSPD) and Planning and Development Division) show a sharp decline in the headcount poverty ratio for 2007-08. However, these findings appear to contradict other assessments conducted subsequently, and which better reflect global and domestic price developments after June 2008.



approach, might count on a quite secure livelihood system although proximal to the poverty line. Therefore the data was further analyzed to find out the transmission mechanism as well as factors which global financial crisis has affected and put households in the vulnerable situation.

TABLE 3.2  
Population Under Various Poverty Bands

Poverty Status	Year 2004-05 Poverty Line= Rs 878.64	Year 2005-06 Poverty Line= Rs 944.47	Year 2009 Poverty Line= Rs 1290.52
Extremely Poor consumption <50%	<Rs 439.32 1.00%	<Rs 472.23 0.50%	<Rs 645.26 5.4%
Poor	<=Rs 878.64 22.9%	<=Rs 944.47 21.8%	<=Rs 1290.52 25.3%
Vulnerable >100%<200%	878.64-Rs 1757.28 55.5	Rs 944.47-1888.94 56.8	Rs 1290.52-2581.04 56.2
Non-Poor >200%	>Rs 1757.28 20.50	>Rs 1888.94 20.90	>Rs 2581.04 13.1

Source : Pakistan Economic Survey 2007-08 and PVS 2009

The data shows that two important factors which affected the income and expenditure at the household level were the employment and inflation. These two shocks are the main source of household vulnerability as almost all household having monthly per capita consumption of less than PRs 2000 were hard hit by them. Most of the households are having the employment as their main source of income. The data shows almost 40 percent families experienced unemployment of one or more member due to the financial crisis and down turn of the economy. This shock was more pronounced for low skilled and illiterate families. The impact of this shock for about one fifth of the sampled families having only one employed member was devastating and pushed them either into poverty or increased their vulnerability to poverty.

Similarly the impact of the inflation shock was also disturbing for almost 82 percent of the households surveyed in the study. These families used to spend 50-60 percent of their income on essential food items. The overall general inflation of 12 and 22 percent in two consecutive (2007-08 & 09) years badly affected the household budget and created difficult situation for poor families. A number of families cut down their food expenditure to adjust to the inflation. This increased their vulnerability to poverty by eroding their assets.

There are a number of safety net schemes available in the country to provide assistance to the vulnerable families. These include the Zakat and ushr, Bait-ul Maal, Social Security, Employees Old Age benefit etc. Recently government launched Benezir Income Support Program (BISP) especially for helping people fell into the poverty or vulnerable situation due to the global financial crisis and slowdown in the domestic economic activity. Families affected by this crisis receive PRs1000 per month under this program. In the first phase, a total of seven million families were selected from all over the country to receive compensation. The data collected for the study contains the information on different safety nets programs including BISP.

Table 3.3 shows the average monthly consumption expenditures of families receiving compensation under BISP along with those not receiving any help. A total of 294 families (out of 1000) in our sample are receiving income support. The data clearly indicates that families with BISP assistance are able to increase their monthly expenditure on food items. This evidence supports the implementation of such cash transfer programs in different countries of region to mitigate the impact of global financial crisis at household level.

TABLE 3.3  
Average Monthly Per Capita Consumption Expenditure of Families with and Without BISP Assistance

Poverty Status	Families with BISP assistance	Families without BISP assistance	Total
Poor	Rs 1369.75 (294)	Rs 920.61 (13)	Rs 1164.26 (307)
Vulnerable	-	Rs 1578.34 (562)	Rs 1578.34 (562)
Non-Poor	-	Rs 2786.09 (131)	Rs 2786.09 (131)
Total	Rs 1369.75 (294)	Rs 1968.49 (706)	Rs 1874.64 (1000)

Source: PVS 2009

In the following section, factors increasing likelihood of families falling to vulnerable situation are estimated by using Multinomial Logit Model.

### 3.6 Estimates of Multinomial Logit Model

The dependent variable for the analysis is categorical having four categories i.e. HH1= poor and head unemployed; HH2=poor and head employed; HH3=non-poor and head unemployed and HH4= non-poor and head employed. The poverty status of the household is derived from the household per capita monthly consumption expenditure. The four categories adopted in the study are same as being used in the official documents. These include two poor and two non-poor categories.

There may be a number of economic and social factors leading households to different situations such as poverty, vulnerability and non-poor status. The primary motivation of this study is to identify factors which may be responsible for pushing households to one of the above situations. We classified the factors included in the regression into Demographic Characteristics, Education, Employment and Location. A detailed description of these variables is given below.

#### 3.6.1 Demographic Characteristics

This set of variables includes the characteristics of the household in terms of size, composition, and dependency ratio. Three categories are identified according to the age of the household members: below 15 years old, 15-60 years old and above 60 years old. For individuals aged between 15 and 60, a gender distinction is applied. The household size and dependency ratio (ratio of household members below 15 and

above 60 years to household size) is included in the model as independent variables. The regression also explores the connection between household vulnerability and the gender of household head. A dummy variable is introduced to indicate whether the household head is married and living with spouse.

### *3.6.2 Human Capital*

The regression includes variables indicating different education attainments of household members older than 14 years old. This is due to the investment in education made by household adults which cannot be influenced by the current household living standards because it dates back to years ago. The first education variable in the regression considers the number of adult members who never attended school and unable “to read, write and do simple arithmetic with understanding” over total adults in the household. The second variable identifies the adult members who never attended school or never attained qualifications but that are capable of reading and writing. The investment in human capital is analyzed by looking at the number of adults with primary, secondary and higher level of education as well as those who received training (vocational /technical). Following Datt et al (2000) and others, the education variables are differentiated by gender.

### *3.6.3 Employment*

This set of variables refers to household employment and livelihood characteristics. The presence of unemployed in the household is represented by the number of unemployed over total adults in the household. These unemployed include both who were employed in the domestic or foreign market. The case of individuals employed as informal labor is represented by two variables. The first includes household members engaged in agriculture activities such as owner cultivators, unpaid family helpers who support other members in their work and those who perform other activities such as sale of agricultural goods and other unspecified services. These are defined as agricultural occupation. The other category, informal laborers, includes persons working for private enterprises not registered with the labor department. This categorization is in accordance with Bernabe (2002) which proposes a distinction between unregulated and unregistered activities whose main purpose is to meet basic needs and activities which are concealed to avoid taxes and regulations. These two aspects are very relevant in Pakistan where enterprises attempt to escape registration and legislation procedures while households and individuals turn to small scale income activities to generate livelihoods in absence of formal employment opportunities. Formal labor is described through two variables: the first identifies household members working in public enterprise, institutions and organizations. The second identifies those working for private sector employers registered with labor department and regularly receive pension contributions. Another variable represents self-employed; the owners or co-owners of enterprises or small-businesses. Finally, a variable is derived to represent the number of workers employed in the foreign labor market over total household size.

### 3.6.4 Location

Besides introducing a distinction between rural and urban areas, three provincial dummies are also included in the model to adequately capture the provincial variation in vulnerability analysis across the country. The set of three provincial dummies correspond to Punjab, Sindh and NWFP. In the regression, the excluded province refers to Baluchistan which is less developed than other parts of the country.

### 3.6.5 Regression Results

The estimated parameters for each category of household, i.e., HH1 – HH4, are obtained from single maximum likelihood multinomial logit estimation. Table 3.3 reports the logit coefficients with statistical significance represented by the \*.

### 3.6.6 Human Capital

The estimated results show positive and significant coefficients of human capital variables for HH3 and HH4 categories showing the importance of human capital in the economic well being of the family.<sup>20</sup> The results indicate that the likelihood of being in a non-poor household increases as compared to HH1 (poor and head unemployed) households with investment in education and training of both males and females. The positive and highly significant coefficient of training variable for non-poor households indicates that probability of household to be non-poor increases with the presence of individuals having some type of training. The coefficient has negative but statistically insignificant coefficient in poor category showing no effect of training on poor households. The only education variable that has significant negative relationship with household well-being relates to illiterate individuals who do not have reading, writing and arithmetic skills. The coefficient is significant at the 1% confidence level in all three categories however the magnitude of the coefficient declines as we move from poor to non-poor households. This suggests that illiteracy is a concern especially for vulnerable and poorer population strata more than the other groups.

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<sup>20</sup> The magnitude of the education coefficients is enough to make the argument that investment in education by household is a rational choice in determining their future well being.

