



**FOOD SECURITY ASSESSMENT  
BALOCHISTAN & FATA  
PAKISTAN**

**Based on the  
INTEGRATED FOOD SECURITY AND  
HUMANITARIAN PHASE CLASSIFICATION  
APPROACH**

**MAY 2007**

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## List of Acronyms

ADB	Asian Development Bank
AFLC	Acute Food and Livelihood Crisis
ANC	Antenatal Care
CMR	Crude Mortality Rate
CP	Country Programme
CPI	Consumer Price Index
EMOP	Emergency Operation
FAO	Food and Agricultural Organization of the United Nations
FATA	Federally Administered Tribal Area
FFE	Food for Education
FFT	Food for Training
FFW	Food for Work
FIVIMS	Food Insecurity and Vulnerability Information and Mapping Systems
GDP	Gross Domestic Production
GNI	Gross National Income
GNP	Gross National Production
HE	Humanitarian Emergency
IDPs	Internally Displaced Persons
IFPRI	International Food Policy Research Institute
ILO	International Labor Organization
IMF	International Monetary Fund
IMR	Infant Mortality Rate
IPC	Integrated Food Security and Humanitarian Phase Classification
LBW	Low Birth Weight
NAs	Northern Areas
MDG	Millennium Development Goals
MICS	Multiple Indicators Cluster Survey
MPCS	Multipurpose Co-operative Societies
NGO	Non-Government Organization
MMR	Maternal Mortality Rate
PAK	Pakistan Administered Kashmir
PRRO	Protracted Relief and Recovery Operation
PSLSMS	Pakistan Social and Living Standard Measurement Survey
PHIES	Pakistan Household Integrated Economic Survey
U5MR	Under-Five Mortality Rate
UN	United Nations
UNDP	United Nations Development Program
UNICEF	The United Nations Children's Fund
USD	US Dollar
VAM	WFP Vulnerability Analysis and Mapping Unit
WB	The World Bank
WFP	World Food Programme

## EXECUTIVE SUMMARY

Pakistan has been registered as net food deficit country in the World Trade Organization (WTO). Since independence, Pakistan is regularly importing vegetable oil, dry milk, tea and wheat (except for the last two years). Wheat is the major staple food accounting for more than 50% of the daily caloric consumption. With the recent announcement of export of wheat due to bumper crop in 2006-07, the price of wheat flour has immediately gone up. As a result, the government has put ban on the export of wheat.

### Availability

Food availability depends predominantly on wheat production and marketing in Pakistan. Despite significant improvement over the past two years (2005-2007), the country's net wheat production remains insufficient to meet household demand in the food deficit districts of NWFP, Balochistan, FATA, Pakistan Administered Kashmir (PAK) and Northern Areas (NAs). Balochistan has 36% wheat deficiency, while Federally Administered Tribal Area (FATA) is importing 86% of the wheat from other regions.

Food supply and availability is an issue in rural areas of Balochistan and FATA due to a combination of provincial restrictions, remoteness, poor access to markets and deficit production. Poor road network is an important constraint to food supplies, especially to rural areas.

### Access

Access to food is an issue in almost all districts of Balochistan (except Nasirabad, Jafferrabad and Barkan) and all Agencies of FATA for the poorest households due to increased market prices and low wage rate. There is also the issue of high price volatility that affects access for those living below or just above the poverty line. Income losses in the conflict affected areas of, Dera Bugthi, Kohlu, North- and South Waziristan, is a huge limiting factor, which in combination with higher market prices has reduced the purchasing power for large numbers of households.

Poverty associated with inadequate job opportunities in rural Pakistan and especially in Balochistan and FATA is another predominant factor that influences food security. The poverty level is high in Dera Bugthi, Kohlu, Musa Khel, Kharan and FATA.

### Utilization

Health vital indicators are low in Balochistan and FATA due to poor health facilities, poor access to health centers and inadequate resources for treatment. The availability of tap water and awareness of rural masses are lacking in these regions. The situation is not improving in the area. The social setup and political situation of the area has further added to the problems. In Balochistan, the Maternal Mortality Rate (MMR) is 600/100,000, Infant Mortality Rate (IMR) is 104/1000 live births, Under Five Mortality Rate (U5MR) is 158/1000 live births and prevalence of Underweight is 43% in children. FATA has IMR of 86.8% with access of only 19% households to tap water.

### Recommendations for WFP interventions

The assessment concluded that food supply and availability are significant problems in districts of Balochistan and agencies of FATA, except for few in Balochistan, because of longest routes from the production surplus areas and poor road network that affecting access to markets. Economic access to food, chronic poverty and malnutrition are other main issues, which influence the household food security. In addition, the tribal structure

of FATA and traditional set up in Balochistan has limited flexibility to change to overall food security and to poverty eradication efforts in the rural areas.

**Food for Work and Food for Training:** in rural areas, FFW could include the acute food insecure population in the identified districts. Potential sectors for FFW are water harvesting (water storages, dug wells, spring development, lakes and traditional irrigation system etc.), nursery raising, plantation, income generation activities for livelihood sustainability and involvement of women in productive sector.