TABLE 3.3  
Multinomial Logit Regression Results

Variable Name	HH4	HH3	HH2	HH1
Constant	-8.345** (0.144)	-7.039** (0.634)	-5.914** (0.497)	-5.830
<b>Demographic Characteristics</b>				
Age of household head	0.006** (2.493)	0.003* (1.815)	0.003 (1.312)	0.003
Age Square of household head	-0.000** (-2.682)	-0.000 (-1.177)	-0.000 (-0.211)	-0.000
Household size	-0.192 (0.265)	-0.079** (-6.220)	0.0143** (2.622)	0.239
Dependency ratio	-0.075** (-8.080)	-0.0897** (-5.023)	0.1046** (4.046)	0.028
Dummy, 1 if Married spouse present	0.132 (0.199)	0.147 (0.411)	0.213 (0.003)	0.203
Dummy, 1 if hh head is a women	-0.454** (-7.794)	-0.490** (-4.640)	0.877** (5.544)	0.113
Dummy, if own a house	0.233** (4.201)	0.293** (6.201)	-0.423** (-3.201)	0.389
<b>Human Capital</b>				
Ratio of Ill. and no RWA with hh size	-0.011** (-3.160)	-0.109** (-4.137)	-0.231** (-6.203)	-0.480
Ratio of ill ad. but RWA with hh size	0.0134 (0.036)	0.296 (0.225)	0.193 (0.044)	0.139
Ratio of Male ad. with primary ed. with hh size	0.550** (4.454)	0.1850** (6.038)	0.0324 (0.013)	0.068
Ratio of Fem. ad. with primary ed. with hh size	0.5830** (0.076)	0.4730** (0.053)	0.3880** (0.049)	0.550
Ratio of Male ad. with secondary ed. with hh size	0.054** (5.075)	0.065** (6.031)	0.237** (6.051)	0.120
Ratio of Fem. ad. with secondary ed. with hh size	0.150** (4.045)	0.282** (3.038)	0.341** (3.132)	0.322
Ratio of Male ad. with higher ed. with hh size	0.4900** (10.025)	0.567** (12.022)	0.430 (9.103)	0.038
Ratio of Fem. adults with higher ed with hh size	0.446** (7.021)	0.2180** (8.015)	0.192** (3.265)	0.043
Ratio of trained workers with hh size	0.322** (6.02)	0.471** (4.015)	0.542** (8.265)	0.251
<b>Employment</b>				
Ratio of public employees with hh ad.	0.163** (8.906)	0.385** (7.163)	0.002 (0.03)	0.012
Ratio of formal private employees with hh ad.	0.192** (8.265)	0.179** (12.318)	-0.021 (0.18)	-0.297
Ratio of overseas employees with hh size	0.413** (6.048)	0.1510** (4.046)	0.001 (0.02)	0.000
Ratio of self-employed with hh adults	0.1052** (6.420)	0.192** (8.265)	0.079** (6.220)	-0.0143
Ratio of Agr. workers with hh adults	0.0143 (0.228)	0.023* (1.812)	0.078** (2.941)	0.0248
Ratio of inf. employees with hh adults	0.132 (0.199)	0.147 (0.411)	0.213** (4.003)	0.203
Ratio of unemployed with hh adults	-0.075** (10.026)	-0.297** (9.189)	-0.367** (10.101)	-0.475
<b>Location</b>				
Dummy, 1 if living in urban areas	0.862** (3.328)	0.470** (2.742)	-0.963** (2.614)	0.293
Dummy, 1 if living in Punjab	0.122** (7.190)	0.167** (6.031)	-0.2720 (1.180)	0.266
Dummy, 1 if living in Sindh	0.0143** (5.228)	0.239** (4.121)	-0.0783** (3.014)	0.0248
Dummy, 1 if living in NWFP	-0.032** (-8.447)	-0.004** (-3.178)	-0.017** (-0.135)	-0.019

Note: \*\* indicates significant at the 5 percent level and \* indicates significant at the 10 percent level.

### 3.6.7 Demographic Characteristics

The stage in life cycle of the household head is expected to have a significant effect in the economic well being of the household. The older the head of household, the more likely it is that the household is non-poor. Consistent with this expectation, we find a concave probability profile for the age of the household head on household status. The function peaks at age 40 and declines thereafter. There is no significant effect of the age of head of household on the other two alternatives though. In developing countries, in general, female headed households are more likely to be poor because of the limited work opportunities for women. This is exactly what we find from our results where female headed households are less likely to be non-poor and more vulnerable to poverty. We could not find a significant relationship of marital status with the well being of the household. The regression shows a strong and negative relationship of household size for non-poor households where head is unemployed however it has positive significant coefficient with poor category. This indicates that as the family size increases, the likelihood of household to be non-poor declines and increases its vulnerability to poverty. The dependency ratio is also found to be positively related with poverty status and enhances household vulnerability to poverty with rise in the dependency ratio. The variable has statistically significant negative coefficient for non-poor households and positive for poor households. These findings raise the concern for the high exposure to poverty of children living in large households having higher dependency ratio.

### 3.6.8 Employment

The likelihood of being non-poor increases with the presence of overseas worker, employees of public and private sector and those working as self-employed in the household. The coefficients of these variables are positive and significant for non-poor households irrespective of head's employment status. But for poor households, the coefficients are small in size and statistically insignificant showing that the formal (both public and private) sector and overseas employment does not affect the probabilities of poor households. This is because of the low ratio of such workers in the poor households. There is low probability for a worker of the poor household to be employed in the formal sector of the economy or in the overseas market. However, the contribution of formal sector employees, self-employed and overseas workers in terms of income is highly relevant for non-poor and it reduces the vulnerability of the households to poverty significantly. The positive significant coefficient of self-employment for poor households with head employed shows the increase in the likelihood of being in poor households if some members are engaged in the self-employment activities. The chances are these members are involved in low income activities which are not adequate to lift them out of poverty. The coefficients of agriculture and informal occupations are found positive but only significant for poor households with employed head. This indicates that the employment in the agriculture and informal sector does not significantly affect the well-being of households and increases their likelihood to be poor. The presence of unemployed in the household is negatively associated with household welfare for non-poor households and positive for poor households showing the likelihood of household falling into vulnerable

situation with increase in the unemployment in the family. On the basis of the regression results, the increase in unemployment has a major negative impact on the poorest households. It is reasonable to suppose that a larger welfare loss will be experienced by the households hit by the unemployment shock.

### 3.6.9 Location

The highly significant urban dummy indicates the likelihood of being non-poor if household are located in the urban areas as compared to the rural location. Although the global meltdown and the decline in the domestic economy has adversely affected the job market but the urban areas are still associated with higher income generating activities and increase the probability of households to be non-poor. The provincial dummies show that living in the North West Frontier province (NWFP) increases the vulnerability of the households to poverty due to the ongoing drive against terrorists and shrinking economic opportunities in the province. The results show lower likelihood of being in poor households if the location of the household is in Punjab and Sindh province. To explain the positive coefficients of these variables, the economic history of the Punjab and Sindh, their economic development and infrastructure endowment are remarkably high. Most of the trading and manufacturing activities are in these provinces therefore the likelihood of being in these provinces enhances the probability of households to in the non-poor group.

## 3.7 Findings and their Relevance for Regional Countries

The results indicate that household demographic characteristics especially the household size, dependency ratio and females being head of the household increase the likelihood of families to fall into vulnerable situation. The results further suggest that employment along with human capital variables have a key role in reducing the vulnerability of the household to poverty. For poor families, it is reasonable to attribute the non-significance of the coefficient to the low skills endowment of individuals belonging to low population strata which imply scarce access to well-paid jobs (both in formal and informal sectors), whereas for richer households, the variable becomes a relevant livelihood source.

By looking at household members involved in income generating activities, the highest coefficient refers to overseas employment. The presence of such employees positively influences household consumption and significantly reduces their vulnerability to poverty. Same is the case for the formal (public and private) sector jobs and self-employment which significantly increase the likelihood of households to be in the non-poor households. The agriculture and informal sector employment are found to be increasing the likelihood of households to be vulnerable to poverty. Similarly, the location of households in urban areas and in Punjab and Sindh province is also an important determinant which reduces its vulnerability to poverty.