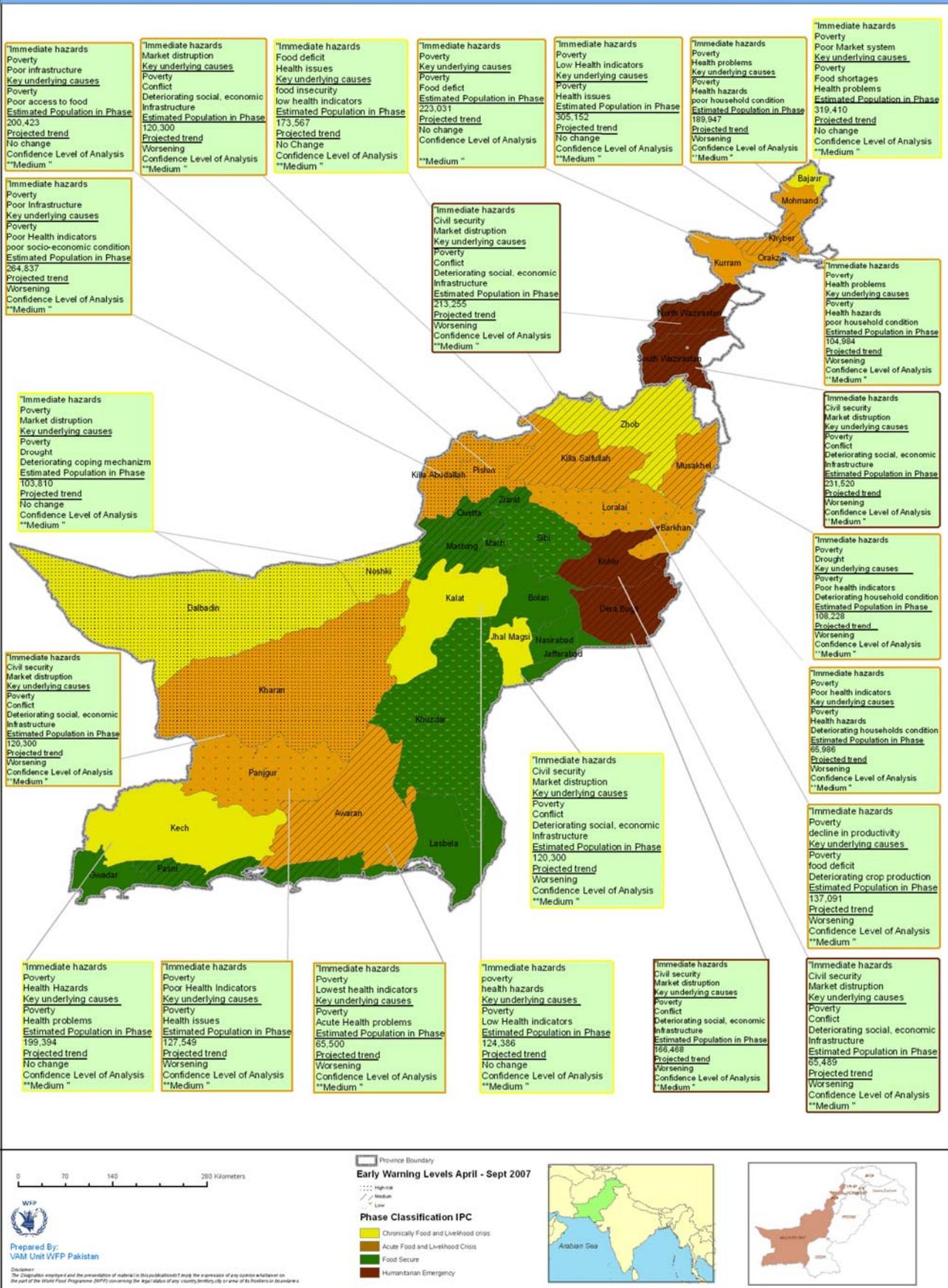
Food for Training (FFT) is quite important for improving the access of households with better skills. It also enables poor communities to develop sustainable livelihood sources. FFT should be part of the livelihood initiatives in the selected food insecure areas.

**Nutrition interventions:** Supplementary Feeding Programme for malnourished children under five and pregnant women is needed in the acute food insecure areas.

**Food for Education:** Both on site feeding with high energy biscuits and take home ration are essential for improvement in nutrition of school going children and incentive for parents to spare children and send them to schools.

**Food Security Monitoring System:** WFP should consider developing a Food Security Monitoring System due to the volatile situation in Balochistan and FATA. There is a need for updated livelihood and food security information. This would reduce the more costly and time consuming assessments and would give the Programme Unit more regular data for decision-making. WFP VAM Unit is already collecting market prices in earthquake affected area and it should be extended to FATA and Balochistan.

# Pakistan Situation Analysis - (April 2007 - April 2008)



Scale : 1:5,010,399



## 1. INTRODUCTION

WFP has been providing assistance to 33 districts in the country, through Country Programme, in Girls' Primary Education, Safe Motherhood and Assets Creation for Rural Women. Besides, a number of Emergency Operations (EMOPs) and Recovery Operations (PPROs) have been launched in the country, including recent PRRO for the earthquake-affected area.

Keeping in view the deteriorating situation of food security in Balochistan and FATA, WFP has planned to launch a PRRO for the acute food insecure areas in these two regions.

The PRRO is aimed at improving livelihood opportunities in areas vulnerable to food insecurity through Food-for-Work activities, which are in line with Millennium Development Goal (MDG 1 - poverty reduction). The operation is also aimed at improving the nutritional status of the most vulnerable groups of society, such as pregnant and lactating women and children below the age of 5 (in line with MDGs 4 and 5 – reduced child mortality and improved maternal health) as well as contributing to improved access to education through the provision of school feeding, and enhances the capacities of youth and female-headed households through vocational skills training.

### 1.1. Objectives and methodology of the assessment

As part of WFP preparation for the PRRO for Balochistan and Federally Administered Tribal Area (FATA), starting in September 2007, a Food Security Assessment took place using secondary data available from various sources. WFP took this opportunity to use the model of the Integrated Food Security and Humanitarian Phase Classification (IPC), previously piloted by WFP in Indonesia, Cambodia and Sri Lanka. Keeping in view the time constraint, essential parts of IPC was covered.

The IPC was developed as a means to link complex food, nutrition and livelihood security analysis to appropriate action. The classification system is designed to allow comparability of results from one place to another, increase rigour and transparency and to increase relevance to decision making. However, the IPC focuses on understanding the current or projected food security situation, and does not replace in-depth studies on the underlying causes of food insecurity. The IPC has been implemented in drought stricken Somalia with success and its application is being piloted in both Africa and Asia. Based on detailed technical guidelines, the IPC allows classification of a country into five phases: generally food secure, chronically food insecure, acute food and livelihood crisis, humanitarian emergency, and famine/humanitarian catastrophe. Key reference outcomes and a strategic response framework are outlined for each Phase (see below table from the IPC technical manual)<sup>1</sup>.

<sup>1</sup> FSAU (2006): *Integrated Food Security and Humanitarian Phase Classification: Technical Manual, Version 1*, Technical Series, Report IV.11, May 2006.

Table 1: Integrated Food Security and Humanitarian Phase Classification Reference Table