The findings of the study are very important for Pakistan as well as other countries of the region. The factors identified in the study have strong relevance for other countries of the study (Bangladesh, Sri-Lanka and Nepal) because of the similar economic and employment structure in these countries. A large number of workers from these countries, like Pakistan, are involved in informal sector including

agriculture and self-employment. Formal sector private and public sector jobs are limited which provide protection against sickness and old-age. The share of workers of these countries employed in the foreign markets is also high. The global financial crisis is having the impact through the similar channels on these countries and households as it has affected Pakistan. Therefore similar approach can be adopted to cope with the situation developed by the global financial crisis. The immediate measures to cope with the impact of the financial crisis are to strengthen the existing social safety net systems in each country and initiating crisis specific new programs.

Another important result is the effective role of income support program such as BISP in mitigating the adverse impact of global financial crisis at the household level. The data shows that BISP has successfully increased the consumption level at the household level and pulled many families out of poverty though temporarily. The immediate relief provided to the poor families through BISP is a good model for other countries caught up in the similar situation due to global financial crisis. The cost of such cash transfer program is however high and puts extra burden on the fiscal position of the country. It requires a long term strategy to finance such programs through increase in tax revenues or other sources.



## SECTION IV

**Global Financial Crisis and Social Protection:  
National and Regional Strategies**

It has been increasingly realized that the governments have to play a key role in the time of contingencies, shocks and hard economic situation to protect the vulnerable groups from the adverse affects of such conditions. The current financial crisis has given rise to increasingly more interest on social safety net programs. Added to the urgent need to revisit safety net issues is the ongoing debate over the optimal policy mix between the indirect growth oriented path to poverty reduction and the direct path of targeted transfers to the poor. Should all scarce resources be allocated so as to maximize economic growth, the benefits of which will eventually trickle down to the poor, or should a part of these resources be transferred to the poor to improve and maintain their living standards during the process of economic growth? A third option is to give the poor access to assets (such as land) that provide them with a source of economic growth based on their absolute advantage that is, labor.

Theoretically, cash transfers are preferred to in-kind transfers for minimizing distortions in the economy, but if the objective is to encourage the consumption of a particular commodity and if there are political objective that are better served through in-kind transfer then in-kind transfer is preferable. In addition, in-kind transfers, hold their real value during inflationary period. If safety net programs are properly chosen and designed, they can complement economic growth; otherwise they crowd out growth-promoting investments and private safety nets. Thus it is important to relate program choice to desired objectives and the nature of poverty, with a clear understanding of the potential constraints and trade-offs. For example in countries with a high incidence of rural poverty where it is difficult to separate needy from non-needy households, cash transfers will be infeasible in terms of targeting and fiscal sustainability.

The economic crisis and the adjustment mechanism that has followed will have short term effects on the life standards of the vulnerable groups. The shrinking budgets are severely restricting the amount of the resources available for the social assistance. There is clearly an acute need to protect the new poor and the chronically poor by introducing social assistance programs or restructuring existing ones in ways that make them fiscally, politically, and administratively sustainable. There is no formula for providing the best or most appropriate and effective safety net programs, but in order to avoid the pitfalls and enhance the positive aspects of the program we have to ask what makes program work well and how could they be made work even better while designing any safety net program. In order to examine the appropriateness and efficiency of the safety net programs we need to examine how well were the poor reached? Were programs cost effective? Have there been any disincentive effects for food and labor supply?

#### **4.1 The Crisis and Vulnerable Households**

The analysis on poverty and employment profile as well as the adverse impact of the global financial crisis reveals some key issues for concern at policy level in addressing the household impact of the crisis. The impact of the crisis is different across different segments of the poor, depending on the extent of their exposure to the world economy through their economic activities. Even though in general a large number of poor in each country are vulnerable to the adverse impact of the crisis, the urban poor are affected more than the rural poor. Given the size of the rural sector, obviously the number of poor is much larger in the rural sector than in urban sector. The urban poor are directly exposed to the world economy so that their daily wages and irregular incomes based on the amount of work are likely to shrink. However, as at present there are some improvements in this sector. First the world prices of export crops began to rise particularly in the second half of the year. Secondly, the daily wage has already increased in almost all the countries.

The rural poor who are largely dependent on domestic agriculture appear to have a weak exposure to the world economy. Their vulnerability to the global crisis is limited, but the government policy focus on rural development and increased household transfers appear to have crisis-mitigating effects in the rural sector. However, most of the workers employed in the non-agricultural production sectors in the urban areas are from the rural sector. They usually supplement the household income of their families who are engaged in rural agricultural activities. For this reason, the income of the rural households is likely to shrink as the non-agricultural employment of the family members have been affected adversely.

In all sectors there are vulnerable poor groups whose employment and income related to the availability of irregular work for daily living. Therefore, the crisis impact is not uniform among the poor within any category. The urban poor whose earnings are dependent on self-employment and on the availability of daily work is likely to be affected severely by the crisis. The rural poor are also not a uniform category in terms of land-holdings and the availability of infrastructure facilities for farming. The rural household income levels are skewed towards better performing agricultural areas and the agricultural productivity is skewed towards irrigated areas.

Given this heterogeneity of poverty within each of the sectors, the proper targeting appears to be the key issue in relation to the safety net programs. Since all the poor in different sectors are not at a risk due to global crisis, the need for identifying the extremely vulnerable segments of poor is important in order to make the safety net programs more effective. This point can be substantiated further by the existing poor targeting of the all countries' major poverty alleviation programs. Improvement in targeting of the safety net programs would not only help the government to look after the needy poor but also to address a part of the misallocation of public funds.

#### **4.2 New Vulnerable Groups**

In addition to existing poor groups, the crisis has created new vulnerable groups which were not necessarily in the poor category by definition. The persons in these social groups included those who remained above the national poverty line prior to the crisis, but lost their work, employment and income due to the crisis. The problem

is related to the contraction in output in many industrial and service sectors, including export sectors. The evidence is significant rise in unemployment rate in all countries of the study. For example in Sri-Lanka, by the end of the second quarter of 2009, the unemployment rate has increased to 6.2 percent from 5.2 percent in 2008, increasing the number of unemployed to 496,000 persons, according to the most recent *Labour Force Survey* (DCS 2009b). Since the female workforce is playing a dominant role in the country's some of the main economic activities such as the apparel industry and since the growth elasticity of female employment is significantly greater than that of the male employment, in a growing unemployment situation the female workforce is likely to suffer more than the male workforce. Moreover, the industrial and service sectors had lost 217,000 jobs by the end of the second quarter of 2009, compared to the same period in 2008. Even though the agriculture sector has created 118,000 jobs and so as the public sector, it does not necessarily mean that those lost jobs in industrial and service sectors have been recruited in the agriculture and public sectors. Same is the situation in Pakistan, Bangladesh and Nepal.

As was discussed earlier, another aspect of the crisis impact on employment is that employees yet remained employed by definition, but as a result of contraction in economic activity they suffer from reduced volume of work and income. Apparently, the safety net programs which are already in effect do not cover the newly created vulnerable groups by the adverse effects of the crisis. Since there has been no assessment by the government about the crisis impact on households, it is necessary to identify poor and vulnerable groups as at present. This point further justifies the importance of improving the targeting of the existing safety net programs covering the new poor.

### 4.3 Fiscal Space for Improving Safety Nets

Despite rhetoric, there is little attention at policy level to address the crisis impact on households in respect of increased poverty and unemployment. However, there were some policy initiatives aimed at not improving the safety net but providing stimulus to export sectors with the objective of mitigating the crisis impact on foreign exchange earnings and employment.<sup>21</sup> Even in this case the success of the stimulus measures so far appears to be marginal. Apparently, there is little fiscal space available to the government in almost all countries under study to consider an expansion of the safety nets. The government's fiscal burden was growing even prior to the adverse impact of the crisis. Under the Fiscal Management Responsibility Act, different countries aimed at improving fiscal management, transparency and accountability of public finance compelling the governments to reduce budget deficit to 5 percent of GDP became totally ineffective since the rapid increase in public spending. Although a part of the increased spending was covered by raising the debt financing was an unavoidable option.

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<sup>21</sup> While the government has paid attention to the negative impact of the crisis on foreign exchange earning sectors in formulating its *Budget 2009* (GOSL 2008: 24-25), a special stimulus package amounting to LKR 16 billion or 1.3 percent of the estimated total government expenditure for 2009 was approved in December 2008.