Phase Classification	Key Reference Outcomes (current or imminent outcomes on lives and livelihoods; based on convergence of evidence)	Strategic Response Framework (mitigate immediate outcomes, support livelihoods, and address underlying/structural causes)
1 Generally Food Secure	<p>Crude Mortality Rate &lt; 0.5 / 10,000 / day</p> <p>Acute malnutrition &lt; 3 % (wh &lt; -2 z-score)</p> <p>Stunting &lt; 20% (wage &lt; -2 z-score)</p> <p>Food Access/ Availability usually adequate (&gt; 2,100 kcal ppp day), stable</p> <p>Dietary Diversity consistent quality and quantity of diversity</p> <p>Water Access/Avail. usually adequate (&gt; 15 litres ppp day), stable</p> <p>Hazards moderate to low probability and vulnerability</p> <p>Civil Security prevailing and structural peace</p> <p>Livelihood Assets generally sustainable utilization (of 5 capitals)</p>	<p>Strengthen resilience to shocks of food insecure groups</p> <p>Investment in food and economic production systems</p> <p>Enable development of livelihood systems based on principles of sustainability, justice, and equity</p> <p>Prevent emergence of structural hindrances to food security</p> <p>Advocacy</p>
2 Chronically Food Insecure	<p>Crude Mortality Rate &lt; 0.5/10,000/day; USMR&lt;1/10,000/day</p> <p>Acute malnutrition &gt;3% but &lt;10 % (wh &lt; -2 z-score), usual range, stable</p> <p>Stunting &gt;20% (wage &lt; -2 z-score)</p> <p>Food Access/ Availability borderline adequate (2,100 kcal ppp day); unstable</p> <p>Dietary Diversity chronic dietary diversity deficit</p> <p>Water Access/Avail. borderline adequate (15 litres ppp day); unstable</p> <p>Hazards recurrent, with high livelihood vulnerability</p> <p>Civil Security Unstable, disruptive tension</p> <p>Coping Insurance strategies stressed and unsustainable utilization (of 5 capitals)</p> <p>Livelihood Assets Pronounced underlying hindrances to food security</p>	<p>Design &amp; implement strategies to increase stability, resilience and resilience of livelihood systems, thus reducing risk</p> <p>Provision of safety nets/ to high risk groups</p> <p>Interventions for optimal and sustainable use of livelihood assets</p> <p>Create contingency plan</p> <p>Restress structural hindrances to food security</p> <p>Close monitoring of relevant outcome and process indicators</p> <p>Advocacy</p>
3 Acute Food and Livelihood Crisis	<p>Crude Mortality Rate 0.5-1/10,000/day; USMR 1-2/10,000/day</p> <p>Acute Malnutrition 10-15 % (wh &lt; -2 z-score), &gt; than usual, increasing epidemic; increasing</p> <p>Disease lack of entitlement; 2,100 kcal ppp day via asset stripping</p> <p>Dietary Diversity acute dietary diversity deficit</p> <p>Water Access/Avail. 7.5-15 litres ppp day, accessed via asset stripping</p> <p>Desitution/Displacement emerging, diffuse</p> <p>Civil Security limited spread, low intensity conflict</p> <p>Coping 'tortis strategies', CGI &gt; than reference; increasing</p> <p>Livelihood Assets accelerated and critical depletion or loss of access</p>	<p>Support livelihoods and protect vulnerable groups</p> <p>Strategic and complimentary interventions to immediately i) food accessibility AND support livelihoods</p> <p>Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.)</p> <p>Strategic interventions at community to national levels to create, stabilize, rehabilitate, or protect priority livelihood assets</p> <p>Create or implement contingency plan</p> <p>Close monitoring of relevant outcome and process indicators</p> <p>Use 'tortis as opportunity' to redress underlying structural causes</p> <p>Advocacy</p>
4 Humanitarian Emergency	<p>Crude Mortality Rate 1-2 / 10,000 / day; &gt;2x reference rate; increasing; USMR &gt; 2/10,000/day</p> <p>Acute Malnutrition &gt;15 % (wh &lt; -2 z-score), &gt; than usual, increasing pandemic</p> <p>Disease severe entitlement gap; unable to meet 2,100 kcal ppp day</p> <p>Food Access/ Availability Regularly 2-3 or fewer main food groups consumed</p> <p>Dietary Diversity &lt; 7.5 litres ppp day (human usage only)</p> <p>Water Access/Avail. concentrated; increasing</p> <p>Desitution/Displacement widespread, high intensity conflict</p> <p>Civil Security 'tortis strategies'; CGI significantly &gt; than reference</p> <p>Coping near complete &amp; irreversible depletion or loss of access</p> <p>Livelihood Assets</p>	<p>Urgent protection of vulnerable groups</p> <p>Urgently i) food access through complimentary interventions</p> <p>Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.)</p> <p>Protection against complete livelihood asset loss and/or advocacy for access</p> <p>Close monitoring of relevant outcome and process indicators</p> <p>Use 'tortis as opportunity' to redress underlying structural causes</p> <p>Advocacy</p>
5 Famine / Humanitarian Catastrophe	<p>Crude Mortality Rate &gt; 2/10,000 lday (example: 6,000 / 1,000,000 / 30 days)</p> <p>Acute Malnutrition &gt; 30 % (wh &lt; -2 z-score)</p> <p>Disease pandemic</p> <p>Food Access/ Availability extreme entitlement gap; much below 2,100 kcal ppp day</p> <p>Dietary Diversity &lt; 4 litres ppp day (human usage only)</p> <p>Water Access/Avail. large scale, concentrated</p> <p>Desitution/Displacement widespread, high intensity conflict</p> <p>Civil Security effectively complete loss, collapse</p> <p>Livelihood Assets</p>	<p>Critically urgent protection of human lives and vulnerable groups</p> <p>Comprehensive assistance with basic needs (e.g. food, water, shelter, sanitation, health, etc.)</p> <p>Immediate policy/legal relations where necessary</p> <p>Negotiations with varied political-economic interests</p> <p>Use 'tortis as opportunity' to redress underlying structural causes</p> <p>Advocacy</p>

Early Warning

Early Warning Levels	Probability / Likelihood (of worsening Phase)	Severity (of worsening phase)	Reference Hazards and Vulnerabilities	Implications for Action
Low	As yet unclear	Not applicable	Hazard: occurrence of, or predicted event stressing livelihoods; with low or uncertain vulnerability Process indicators: small negative change from normal	Close monitoring and analysis
Moderate Risk	Elevated probability / likelihood	Specified by predicted Phase Class, and as indicated by color of diagonal lines on map.	Hazard: occurrence of, or predicted event stressing livelihoods; with moderate vulnerability Process indicators: large negative change from normal	Close monitoring and analysis Contingency planning Step-up current Phase Interventions
High Risk	High probability, 'more likely than not'		Hazard: occurrence of, or strongly predicted major event stressing livelihoods; with high vulnerability Process indicators: large and compounding negative changes	Preventative Interventions—with increased urgency for High Risk populations Advocacy

1.2. Process

A number of procedures and decisions had to be made during the process of the assessment and the steps are explained below in chronological order. The process was shared within WFP with technical expertise in Food Security and with specific knowledge of the country.

### **Step 1: Literature Review**

The literature review included the IPC document of Sri Lanka and Cambodia, documents on Pakistan including databases, reports and maps from government, UN and NGOs, and international papers on emergency food security and nutrition assessment.

By design, the IPC recognises the limitations on data quality and quantity and allows flexibility in utilization of all existing information sources. This flexibility is most critical for FATA. The process started with the collection of all relevant data and the identification of a unit of study. This unit for Balochistan and FATA was based on the smallest administrative boundaries, i.e. district/agency where valid and reliable data could be obtained. There are 26 districts in Balochistan and 7 agencies in FATA.