The impact of the global financial crisis in the midst of growing fiscal imbalances brought about a second blow to the fiscal management. Since the late 2008, the fiscal position of the countries expenditure recorded a massive deterioration with a significant fall in revenue and a rise in expenditure. Point-to-point changes in monthly government revenue and expenditure during the 12 month period ending June 2009 clearly shows the worsening fiscal position of the three countries i.e. Pakistan, Sri-Lanka and Bangladesh. Particularly the first half of 2009 was marked by a sharp fall in government revenues along with a sharp increase in government expenditures, compared with the corresponding period of the previous year. The contraction in revenue was contributed largely by the decline in output in revenue generating economic activities in the industrial and service sectors which were affected mostly by the crisis. Even though the domestic agriculture sector was performing relatively well, it does not generate government revenue but rather drain part of it.

In Sri-Lanka, for example, the government envisaged a significant improvement in its fiscal position for the coming financial year, January – December 2009 (GOSL 2008). The government revenue was estimated to be increased by 20.5 percent and the expenditure by 17.2 percent, compared to that of the previous year, resulting in substantial decline in budget deficit from 7.0 percent to 6.5 percent of GDP.<sup>22</sup> According to the first half-year performance of the budget, the government has been able to generate only 34 percent of the estimated annual revenue, compared to 44.2 percent of the corresponding period of the previous year. The completion of the government expenditure amounting to around 46 percent is roughly as same as that of the previous year. The achievements of the estimated revenue and expenditure outlays show that 76 percent of the estimated budget deficit has already reached within the first half 2009, recording budget deficit at 11.5 percent of the GDP. Given the weak budgetary performance, not only in Sri-Lanka but in other countries as well, it is rather difficult to anticipate a further increase in the allocation of public funds on expanding the safety net. It is the responsibility of the Governments to extend humanitarian assistance to address the special needs of the crisis affected communities and to increase spending on their proper rehabilitation.

In almost all countries, there are extensive poverty alleviation and welfare programs in place. During last year, the governments in Pakistan and Sri-Lanka had already undertaken a massive increase in transfer payments to households together with increased expenditure on domestic agriculture and rural development. This means, in fact, for whatever the political and economic reasons, the governments in these countries had already resorted to the expansionary policy measures that have been implemented by many other countries against the adverse impact of the crisis, even though their long-term sustainability remains as an important issue to be addressed. In an overall assessment, it appears that these measures at least temporarily helped the countries to cope with the adverse impact of the crisis on households.

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<sup>22</sup> However, it was also not unusual to observe that actual government revenue often fell short of the estimated revenue targets and that actual recurrent expenditure rose above the estimated expenditure targets in the past.

#### 4.4 Programs for Protecting the Vulnerable

The social safety nets programs can broadly be categorized into social protection and social empowerment programs. They are implemented through both development and non-development budgets. Social protection encompasses cash transfer allowances and food security. Social empowerment includes stipends, housing, rehabilitation, micro-credit, and development programs. Some of the existing major social safety net programs available in the four countries are discussed along with some policy initiative for providing the coverage to newly vulnerable groups due to global financial slowdown. As a response to the global crisis and price hike, compared to the fiscal year 2007-08 during 2008- 09 the governments in the South Asian countries have increased the expenditure on social protection programs.

##### 4.4.1 Existing Social Safety Nets in Pakistan

Social protection for people in the formal sector is currently provided through social insurance programs and other employer benefits. At present, there are several such programs operating in Pakistan but two main categories can be distinguished. The first category consists of the general government schemes that employers are required to contribute unless they have been specifically exempted by the legislation. Three of these schemes are;

- The Employees Old Age Benefits Institution (EOBI). A Federal body that provides age, disability and survivors pensions.
- The Employees Social Security Institutions. Provincial bodies (ESSIs) that provide health services and some cash benefits.
- The Workers' Welfare Fund. A Federal body that provides a range of small benefits to workers and provides educational and health facilities for workers.

Majority of workers in each of these schemes are covered by all three schemes but there are substantial differences in coverage. EOBI covers approximately 1.3 million workers, while the ESSIs cover only 850,000. The second category consists of schemes that are specific to particular sectors or enterprises and are specifically exempted from membership of the general schemes. The main category exempted consists of government workers and members of the armed forces but there are a number of others.

Government-funded social protection in the informal sector is largely social assistance. By social assistance, we mean programs that transfer money or goods to individuals that are not linked to contributions. They are usually, but not always, targeted at the poorest and means tested. The main organizations providing social assistance are Zakat/Ushr and Bait-ul-Mal. The type of assistance provided through Zakat/Ushr include Guzara Allowance (Rs500 per month paid for six months to eligible workers), Educational Stipends (paid to poor students in mainstream schools, colleges, polytechnics and universities), Health Care (poor patients can get help with the cost of an operation or necessary medication), Social Welfare (consists of grants to social welfare institutions largely those run by provincial welfare and labour departments to pay the fees of *Mustahiq* getting vocational training), Marriage

Assistance (dowry to deserving girls). The schemes of Zakat and Ushur also cover victims of Natural Calamities.

The other important institution helping needy households is Pakistan Bait-ul-Mal, a semi-autonomous organization within the Ministry of Women Development, Welfare and Special Education. Unlike Zakat, Bait-ul-Mal benefits are open to all regardless of creed. Also, unlike Zakat, the funds are entirely controlled by public servants. It has offices at provincial and district levels that are closely linked to, but not part of provincial administrations. Bait-ul-Mal's main programs of direct assistance to individuals are the Food Support Program, Individual Financial Assistance, National Centers for Rehabilitation of Child Labour, Vocational Training Institutes, Tawana Pakistan (school feeding program) and building of homes. Besides, the grants are provided to NGOs, institutional support for orphans, the disabled and abandoned and destitute women, and the aged. It also provides some grants for water supply. In the past, it has also completed a housing development for the poor in Sindh.

#### *4.4.1.1 New Initiative: Benazir Income Support Program*

The present government has launched a new cash transfer program entitled "Benazir Income Support Program" (BISP) with an allocated budget of PRs 34 billion (0.3 percent of GDP) to provide cash assistance of PRs 1000 per month to 3.4 million poor families in its first phase. The program is specially designed to protect those who fell into vulnerable situation due to slow down in the economic activity as a result of global financial crisis. The program is now into its second phase where the amount has been increased to PRs 70 billion to provide coverage to seven million vulnerable families. These families were identified by the elected representatives of the area on the basis of their poverty status. The design of the BISP, in particular the targeting of transfers and the delivery mechanism, was reviewed in the first half of 2009, in consultation with the World Bank. The new phase is now targeting the vulnerable families through poverty score card survey being conducted by World Bank, first in nine districts and later all over the country.

#### *4.4.2 Social Safety Nets in Sri -Lanka*

Sri Lanka has a wide range of general welfare programs and a targeted poverty alleviation program which were the main underlying factors of the achievements of country's better social and human development standards. The *Samurdhi Relief Program* is considered to be the most extensive poverty alleviation program in South Asia (CBSL 2008). It is basically an income supplement program targeting the poor households. In addition, however, this includes various components aimed at various aspects of poverty such as food and nutrition, social security, income generation, self-employment support, and savings and credits. The program covered 1.6 million families in 2008 (CBSL 2008: 78).<sup>23</sup> Apparently, the population benefiting from the program, amounting to 33 percent of the total is much larger than the population below poverty line (15.2 percent), indicating its poor targeting. Total expenditure of the program remained around LKR 10 billion during the past five years. But as a

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<sup>23</sup> This excludes the conflict-stricken 3 districts – Kilinochchi, Mannar and Mullativu.

share of total government expenditure, this has declined gradually from 1.8 percent in 2004 to 1.0 percent in 2008 due to the reduction in Samurdhi recipient households as well as due to the increase in government expenditure in other areas.

Other welfare programs include mainly the free health system, free education and consumer subsidies covering the all island and the entire population derive benefits. Free health system covered both curative and preventive health care. Free education ensured both primary and secondary education for all the children, along with the provision of free textbooks and uniforms. Although University education for undergraduate studies was also free together with the provision of cash subsidies and accommodation, admission was severely restricted due to inadequate capacity and resources. In 2008, the health and education expenditure accounted for LKR 75 and 100 billion respectively (CBSL 2008). The total expenditure on both health and education was 17.2 percent of the total government expenditure.

Price subsidies and administered prices were also in effect covering mainly the essential food items such as rice and milk powder, fuel and electricity and public transport. Price ceilings on rice also came into effect against the adverse impact of the global food crisis. As far as the energy prices are concerned, particularly the diesel and kerosene prices were subsidized with a view of containing the transport and production costs and of averting the adverse impact of oil price hikes on the poor. Sri Lanka's electricity tariffs are also subsidized under the regulated prices, while the small consumers pay much less than the big consumers. Public transport was also an important area in which the fares were highly subsidized by government transfers.<sup>24</sup>

#### *4.4.3 Safety Net Programs in Bangladesh*

The government of Bangladesh views poverty from two broad perspectives –income poverty and human poverty. The government identifies direct and indirect safety net programs to address these two types of poverty, where the direct measures (income/ employment generating program) are considered as those that are targeted towards the poor, and indirect measures (human development program) are growth oriented and hence expected to leave indirect effects on poverty reduction. Examples of indirect or growth oriented measures cover mostly infrastructural development and rehabilitation programs. However there are also safety net programs that merge the two concepts of direct and indirect measures. For example, a direct measure like Food for Work program that is targeted towards the poor is also used to construct infrastructural services, falling in the category of indirect measure.

Major SSNPs in Bangladesh include Cash transfers, (i.e. Old Age Allowance, Widowed and Distressed Women Allowance, Disabled Allowance), Conditional cash transfers (Primary Education Stipend Program formerly Food-for-Education, Stipends for Female Secondary Students), Public works or training based cash or in kind transfer, Rural Maintenance Program (Food-for-Work), Vulnerable Group Development (VGD), Employment Generation Program (EGP), Emergency or

<sup>24</sup> According to the annual data on Sri Lanka's public transport system from CBSL (2008: 69), average railway fare per passenger km is LKR 0.78 whereas the average operating cost is LKR 1.76. Similarly, the average bus fare per passenger km is LKR 1.14 whereas the average operating cost is 1.38.

Seasonal Relief, Vulnerable Group Feeding (VGF), Gratuitous Relief (GR), and Tax Relief (TR).

#### *4.4.3.1 New Initiative: The Employment Guarantee Scheme*

This new program is initiated to protect vulnerable and poor families from the downturn in the economy. It is designed to provide temporary employment to unemployed and unskilled poor of ages between 18 and 60 and landless and marginal farmers.<sup>25</sup> For a seven-hour work day, each person under the program gets Tk 100/per day for employment in canal digging, dam and road construction, making the premises of educational and religious institutes and cyclone shelter higher, preparing organic fertiliser or in other projects recommended by the ministries concerned for rural development. In the fiscal year 2008-09, Tk 2,000 crore was allocated to “100-Days employment- Generation Program” (EGP) where 2 million labourers were enrolled and Tk 920 crore was spent implementing the first phase of the program.

In the first phase, although the program benefited the poor it could not contribute to the improvement of rural infrastructure, therefore it was redesigned in the second phase to include infrastructure development component by allocating Tk 1120 crore to provide employment to 1.12 million “hardcore poor”. Initially as a pilot project, the program is implemented for one and a half months in 124 upazilas of five monga-prone northern districts and 11 Aila-hit coastal districts in two phases -- first during September-November and the second in March-April. In around five months of these two seasons, more poor people become unemployed. At least 5.6 lakh beneficiaries will be selected under the program from areas where more than 40 percent people are poor. Another 3.36 lakh people will be selected from 253 upazilas having 21 to 39 percent poor and 2.24 lakh from the rest 147 upazilas with 1 to 20 percent poor people.

#### *4.4.4 Social Safety Nets in Nepal*

The government of Nepal has two-part strategy – foster broad based growth to benefit principally the moderately poor (who are roughly 60% of the poor), and combine targeted programs with social mobilization to reach the very poor. In the formal sector, social protection programs reach beyond poverty reduction i.e., to pension and provident funds as well. Governments’ policy document asserts that the nature of targeted program and safety nets differ because of the diversity of needs. The review shows, two broader categories of the targeted programs - (a) geographical and sectoral targeted programs which include construction of infrastructures and local development initiatives; and (b) Group-based targeted programs, which include subsidies, programs focusing on capability development through improvements in HDI, income generating schemes, food for work program, skill oriented training and programs aimed at increasing access (of the poor) to productive resources (NPC, 2005).

Social security schemes for workers and social assistance programs for the needy in society have developed very slowly in Nepal. The review of government programs on safety nets shows uncoordinated numbers of projects, which are many in numbers but small and exhibit high administrative overheads. These projects are found to cover

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<sup>25</sup> Among them at least one-third of the total beneficiaries are female.



different beneficiaries beginning from the children through disabled to conflict victims. There has been steady growth in budgetary allocation to implement these programs, up from Rs. 1.67 billion in 2000/01 to Rs. 2.97 billion in 2003/04. In terms of allocation the growth is 79 per cent (Ibid, 2005). The government had allocated a little over 7 per cent of the development budget beyond the targeted programs to inclusive mainstream programs. To expand the coverage, a provision is made in the budget of the fiscal year 2009/10 to collect one per cent tax from regular income earners. Initially, the beneficiary of such policy will be roughly 800 thousand employees working in the organized sector. There are about 400 thousand persons working in the organized private sector. Such policy was decided after the consultative meeting among the private sector employers, trade unions and government officials. The task force headed by revenue secretary of the government of Nepal will submit the report by the second week of November 2009. The social security until now was limited to the limited cash grant to old, disabled and widows (Kantipur Daily, September 10, 2009).

The long-run vision of the government to reduce the degree of vulnerability is to take steps for the greater spatial integration of the markets by creating marketing and physical infrastructure. In Bangladesh, the impact of liberalization is much more even than in Nepal since they have made significant investments in the integration of markets through roadways and to an extent through waterways.

#### **4.5 Key issues in the backdrop**

In the era of global financial crisis there is a need for expansion and redesigning of the the SSNPs. It appears that in general, there is relatively high leakage from food based programs and despite popular assumptions they are not better targeted in all countries under study. It is also important to note that the programs are very rural focused but the countries are getting rapidly urbanized with increasing proportion of the poor living in urban areas. Programs have significant administrative leakages. Too many programs are run by too many Government departments and thus a large administrative overhead cost which can be reduced and used to provide benefits. There are also too many layers of decision making in selection of beneficiaries. The weaknesses in safety nets programs include:

##### *Lack of an Integrated National Policy*

There is no integrated national policy for social protection and safety net programs based on a comprehensive and updated risk and vulnerability mapping. Often, the extent, nature and mechanisms of many safety net programs change with a change of government. There is also lack of integration and coordination among various safety net programs and providers. A number of ministries are involved in implementing and monitoring safety net programs. Many are funded with donor money. Budgetary provisions are ad-hoc and given as block allocations.

##### *Limited Coverage of Safety Net Programs*

Though SNPs have played a role in mitigating poverty, their coverage remains limited given the magnitude of extreme poverty that exists in the each country. In Bangladesh, a survey reveals that SNPs cover about 10 million people, and

consequently fall short of the needs of 23.9 million people who belong to the “extreme poor” category. Furthermore, SNPs cover mainly the rural poor, whereas the nature of urban poverty is more severe than rural poverty in certain respects. Recently, GOB has started a new safety net program, namely the Urban Social Service (USS) for the urban poor. Through this program, the slum and pavement dwellers are provided with collateral-free small credit and skill training. But the coverage of this program is extremely limited.

#### *Missing Poor and New Vulnerabilities*

Current social safety-nets also lack coverage of specific socially excluded and marginalised groups. Some outcast groups living in extreme poverty for years together. Farmers, particularly the small farmers, are exposed to large-scale vulnerability due to various natural uncertainties, price fluctuation and low price of output. This may be exacerbated by the globalization process. If prices suddenly fall due to large-scale imports, there are no means to protect these farmers. There is also a lack of understanding of the poverty implications arising from globalization-induced shocks and their gender dimensions for the garment sector.

#### *Insensitivity to Geographic and Agro-Ecology Specific Poverty*

The nature of extreme poverty varies with variations in geography and agro-ecology. Separate safety net programs are needed to alleviate poverty arising from area specific problems like river erosion, salinity and arsenic pollution. Geographic targeting taking these characteristics into account is still lacking.