### **Step 2: Indicator Selection**

Outcome indicators and their respective thresholds stipulated in the IPC for Pakistan were considered in the light of existing government statistics derived from national, provincial and district level reports, surveys and assessments. Besides, area specific assessments such as UNICEF Multiple Indicators Cluster Survey (MICS) 2004 that conducted in Balochistan. Data from various agencies, FATA secretariat and VAM database was used for FATA.

Indicators with no clear thresholds had to be developed based on guidelines and lessons learnt from the pilots in Indonesia and Cambodia and Sri Lanka. These indicators included Underweight, Infant Mortality Rate, access to portable water and agricultural production.

IPC Key reference indicators of Food Access as per standard Kcal and Dietary Diversity were used at the provincial level. Poverty levels were used as process indicators for Food Access. Price increase and price volatility at district level were other very important process indicators used to support the phase classification decision.

	<b>Indicator</b>	<b>Description</b>	<b>Thresholds</b>
<b>UTILIZATION</b>	<b>Underweight</b>	Percentage of children under 5 years with weight for age <-2 SD	<10 percent
			10-50 percent
			>50 percent
	<b>IMR</b>	Number of infants deaths per 1,000 live births (40=National MDG for 2015)	<40
			41-60
			61-80
			81-100
			>100
	<b>U5MR</b>	Number of deaths for children under 5 years per 10,000 (MDG goal for 2015 is 52)	<52
			52-100
			101-150
	<b>Maternal Mortality Rate</b>	Number of women deaths in pregnancy per 100,000	<500
			500-549
			550-600
	<b>Incident of Tuberculosis</b>	cases per 100,000	>600
<100			
100-500			
501-1000			
<b>ACCESS/ASSETS</b>	<b>Access to safe drinking water</b>	Percentage of households having access to safe drinking water	>1000
			>50 percent
			31-50 percent
			11-30 percent
	<b>Access to Proper housing</b>	percent of population with access to Concrete or semi-concrete houses	<=10 percent
			>50 percent
			20-49 percent
			10-19 percent
	<b>Poverty</b>	Percentage of population below the national poverty line	<10 percent
			<20 percent
			20-30 percent
	<b>Sanitation</b>	Percentage of households with toilet facility	30-40
>40			
>50 percent			
11-50 percent			
<b>AVAILABILITY</b>	<b>Productivity growth</b>	Average wheat productivity growth 2002-2006	<=10 percent
			>5 percent
			0-5
			0 to -5
	<b>Production increase</b>	Average percent increase in wheat production 2004-2006	< -5
			>10 percent
			10-0 percent
			<0 to -10 percent
	<b>Wheat balance</b>	Average per capita 2005-2006	<-10percent
>25 kg			
25-0			
			<0 to -50kg
			<-50kg

### Step 3: Template and Analysis

Each key reference outcome and process indicator was analyzed separately and the appropriate phase determined. The second stage of analysis consisted of concluding a single overall phase for the area. To support the analysis, IPC Analysis Templates were prepared for each district. The IPC Analysis Templates record details of each indicator. In addition to source, collection dates and geographic coverage, the IPC Analysis Templates also capture the confidence level assigned by the analysts to the particular data set. The resulting classification is illustrated in a map with distinct colour codes for each Phase. Boxes with text and data are included to provide relevant information on population, type of hazards and underlying causes. The IPC is a dynamic product and the map indicates a time limit regarding the early warning forecasts. Through regular data collection, the map should be updated periodically, so that decision makers have constant access to predictions of potential changes in the phase assigned to a particular area or group.

#### 1.2 Limitations

The following limitations can be mentioned:

- Most recent Government statistics, including national averages, do not include FATA agencies. These agencies are amongst the poorest due to tribal society, fight in Afghanistan, poor investment and negligible development.
- Despite the availability of relatively good quality data and sources, the IPC approach could not be implemented below the district level due to lack of further disaggregated and comparable data.
- In the absence of a reliable outcome indicator for food availability and access, process indicators were used. The interpretation of the calorie intake indicator proposed by the IPC approach was, some times, in contradiction with process indicators such as poverty levels, price changes, real wages, wheat productivity growth, wheat self-sufficiency status, and physical access to markets. The calorie intake measurement in terms of food consumed was therefore, used only at provincial/regional level, though it is not certain that the set of process indicators can provide a comprehensive analysis of the food availability and access situation.
- The natural hazard proneness of Pakistan was also taken into account. Considering the highly volatile nature of the area and the seasonality of drought which occur generally in July-December in arid zone area and some times continue for a number of years. This time frame is only indicative and can be updated earlier or later depending on the patterns of the situation, especially in the western districts of Balochistan and FATA bordering Afghanistan.
- In the absence of a clear guidance in the IPC manual on how to estimate population in need of assistance, the population in need of assistance may be over/under-estimated. There is no direct link between the population estimates and the phase classification in the IPC approach. The latter maps the severity of the food insecurity situation regardless of who is affected. The former is an attempt to estimate how many people could be targeted in the area concerned by the phase classification. However, the poverty estimate at district level, based on the poverty line established by the “Human Condition Report”, was used to estimate the food insecure population. By using the poverty line, it is assumed that people in need will most

likely fall under the poverty line and live in areas with severe food insecurity situation. However, this assumption may not hold everywhere because the population density does not necessarily match with the severity of food insecurity.

## 2. BACKGROUND

Pakistan's economy faced headwinds from rising oil prices, hovering around \$ 70 – 75 per barrel and putting severe strains on the country's trade balance and the budget. The massive earthquake of October 8, 2005 also caused extensive damage to property, infrastructure, school, hospital etc. and a loss of over 70,000 human lives. The rescue and relief operations and reconstruction of earthquake-affected areas also put Pakistan's economy under severe stress. Despite these constraints, Pakistan's economy has proved itself as remarkably resilient in the face of shocks of extraordinary proportions. Growth has remained buoyant with *real* GDP growing at 6.6 percent in 2005-06. The per capita income is about USD 847.

### Agriculture Growth (Percent)

Over the last five years, agriculture growth has witnessed a mixed trend. During the first two years (2000-01 and 2001-02), the country experienced the crippling drought, which badly affected its agriculture and eventually overall growth in agriculture turned negative for these two years. In the preceding years (2002-03 to 2004-05), relatively better availability of irrigation water had positive impact on overall agricultural growth and this sector exhibited modest increase.

Year	Agriculture	Major Crops	Minor Crops
2000-01	-2.2	-9.9	-3.2
2001-02	-0.1	-2.5	-3.7
2002-03	4.1	6.9	0.4
2003-04	2.3	1.9	4.0
2004-05	6.7	17.8	3.0
2005-06 (P)	2.5	-3.6	1.6

Balochistan and Federally Administered Tribal Areas (FATA) cover 47 percent of geographical area, while only 7 percent of country's population resides there. Balochistan and FATA share a long border with Afghanistan. Both the regions are the poorest, under developed and the most backward in the country.

Balochistan, the largest province of Pakistan, lays between the latitudes 24<sup>o</sup> to 32<sup>o</sup> and the longitudes 60<sup>o</sup> to 70<sup>o</sup>. It is situated at the eastern flank of Middle East and is strategically located closed to the sea, leading to the Persian Gulf. Afghanistan borders Balochistan in the north-west and in the west, Iran shares its boundaries. South of Balochistan has 760 Kms. long the Arabian Sea coastal-line. The boundaries of Balochistan meet the provinces of Sindh, Punjab, and N.W.F.P. in the southeast, northeast and north respectively.

Balochistan, the largest of the four provinces of Pakistan, spreads over an area of 347,190 Sq, Kms, forming 43.6 per cent of the total area of Pakistan. It has low population density and is smallest in proportion as compared to that of other provinces. Its population, according to 1998 census, is around 8 million, having a low density per square kilometer. Physically, Balochistan is an extensive plateau of rough terrain divided into basins by ranges of sufficient heights and ruggedness. Broadly, Balochistan's geographic area can be divided into four distinct zones: Upper high lands, lower high lands, plains, and deserts.

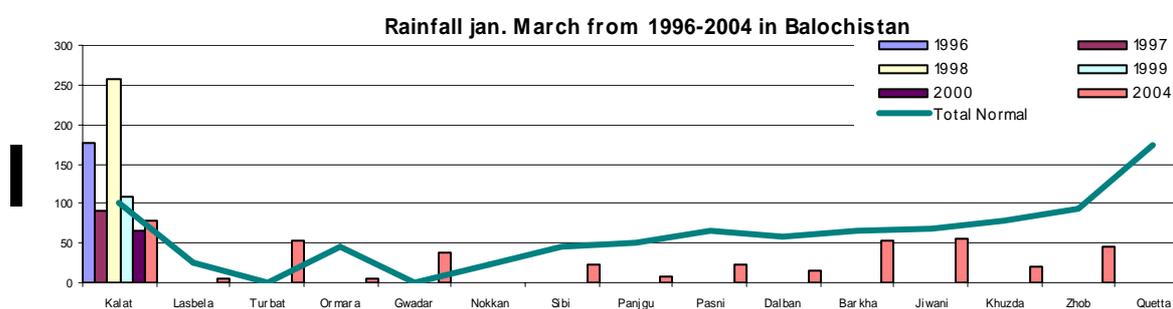
The upper highlands, known locally as Khorasan, rise as high as 3,700 meters, with valley floors about 1,500 meters above sea levels. The highlands include Makran, Kharan and Chaghi ranges in the West and Sulaiman, Pab, Kirther in the east. The Upper High Lands

fall mainly in districts Zhob, Killa Saifullah, Pishin, Quetta, Ziarat and Kalat. It comprises a number of ranges such as Sulaiman, Tobak Kakari, Murdar, Zarghoon, Takatu, and Chiltan ranges.

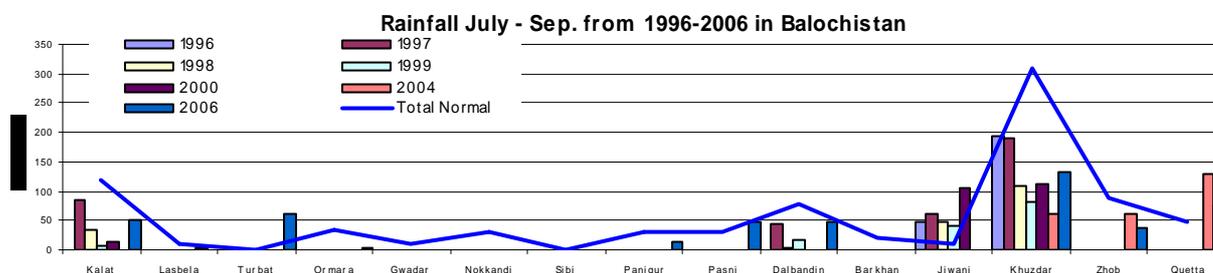
The Lower High Lands have an altitude ranging from 1970 to 3940 ft (600 to 1200 M). They are located in the southeastern Balochistan, except eastern part of Kachi, the southern end of Dera Bugti and Nasirabad districts. Some are extension of lower high lands that exist at boundaries of Gwadar, Turbat, Panjgur, Kharan and Chaghi districts.

Balochistan has relatively small area of plains as compared to its total land area. They include the Kachi plain, situated to the south of Sibi and extending into Nasirabad Division, the southern part of Dera Bugti district, and narrow plain area along the Mekran coast stretching from Kachi to the Iranian border. The plains of Kachi, Lasbela and that of river Dasht cover sizable area. Mountains dominate the terrain, and valley floors, and piedmont plain make up only 15% of the landscape.

The western part of the province, mostly Kharan and Chaghi districts, consists of vast plains covered with black gravel surface and broad expanses of sand dunes. The coastal-line is about 760 Kilometers long, with a number of peninsulas and promontories. The coastal area is not effectively connected with the interior; the steep hills rise abruptly beyond the narrow coastal plain. Ports, such as Somiani, Pasni and Gwadar are unsheltered. Federal and provincial governments have comprehensive development plans that feature a deep-sea port at Gwadar and a coastal highway.



Average annual precipitation in Balochistan varies from 2 to 20 inches (50 to 500 mm).



Maximum precipitation falls in the northeastern areas with annual average rainfall ranging from 8 to 20 inches (200 to 500 mm). It decreases in the south and the eastern parts and is minimal in Naukundi. In Kharan and Dalbandin area, rainfall ranges between 1 to 2 inches (25 to 50 mm). Evaporation rates are higher than the precipitation and generally vary from 72 to 76 inches (1830- 1930 mm) per annum.

Federally Administered Tribal Area (FATA) is a special administrative region of Pakistan comprising of seven agencies and six frontier Regions (FRs) along the border of Afghanistan covering an area of 27,220 km<sup>2</sup> (10,507 mi<sup>2</sup>). About

3.341 million people belonging to various tribes are living here governed under century's old rules and regulations with unique governance arrangements different from the rest of the country.