#### *Inadequacy of the Amount of Transfers*

The “widowed and distressed women’s” allowance/Inadequacy of the amount of allowance/grain/wages/loans provided under the safety net programs is one of the main weaknesses of these programs. Almost all beneficiaries of the Old Age Pension Scheme reported that during old age, health care is a basic need and for this a more substantial amount of money is required every month. About 97 percent of the beneficiaries of those widowed and distressed women’s allowance reported the amount of allowance as inadequate. The dissatisfaction related to micro-credit disbursements is also universal.

#### *Inadequacies of Poverty Criterion*

For all the safety net programs, the poor have been identified mainly on the basis of land ownership and income criteria. It is possible to identify the poor with respect to various socio-economic characteristics such as land ownership, income, housing condition, food security and consumption expenditure. The use of these characteristics should be applied, based upon the particular focus of the safety net program subject to the provision that they should not be too complex to understand and apply.

#### *Inadequate understanding of the Gender Dimension of Poverty*

In the existing safety net programs, the gender dimension of poverty has been addressed inadequately. All the safety net programs undertaken for women addressed their income poverty whereas social and psychological poverty is pervasive among women. Human poverty, particularly health poverty, is more acute in case of women

but there is no safety net program addressing the health insecurity of poor women. Access to education and skill training is highly restricted to poor women but no women-focused safety net program was undertaken to provide education to girl children of poor families.

#### *Gender specific risks*

Poor women-workers face specific risks and insecurity. Risk of violence is also rampant for them in the workplace. Safety net programs addressing these risks and insecurities are inadequate both in number and magnitude. In Bangladesh, only recently, the GOB has undertaken a safety net program to provide protection to the victims of acid throwing. But the size of this program is as yet quite small. Victims are also in great need of counselling and health services as well as marketing services to sell what they produce through self-employment. Therefore, together with providing small credit, health and counselling services an outlet for marketing their products should also be provided to help their proper rehabilitation.

#### *Targeting and leakages*

Despite the successes in safety net programs, there have been causes of concern on several counts in many countries. There have been various administrative problems obstructing the smooth running of the programs. Targeting has been off the mark in some of the programs. In some cases, leakages have been more of a problem than targeting. Also in-kind transfers such as food may have depressed prices somewhat, and this could be a disincentive to small producers.

### **4.6 New Strategies to Protect Vulnerable**

New strategies to cope with the vulnerable households at risks need to be two-fold as national and regional. They should be placed in the context by identifying the different needs of different social groups affected by the crisis and be directed at addressing the immediate household requirements as well as long-term development prospects. While improving the fiscal prudence and productive expenditure patterns, the national strategies to cope with the crisis impact on households should comprise the programs based on coordination among the government agencies, non-governmental organizations, community-based organizations and the corporate sector. The objectives of the programs should be the income and employment generation at local and grass root levels, while addressing the immediate needs of the vulnerable groups.

A regional strategy can be two-fold as *creating opportunities* and *sharing resources* in supplementing the national strategies. Programs for creating opportunities can be directed mainly at market expansion in the region by reducing the risks and uncertainty attached to market concentration and at assisting the income and employment generating activities at national level. Programs for sharing resources can be diverse, while the immediate concern should be on sharing food, energy and human resource development. This will lead to an aversion of the future risks and uncertainty associated with crises and to an establishment of the conditions conducive to promote growth and development in the region.

#### **4.7 National Programs to Meet the Crisis Impact**

As the households were affected by the loss of income and employment, programs to meet the crisis impact need to address this issue, by providing alternative means of expanding opportunities for income and employment generation. This could be an approach based on partnerships among different stakeholders such as the government, non-governmental organizations including international organizations (NGOs), corporate sector and the community-based organizations (CBOs). The already existing political and administrative systems reaching the local and grass root levels, the programs need to be delegated to and decentralized at local levels. As an approach as such could promote administrative efficiency achieving cost-effectiveness and could allow the local authorities to design different income and employment generation programs to meet the different community and local needs.

Public works programs and subsidy programs may help certain social groups particularly at lower-income strata but not all the social groups affected by the crisis. The government and NGOs implement public works programs which could be expanded to provide temporary employment opportunities to the poor. In fact, the country's most extensive poverty alleviation program includes income supplementary and nutrition supplementary components. Part of the poor affected by the crisis may need temporary income supplementary assistance to meet their basic needs. Programs as such should essentially be temporary and be based on proper targeting.

The corporate sector affected by the crisis, could be assisted by the government without a fiscal burden to reduce the cost of production and to improve productivity by maintaining the employment. Because most of the countries in the studies are not at a higher position of the ranking order of ease of doing business (World Bank 2009), country competitiveness (Schwab 2009), and economic freedom (Gwartney and Lawson 2009), there are many areas where the governments of these countries can improve the country's business environment. This would help the production units to reduce cost of production, including higher opportunity costs and transaction costs. Furthermore, the private credit expansion could also be facilitated by reducing the interest rates and limiting the government borrowings from domestic financial market.

Given the lower interest rate regime at present, the microfinance system can be expanded to assist the small-scale economic activities and to create self-employment opportunities. This initiative can be expanded with the assistance of the NGOs and the rural banking system of the country. The policy focus on rural infrastructure and rural agriculture against the global food crisis has helped many countries to mitigate the crisis impact on rural poverty. In addition, the policy has helped the countries to manage food inflation at lower levels helping the poor in general. This has also generated massive public expenditure flows in the form of humanitarian assistance, reconstruction and infrastructure development and private investment flows.

The government effort is, however, directed mainly at expanding agricultural land in spite of land scarcity, subsidizing the high cost of production through government expenditure, and administering the prices of basic food items. The policies and reforms to address the fundamental weaknesses in the agricultural sector are missing in the rural and agricultural development strategies in many countries. These

weaknesses are associated with small-scale farm holding, village land rights, lack of land utilization plan, weak relation to agribusiness, poor marketing and production inefficiency which continued to remain in sustaining the uncompetitive agriculture production in the country.

The Government of Pakistan can use the present global financial crisis as an opportunity to broaden the base of social protection arrangements initiated as part of the recently established Benazir Income Support program (BISP) to include social protection measures for other areas where poor and vulnerable households run the risk of spending catastrophically. In addition to increase in the size of the coverage, a critical imperative for cash transfer schemes is to reduce opportunities for political interference in targeting and ensure transparency in management of resources.

#### **4.8 Regional Strategies**

While the countries in the South Asian region can provide lessons to share in terms of the experience of crisis impact and the strategies adopted, there is much scope for a regional approach to the crisis. A regional strategy can help the South Asian countries to address the immediate needs of the poor and vulnerable groups and pave the way forward to achieve a long-term sustainable growth through strengthening regional integration.

A regional strategy can also incorporate some of the national programs adopted by different countries and facilitate the implementation of their national programs. This strategy should be directed at *creating opportunities* and *sharing resources* in order to meet the short-term challenges posed by the crisis as well as long-term development prospects by expanding the capacity to face future challenges.

##### *4.8.1 Creating opportunities*

In spite of the slow progress of the multilateral and bilateral agreements promoting regional integration, the opportunities created by these agreements have derived mutual benefits to their regional partners. Nevertheless, all the countries in the region are still dependent more on the USA and EU markets than on the regional markets. This has led to an increased vulnerability of individual countries to the external shocks emerging in the developed markets. In Pakistan, Sri Lanka and Bangladesh, many export industries suffered against the global crisis because of their limited market concentration.

When part of the national strategies is designed for income and employment generation supporting vulnerable groups, the economic activities need to find a larger market in order to ensure their competitive growth based on economies of scale and efficiency. However, the trade barriers in general, and the 'negative lists of commodities' in trade agreements in particular hinder potential expansion of the income and employment generating economic activities in each of the country.

Even though multilateral free trade is the best option for long-term growth with short-term cost of adjustment, a regional strategy needs to focus at least on a second best option providing markets for each other. This requires not only a removal of

tariff and non-tariff barriers affecting regional trade but also measures to facilitate trade flows.

#### *4.8.2 Sharing resources*

A regional strategy to share the resources in individual countries can take diverse forms. First, it needs to be directed at sharing basic needs of the poor such as food in difficult times. The global food crisis in the past few years was driven by not only the shortage of food production but also the activities related to speculation and hoarding. In this context, a regional strategy to share food will ensure food security in the region against future risks and uncertainty.