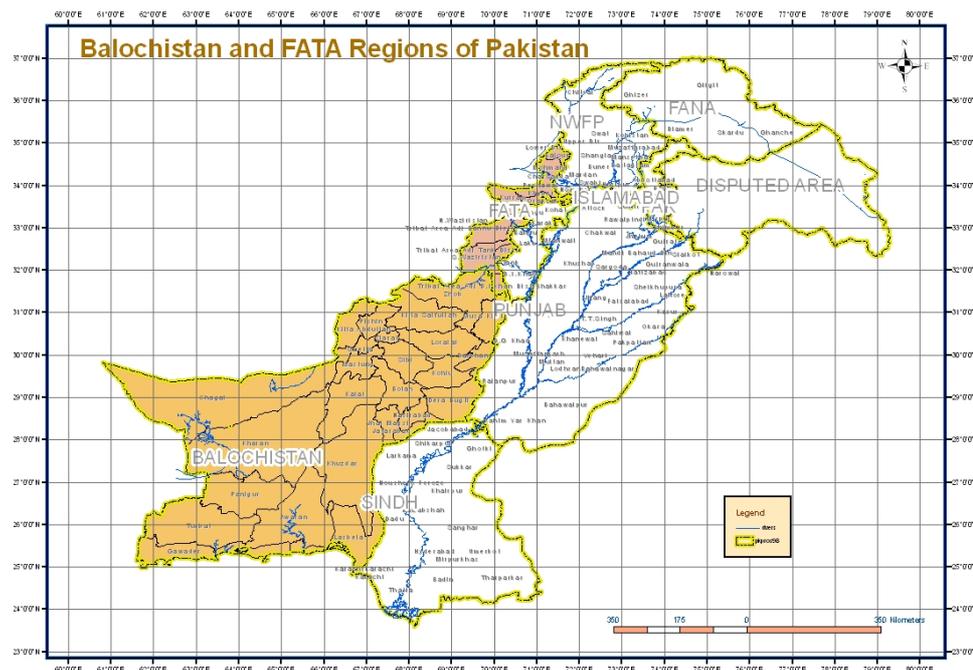
The Federally Administered Tribal Areas (FATA) is part of Pakistan outside the four provinces, comprising a region of some 27,220 km<sup>2</sup> (10,507 mi<sup>2</sup>).

The FATA is bordered by Afghanistan to the west with the border marked by the Durand Line, the North-West Frontier Province and the Punjab to the east, and Balochistan to the south.

The total population of the FATA was estimated in 2000 to be about 3,341,070 people, or roughly 2% of Pakistan's population. Only 3.1% of the population resides in established townships. It is thus the most rural administrative unit in Pakistan.

The Tribal Areas comprise seven Agencies namely Khyber, Kurram, Bajaur, Mohmand, Orakzai, and North and South Waziristan and six F.Rs (Frontier Regions) namely F.R Peshawar, F.R Kohat, F.R Tank, F.R Banuu, FR Lakki and F.R D.I. Khan. The main towns include Miran Shah, Razmak, Bajaur, Darra Bazzar and Wana.

The British set up the Agencies when the closed-door and Forward Policy did not achieve the desired objectives. The Khyber was created as a special Political Agency in 1878; Kurram in 1892 and Malakand, North and South Waziristan Agencies came into existence in 1895-96. Mohmand Agency was added to the existing strength of the Agencies in 1951 and two new Agencies, namely Bajaur and Orakzai were created in December 1973 with headquarters at Khar and Hangu, respectively. The peculiar feature of the Agency administration is that tribesmen have been left to be governed by their customs and traditions. The British control too, was only confined to roads, military installations and places of strategic importance.



The 7 tribal areas lie in a north-to-south strip that is adjacent on the west side of the 6 frontier regions, which also lie in a north-to-south strip. The areas within each of those 2 regions are geographically arranged in a sequence from north to south. The geographical arrangement of the 7 tribal areas in order from north to south is: Bajaur, Mohmand, Khyber, Orakzai, Kurram, North Waziristan and South Waziristan. The geographical arrangement of the 6 frontier regions in order from north to south is: Peshawar, Kohat, Bannu, Lakki, Tank and D.I. Khan.

## 2.1 Poverty and income patterns

Balochistan has a tribal society, mostly neglected in development process because of feudal system and low priority in the past. Local conflicts and political polarization was also one of the main causes of poverty and vulnerability of the area. Main indicators of poverty are quite high for Balochistan. Adult literacy rate is low as 18 districts out of 26 are among the bottom 30 districts of Pakistan. Similarly, 14 districts in female literacy and 11 in safe drinking water are among the bottom 30 districts on national ranking of food security analysis.

Looking at the historical perspective, food insecurity and consequently food poverty in Pakistan and especially in Balochistan and FATA has been on increase over time. Among the possible reasons *inter alia* are the sharp increase in market price of food items, compared to wages, non-systematic delivery of food, slow growth in public sector and low level of investment in socio-economic sectors. Moreover, rural development, in long-term perspective, has not been focused *per se* in national policies. The FSA 2003 findings present a clear picture of the inter play of all these factors.

Due to the isolation of FATA from the main stream of development, very limited interventions have been done in the past. Except for few locations, local resources were not explored and thus communities had to rely on temporary work in transport, trade and service sector. Both poor economic conditions and religious/tribal norms have made a ground for low literacy rate and sending children to madrasas. Madrasas provide free boarding and lodging facilities to students and poor parents have no other option if they want to go for education. One of the serious problems is the physical accessibility of communities to the market and food. Many communities have even no road to reach the market. The prices of food commodities are high due to transportation from main markets to the villages. Because of the poor communication network, small vehicles are used for the transportation of goods, which has a higher cost as compared with the trucks.

According to the Food Security Analysis carried out by WFP in 2003, out of total 26, only 2 (8%) districts in Balochistan, namely Nasirabad and Ziarat, appear to be reasonably food secure. As against these, 22 (84%) districts are food insecure, with insecurity ranging from less insecure in case of 4 (15%) through very low in case of 5 (19%) to extremely low levels in case of 13 (50%) districts<sup>2</sup>. This suggests that 50 percent of districts in Balochistan are net food insecure. Marginalized status of Balochistan in terms of access to opportunities and services could be a factor responsible for this situation.

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<sup>2</sup> Food Insecurity in Rural Pakistan 2003

FATA, as a whole, ranked as the highly food insecure area of Pakistan. Although, farming is the main source of income, it contributes very little to the household food requirement.

Because of its peculiar condition, no humanitarian agency is working in FATA, while resources are not sufficient to meet the challenge. Due to instable security condition in the near past, efforts have not been made to assist the people on a large scale.

Indicators such as literacy, infant and child mortality and life expectancy are all considerably worse there as compared to the rest of country. The development indices both in FATA and Balochistan lag far behind the rest of Pakistan.

The five major indicators, i.e., literacy rate, houses condition, availability of tap water, availability of latrines and vaccination of pregnant women, majority of districts in Balochistan are at the bottom<sup>3</sup>. Among the lowest 26 districts, based on these five indicators, 17 districts are only in Balochistan (65%)<sup>4</sup>.

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<sup>3</sup> Pakistan Social and Living Standard Measurement Survey (PSLSMS), 2004-05

<sup>4</sup> PSLSMS 2004-05 and VAM analysis

### 3. FOOD AVAILABILITY AND MARKETS

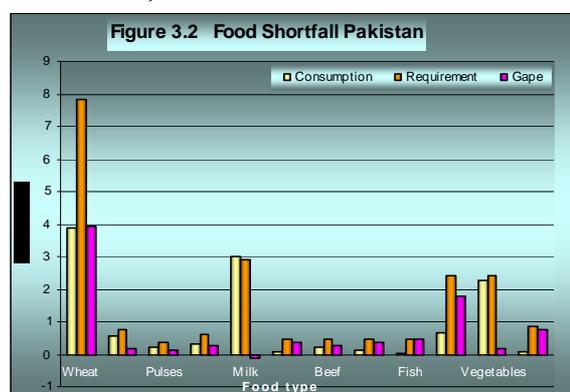
In terms of demand of food, in Pakistan, wheat ranks number one, followed by rice and then dairy & meat. The requirements for these food items have been estimated at 17.6 million mt, 1.4 million mt, 18457 million litres and 882 million MT per annum respectively. When we contrast the food requirements with its average availability, the gap is more pronounced in case of wheat compared to other daily use food items.

The average production of key staple i.e. wheat, increased since 1993-94 from 11 million MT to 18 million MT in 2006 in Punjab, it remained almost stagnant in other three provinces. For example, according to the Agricultural Statistics of Pakistan (2004-5), wheat production in NWFP & Balochistan was in the range of 1064-1091 & 638-655 thousand tons, during 2002-2005 as against Punjab & Sindh, where during the same period production fell in the range of 15355-17375 & 2109-2509 thousand tons respectively. The situation in NWFP and Balochistan remained almost unimproved during the period. As a result, 35(29%) districts in Pakistan were highly deficit in wheat production in 2003.

Wheat Flour in Pakistan 2000-01 to 2005-06		000 mt
Average Net Availability		17571.8
Consumption 2005		17620.6
<b>Deficit</b>		<b>48.7</b>

An average availability of wheat flour, was estimated at 17.5718 million Mt, during period from 2000-2001 to 2005-6, as against wheat demand of 17.6206 million MT, suggesting a net deficit of 0.0487 million MT. However, Government of Pakistan has estimated production of wheat as 22.5 million MT during 2006-07 with a surplus of 1.6 million MT. Nevertheless, good bumper crop of wheat during 2006-07 was the result of good weather condition and proper rainfall. Such conditions are uncertain and may not repeat every year.

Since wheat is key contributor to daily caloric intake in Pakistan, the deficit in wheat requirement & demand, translates to caloric shortfalls and thus to food insecurity.



Food availability is predominantly depends on wheat production and marketing in Balochistan and FATA as it is mostly transported from the adjacent districts of Punjab and NWFP. Nevertheless, the local food production has a close correlation with the market prices and copes with temporary shortages of food caused by provincial quotas and poor supply chain, beside other reasons.

2005-06										
SN	District	Wheat			Rice			Cereal		
		000mt	000 mt	%age	000mt	000mt	%age	000mt	000mt	%age
		Net Production	Consumption	surplus/deficit	Net Production	Consumption	surplus/deficit	Net Production	Consumption	surplus/deficit
	<b>BALUCHISTAN</b>	<b>580</b>	<b>906</b>	<b>-36</b>	<b>341</b>	<b>75</b>	<b>352</b>	<b>921</b>	<b>981</b>	<b>-6</b>

1	Quetta	5	118	-96	0	10	-100	5	128	-96
2	Pishin	8	55	-85	0	5	-100	8	60	-86
3	Killa Abdullah	4	59	-94	0	5	-100	4	64	-94
4	Chagai	24	29	-16	0	2	-100	24	31	-22
5	Zhob	3	36	-91	0	3	-100	3	39	-92
6	Loralai	23	38	-40	0	3	-100	23	41	-45
7	Killa Saifullah	20	24	-20	0	2	-100	20	26	-26
8	Sibi	12	27	-55	0	2	-100	12	29	-59
9	Ziarat	0	4	-95	0	0	-100	0	4	-95
10	Dera Bugti	8	26	-71	0	2	-100	8	28	-73
11	Kohlu	4	13	-70	0	1	-100	4	14	-72
12	Nasirabad	138	37	277	141	3	4528	279	40	604
13	Kalat	10	29	-65	0	2	-100	10	31	-68
14	Mastung	11	21	-50	0	2	-100	11	23	-54
15	Khuzdar	67	55	21	10	5	118	77	60	28
16	Lasbela	8	43	-81	0	4	-96	8	46	-82
17	Kharan	11	29	-63	0	2	-100	11	31	-66
18	Awaran	7	14	-53	0	1	-100	7	15	-56
19	Turbat	1	50	-98	0	4	-95	1	54	-98
20	Panjgur	2	32	-94	0	3	-97	2	34	-95
21	Gawader	0	26	-100	0	2	-100	0	28	-100
22	Barkhan	26	15	79	0	1	-100	26	16	65
23	Bolan	26	36	-26	0	3	-99	27	39	-32
24	Jafarabad	151	60	152	189	5	3702	340	65	425
25	Jhal Magsi	11	15	-31	0	1	-70	11	17	-34
26	Musa Khel	3	18	-80	0	1	-100	3	19	-82
1	Bajour	25.1	91.8	-73	5.9	5.8	2	31	97.5	-68.2
2	Mohmand	4.7	51.4	-91	0	3.2	-99	4.7	54.6	-91.3
3	Khyber	8.5	79.9	-89	0	5	-100	8.5	84.9	-90
4	Orakzai	3	21.3	-86	0.2	1.3	-86	3.2	22.7	-85.9
5	Kurram	10.4	60.1	-83	7.5	3.8	49	17.8	63.9	-72.1
6	N.Waziristan	4.4	48.8	-91	0.6	3.1	-80	5	51.9	-90.3
7	S.Waziristan	4.4	56.4	-92	0.1	3.5	-98	4.5	59.9	-92.5
	<b>Total</b>	<b>60.6</b>	<b>409.7</b>	<b>-86</b>	<b>14.2</b>	<b>25.7</b>	<b>-59</b>	<b>74.8</b>	<b>435.5</b>	<b>-82.8</b>

Spatial disparities in wheat self-sufficiency exist among districts, with the main wheat surplus areas being located in the Punjab province. Inter-provincial trade opportunities from surplus to deficit areas are normally hampered by provincial policies and restrictions during period of low production. Recent food price increases, resulting partly from fuel price increases, allow wheat export and commodity export to Afghanistan, have weakened market performance and further reduced poor households' access to food. Households in food deficit areas are affected by the pass-through effect of the fuel price hikes. This section discusses: i) food availability, with a special attention to the wheat self-sufficiency status at district level; ii) the role of markets in moving food and related challenges, and; iv) the impact of price dynamics on household food access.