Another important area to share regional resources is the energy sector. The recent energy crisis was also led by not only the excess demand for energy but also the activities related to speculation and hoarding. A program for sharing energy will avert the future risks and uncertainty, smoothen the seasonal fluctuations in energy supply, and lower the high energy prices in the countries including Pakistan, Nepal, Sri Lanka and Bangladesh.

Regional resources can also be shared during the crisis period for human resource development and capacity upgrading at household levels, focusing more on the vulnerable groups. By utilizing the excess capacity emerging in many areas as a result of the crisis could be productively used for training and awareness programs aimed at upgrading the income and employment generating activities among the vulnerable groups in individual countries.

### **4.9 Potential Areas of Cooperation in South Asia**

In SAARC voices are raised time and again to properly utilize regional poverty funds on regional priority basis so that safety nets and poverty alleviation efforts will be integrated regionally to achieve symmetrical growth. Similarly, as BOP situation in the member countries is comfortable, banks have adequate capital base, regional cooperation and integration should yield positive result if regional funds are used for regional priority projects such as infrastructure projects.

On principle, the buzz words in the region are trade integration, trade in services, investment cooperation, financial cooperation, infrastructure building and intra-regional connectivity, only few achievements have been made in removing tariff barriers, but not much success has yet been realized on the removal of non-tariff and para-tariff barriers. Trade facilitation through customs cooperation and standards are still a matter of intellectual debate.

The South Asian sub-region could benefit highly from any cooperative arrangements among the countries in the region and between this sub-region and other sub-regions in the Asia-Pacific region. Unfortunately, there is a lack of information about each other on import needs, economic opportunities, market and labor work force, investment opportunities, export potentials and inherent constraints.

In South Asia as a whole, there is a need to build capacity for technology absorption, diffusion and adaptation. Industrial complementarities, especially in agro-

based industries, textiles and garments and food processing are possible with production, processing and marketing being spread on a sub-regional basis.

The modern engineering industries such as electrical and non-electrical machinery and equipment and automotive industries including chemicals and allied product industries have a major share in the manufacturing value added in India. This indicates complementarity. Motor vehicles in the automotive sector, though protected heavily, is one of the critical areas in FDI and for cross border movement of components. For complementarities, there is a need to reduce and rationalize tariff and non-tariff measures for developing a reasonable division of labor in vehicle production.

The electronics sector can be expected to increase competitiveness by providing timely information on the production line. For example, the use of computers in Shanghai No. 6 Textile Factory can be considered. The computer has increased the machine productivity (metres/machine hour) by 12 per cent and labor productivity (Yuan/employee) by 23 per cent and allowed the factory to almost double its annual profit over a five-year period (Pyakuryal, 2000).

The creation of production hubs to service local and sub-regional markets depends on the knowledge of resources available in the specific countries of the region.

Sub-regional economic groupings like SAFTA and BIMSTEC provide opportunities to transfer endogenous resources and capabilities towards mutual benefits.

The identification of first offshore Sangu gas field discovered in January 1996 with reserves worth 50 trillion cubic feet (TCF), Bangladesh possesses the richest gas resources in SA. It is expected to produce about 800 million cubic feet (mmcfd) of gas per day (Ibid, 2000).

The hydropower potentiality of Nepal can be transformed into economic wealth to provide alternative source for clean and renewable energy. It can support the livelihoods and prove to be instrumental in the process of cooperation and regional interdependence.

To safe guard the region from future financial turmoil, the countries in the region should shift trade policy away from import controls to export promotion and expose industry to international competition. Reforms and harmonization of regional policies should be continued. It can increase the role of the market and the private sector by opening up the economy to greater external and internal competition. Finally, peace and stability in the region may support macroeconomic stability, creation of adequate infra-structural facilities and a well educated and trained labor force.

## SECTION V

**Concluding Remarks**

The adverse impact of the global financial crisis has penetrated the real sector and trickled down to the household sector in the countries under study i.e. Pakistan, Sri Lanka, Bangladesh and Nepal. The crisis impact on the household sector has affected the countries' progress in poverty alleviation and employment generation, and has created new dimensions of these issues with increased vulnerability of the social groups. The issue needs to be taken into consideration in the context of redirected development strategies and the policy framework of each country. The governments placed emphasis on domestic agriculture and rural development, and increased government intervention in their economies. In addition, the governments increased public spending and raised expenditure on transfer payments to households and on welfare expenditure. These changes in the development strategies and policy frameworks of these countries, though not sustainable in the long-run, have mitigated at least to a certain extent the crisis impact on households.

It was evident that the crisis impact on poverty and unemployment is different across different sectors. The urban poor who were pushed further below the poverty line appear to be affected more by the crisis than the rural poor. If not for the increase in daily wages in the urban sector and the rise in world market prices of export crops in the past few months, the poverty and unemployment impact of the crisis on poor would have been devastating. In the face of the crisis, the rural sector has also benefitted from the increased government assistance to domestic agriculture during the past few years.

In spite of all above, there are serious poverty and unemployment implications of the crisis. This problem arises mainly due to the loss of output and employment in many production sectors which are integrated with the world economy. As many industrial and service sectors unlike domestic agricultural activities suffered due to the crisis, the loss of jobs, work and income has produced adverse effects on households directly and indirectly. Therefore, the crisis has created new poor and vulnerable groups, who were not considered to be poor or unemployed prior to the crisis. For the same reason, these new social groups vulnerable to the crisis impact have no formal access to the existing safety net programs of the countries.

The discussion points to the fact that there is a need to strengthen the SSNPs in these countries in order to face the challenges of global economic crisis. Evidently, poverty reduction is not confined to, rather supplemented by, safety nets. However, safety nets undoubtedly are vital options to fight damages from natural disasters as well as from external economic shocks like the on-going global economic crisis for preventing transmission of poverty from generation to generation in the long run. While on one hand the safety nets provide immediate relief during emergencies, by ensuring employment, education and nutritional intake of the poor, these programs can often play leading role in addressing poverty and inequality in the long run. Success of any such attempt will depend on how, where and for whom the government decides to design the safety net programs.



Almost every country's most extensive targeted safety nets cover the poverty alleviation program and the subsidy program for rural farmers. In addition, the extensive welfare programs such as free health care, free education and administered and subsidized price schemes also derive benefits to the poor as well as to others. The poor targeting and unproductive nature of spending appear to be the main weakness in both targeted safety net programs and general welfare programs. Given the serious fiscal limitations due to both the internal developments resulting in increased spending and the adverse impact of the crisis resulting in revenue contraction, there is little room for further expansion of the safety net programs. What is more important is the improvement in targeting of the safety net programs with the identification of the new vulnerable groups.

When the official poverty line is considered in identifying the poor, more than half of the people who are currently benefiting from the relief programs do not appear to be eligible for safety net under the poverty alleviation programs. For example in Sri-Lanka, there are poor who are eligible for the Samurdhi relief, but appear to have been excluded from the poverty alleviation program. In addition, the new poor and vulnerable people emerged due to the loss of work, employment and income need to be identified in order to extend the safety net. While streamlining the existing poverty alleviation program, it could be supported further by improving the effectiveness and efficiency of public spending by cutting down unproductive expenditure. This is important not only in respect of releasing public expenditure on more productive use but also in improving the long-term sustainability of fiscal management.

In case of Pakistan, it is in the process of finalizing development instruments for its next planning cycle; the Poverty Reduction Strategy Paper-II, has an ambitious agenda for a range of interventions for protecting the vulnerable households. The Medium Term Development Framework 2010-15 is also in the pipeline and inputs are solicited for an agenda setting exercise to recast its vision. All these strategic planning tools will need resources for implementation and it appears that our resource realities will not be able to support the plans, these instruments aspire to deliver. Within this financially constrained milieu, there are a number of imperatives for the government in terms of planning and ensuring financial allocations for a social protection. The first priority should be to synchronize planning and to review various national development strategies and associated operational frameworks. To increase the effects of growth on poverty, there is a need to pursue policies that can affect the poor directly by reducing income inequality, inflation, access to credit in particular micro credit, raising educational achievement and better health facilities for the poor.

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## ANNEXURE 1

**Variables contained in the PHVS questionnaire**

## SECTION 1

**Household Roster**

Place of residence  
Relationship to the head of household  
Sex  
Age (in completed years)  
Religion  
Marital status  
Literacy and level of education  
Type of school and medium of instruction  
Vocational/technical education  
Migration status  
Place from where moved in  
    Period of movement  
    Place where moved out

## SECTION 2

**Employment and Earnings**

Activity status  
Employment status  
Industry status  
Occupational status of main job  
Occupational status of secondary job  
Number of hours worked on main job  
Number of hours worked on secondary job  
Total work experience  
On the job training  
Downsizing/privatization and unemployment  
Labor market earnings from first job  
Labor market earnings from the second job  
Earnings from other activities  
Pension and social security

SECTION 3  
**Household Expenditure**

Food  
Clothing and Footwear  
Fuel and Lighting  
Transport  
Housing  
Household Effects  
Personal Effects  
Recreation  
Medical  
Education  
Miscellaneous Items  
Durable Goods

SECTION 4  
**Ownership of Durable Items of the Household**

Bicycle  
Radio  
Television  
Video Cassette Recorder  
Sewing Machine  
Knitting Machine  
Washing Machine  
Electrical appliances  
Camera  
Refrigerator  
Gas stove  
Car / Jeep  
Motor cycle/scoter  
Personal Computer  
Air-conditioner  
Other items

SECTION 5  
**Transfer Income**

Zakat, User, Nazrana, or Fitrana  
Domestics and Foreign Remittances  
Assistance from Government / other Sources  
Grants / Inheritance  
Pension

SECTION 6  
**Ownership of Land and Property**

Expected Value of Property and land  
Rent form Property and Land  
Value of the Property Sold  
Value of the property Purchased  
Money spent on renovations  
Value of the Property or land Received as Gift  
Value of the Property or land Lost

SECTION 7  
**Financial Assets and Liabilities**

Total bank Deposits  
Total savings  
Total Interest / Profit Received  
Total Withdrawal  
Total Securities, Types and Value  
Profit / Interest on Securities  
Total Loans to Pay  
Amount Paid  
Amount Remains  
Time Period for payment and Interest Rate  
Purpose and Institution From which Loan Received  
Life Insurance  
Annual Installments and Duration  
Total Payment Made  
Provident Fund  
Annual Contribution  
Balance

**Balance Sheet**

Total Income  
Total Expenditure  
Income / Expenditure Ratio

SECTION 8  
**Household Shock**

Loss of employment of HH member  
Lowered Income of HH member  
Bankruptcy of HH business  
Death or illness of earning HH member  
Loss of Harvest  
Lowering of prices of HH business  
Loss of cash or in-kind assistance

**Agricultural Establishments (Sub-Module)**

Agricultural land ownership  
Land rented out  
Land rented in  
Harvesting of different crops during the last year  
Livestock  
Agricultural operating expenses during the last year  
Persons working and labour costs  
Hand tools ownership

**Non-Agricultural Establishment (Sub-Module)**

Major activity of the business  
Persons working during the last working month  
General operating expenses and revenues  
    Manufacturing  
    Mining and quarrying  
    Service related business  
    Transport  
    Wholesale and retail trade  
    Hotels and restaurants  
    Construction  
Land, building, equipment and other items owned



ANNEXURE 2  
**Descriptive Statistics (Mean and standard Deviation) of Regression Variables**

Variable Name	All Households	HH1	HH2	HH3	HH4
Per Capita Monthly Consumption Expenditure	1649.25 (5.20)	581.31 (3.51)	1056.54 (8.81)	2364.36 (7.26)	3321.72 (9.73)
Persons 0- 14 years old	0.274 (0.61)	0.366 (0.74)	0.294 (0.68)	0.231 (0.46)	0.172 (0.54)
Males 15-60 years old	0.857 (0.84)	1.386 (0.87)	1.096 (0.72)	0.879 (0.87)	1.371 (0.85)
Females 15-60 years old	1.109 (0.78)	1.175 (0.85)	1.501 (0.94)	1.209 (0.65)	1.153 (0.78)
Persons above 60 years old	0.993 (0.76)	0.278 (0.43)	0.150 (0.54)	0.321 (0.76)	0.028 (0.82)
Household size	7.031 (0.65)	7.812 (0.65)	7.374 (0.75)	6.548 (0.65)	5.543 (0.52)
Dependency ratio	0.762 (0.51)	0.735 (0.56)	0.425 (0.54)	0.348 (0.52)	0.213 (0.41)
Dummy, 1 if hh head is a women	0.021 (0.41)	0.025 (0.35)	0.021 (0.41)	0.018 (0.37)	0.012 (0.42)
Age of household head	52.341 (13.85)	56.569 (13.75)	55.664 (14.68)	55.136 (13.18)	54.858 (13.17)
Age Square of household head	3121.31 (1351.24)	3338.81 (1552.25)	3317.35 (1660.6)	3232.05 (1528.73)	3181.191 (1461.27)
Ratio of Ill. and no RWA with hh size	0.672 (0.20)	0.845 (0.26)	0.823 (0.23)	0.692 (0.21)	0.565 (0.19)
Ratio of ill ad. but RWA with hh size	0.255 (0.36)	0.028 (0.32)	0.075 (0.36)	0.126 (0.36)	0.260 (0.36)
Ratio of Male ad. with primary ed. with hh size	0.116 (0.16)	0.000 (0.00)	0.000 (0.00)	0.093 (0.16)	0.178 (0.16)
Ratio of Fem. ad. with primary ed. with hh size	0.105 (0.18)	0.000 (0.00)	0.000 (0.00)	0.011 (0.17)	0.195 (0.21)
Ratio of Male ad. with secondary ed. with hh size	0.189 (0.22)	0.000 (0.00)	0.000 (0.00)	0.017 (0.20)	0.201 (0.21)
Ratio of Fem. ad. with secondary ed. with hh size	0.160 (0.21)	0.000 (0.00)	0.000 (0.00)	0.011 (0.01)	0.178 (0.22)
Ratio of Male ad. with higher ed. with hh size	0.046 (0.13)	0.000 (0.00)	0.002 (0.01)	0.034 (0.11)	0.047 (0.11)
Ratio of Fem. adults with higher ed with hh size	0.012 (0.10)	0.000 (0.00)	0.011 (0.05)	0.015 (0.03)	0.029 (0.13)
Ratio of trained workers with hh size	0.110 (0.12)	0.000 (0.00)	0.000 (0.00)	0.041 (0.32)	0.173 (0.42)
N of overseas employees with hh size	0.074 (0.65)	0.000 (0.00)	0.001 (0.02)	0.131 (0.34)	0.219 (0.87)
N of unemployed with hh adults	0.141 (0.23)	0.234 (0.26)	0.180 (0.25)	0.159 (0.28)	0.122 (0.27)
N of self-employed with hh adults	0.026 (0.12)	0.023 (0.06)	0.041 (0.07)	0.033 (0.06)	0.029 (0.11)
N of Agr. workers with hh adults	0.173 (0.15)	0.238 (0.14)	0.197 (0.17)	0.064 (0.17)	0.015 (0.15)
N of inf. employees with hh adults	0.055 (0.19)	0.053 (0.18)	0.041 (0.15)	0.059 (0.18)	0.057 (0.17)
N of public employees with hh ad.	0.188 (0.27)	0.000 (0.00)	0.036 (0.55)	0.156 (0.37)	0.203 (0.62)
N of formal private employees with hh ad.	0.031 (0.21)	0.000 (0.00)	0.001 (0.10)	0.025 (0.11)	0.352 (0.17)
Dummy, if own a house	0.640 (1.25)	0.002 (1.06)	0.024 (0.75)	0.245 (1.59)	0.739 (0.98)
Dummy, 1 if Married spouse present	0.895	0.912	0.936	0.921	0.952
Dummy, 1 if living in urban areas	0.355	0.341	0.395	0.532	0.647
Dummy, 1 if living in Punjab	0.293	0.183	0.185	0.261	0.324
Dummy, 1 if living in Sindh	0.265	0.261	0.201	0.207	0.268
Dummy, 1 if living in NWFP	0.180	0.371	0.269	0.167	0.126
Sample size (households)	1000	54	253	562	131

The study has been carried out under the Regional Technical Assistance (RETA 6417: Supporting Network of Research Institutes and Think Tanks in South Asia Phase II) of the Asian Development Bank (ADB) of which SANEI is the co-implementer along with the South Asia Centre for Policy Studies (SACEPS), Nepal.