### 3.1 Wheat self-sufficiency status at district level

According to the 2005-06 statistics, 82.8% of the cereals are imported to FATA. The situation within agencies is quite severe as some agencies import above 90% of the cereals, like S. Waziristan (92.5%), Mohmand (91.3%), Khyber (90%) and N. Waziristan (90.3%)<sup>5</sup>.

Only a portion of land is cultivated in Balochistan- Naseerabad, Jafarabad, Dera Murad Jamali and Usta Mohammed and many areas of central Balochistan are considered agricultural regions. Yet, with scarcity in irrigation water, yields per hectare of several crops are highest in the region such as those of dates, barley, sorghum, millet, pulses, onions, potatoes, chilies and fodders.

Balochistan has a pastoral economy. Livestock is the primary source of livelihood for about 67 percent of the population. Balochistan used to provide 40% of Pakistan's livestock requirements; however, due to persistent drought the production has been declined. The leather, carpet and pharmaceutical industries are the main consumers of livestock downstream products. Balochistan has a 1,000-km long coastal belt along the Arabian Sea. It has huge potential for development of fisheries. The enormous fish and seafood potential is yet to be fully tapped. As the diversity of marine life indicates, the coastline is one of the most productive marine ecosystems of the world. According to an estimate, 60 species of fish and 10 of shrimps, including the best in the world, are found in these waters.

In Balochistan, according to 2005-06 statistics, except for Nasirabad, Barkan and Jaffrabad, the rest of the districts are net importers of cereals. Similar is the case of wheat, which contributes for more than 50% of the daily caloric intake, where districts like Gawader imports about 100% of it. Quetta, Pashin, Killa Abdullah, Turbat, Panjgur and Ziarat are among the top category on the list of cereal importers.

Out of 26 districts in Balochistan, 22 districts are deficit in wheat production. The districts bordering Iran are exporting wheat flour from Iran, while the rest depends on Punjab. In the case of FATA, all 7 agencies are deficit in wheat and totally depend on Punjab. This means that in total 94% of the districts are in need of wheat and quite vulnerable during disasters and poor supply chain.

#### Wheat Production and Self-Sufficiency Status per District (2005-06)

sn	Districts/ Agency	Population 2005	Production	Wheat Balance					Average	Average
				kg/capita (production)		kg/capita			% change of production	% change in productivity
				2004- 05	2005- 06	2004- 05	2005- 06	Average	2001-02 to 2005-06	2001-02 to 2005-06
	Balochistan	7,850,169	706,000	84.5	89.9	-41.5	-36.7	-39.1	2.6	2.0
1	Quetta		5,778	5.4	5.7	-112.3	-112.0	-112.1	5.8	3.3

<sup>5</sup> VAM Analysis 2006

		1,008,814								
2	Pishin	469,375	10,295	20.6	21.9	-99.1	-98.0	-98.6	7.5	-2.8
3	Killa Abdullah	502,536	4,419	8.3	8.8	-110.2	-109.7	-109.9	-8.9	-0.2
4	Chagi	217,176	29,258	126.6	134.7	-22.8	-15.7	-19.2	6.6	1.6
5	Loralai	327,969	27,399	78.5	83.5	-47.2	-42.8	-45.0	-12.8	-2.3
6	Musa Khail	157,079	4,251	25.4	27.1	-92.3	-90.9	-91.6	1.6	1.6
7	Barkhan	128,128	31,904	234.0	249.0	87.6	100.8	94.2	1.6	1.6
8	Zhob	305,576	3,903	12.0	12.8	-107.3	-106.6	-107.0	0.0	-2.3
9	Killa Saifullah	216,002	23,745	103.3	109.9	-20.7	-14.9	-17.8	11.0	0.7
10	Sibi	231,386	14,530	59.0	62.8	-65.1	-61.7	-63.4	2.0	2.8
11	Ziarat	33,833	243	6.7	7.2	-112.3	-111.9	-112.1	-4.9	-3.4
12	Kohlu	114,692	4,741	38.8	41.3	-79.4	-77.2	-78.3	-1.5	-3.3
13	Dera Bugti	228,038	9,231	38.0	40.5	-80.7	-78.6	-79.7	5.2	-0.4
14	Nasirabad	320,543	167,795	491.8	523.5	314.9	342.6	328.8	3.0	1.6
15	Jaffarabad	529,423	183,271	325.3	346.2	171.3	189.6	180.4	2.8	2.4
16	Bolan	312,060	32,232	97.0	103.3	-30.4	-25.0	-27.7	2.5	2.7
17	Jhal Magsi	133,932	12,780	89.7	95.4	-33.5	-28.5	-31.0	1.6	0.4
18	Kalat	250,779	12,180	45.6	48.6	-75.7	-73.1	-74.4	4.4	3.2
19	Mastung	180,349	12,803	66.7	71.0	-58.1	-54.3	-56.2	-3.7	-0.1
20	Khuzdar	494,544	79,396	150.8	160.5	20.8	29.3	25.0	5.8	3.0
21	Awaran	121,522	8,158	63.1	67.1	-60.0	-56.5	-58.2	-4.0	2.7
22	Kharan	252,061	12,896	48.1	51.2	-73.0	-70.3	-71.6	-15.0	-1.4
23	Lasbela	385,360	9,742	23.8	25.3	-90.8	-89.5	-90.1	1.6	1.6
24	Turbat	427,885	966	2.1	2.3	-115.0	-114.9	-114.9	-8.5	2.1
25	Panjgoor	273,123	2,166	7.5	7.9	-110.6	-110.2	-110.4	1.0	16.4
26	Gawadar	227,984	-	0.0	0.0	-114.0	-114.0	-114.0	0.0	0.0
	<b>FATA</b>	<b>3,781,079</b>	<b>144,000</b>	<b>37.7</b>	<b>38.1</b>	<b>-75.4</b>	<b>-75.0</b>	<b>-75.2</b>	<b>23.5</b>	<b>16.9</b>
1	Bajaur	829,637	55,045	53.0	66.3	-64.3	-52.6	-58.4	26.9	11.1
2	Khyber	738,868	18,938	22.6	25.6	-88.4	-85.7	-87.0	31.3	27.4
3	Kurram	543,979	20,754	35.4	38.2	-79.6	-77.1	-78.3	15.1	12.6
4	Mohmand	464,419	15,683	44.9	33.8	-71.4	-81.1	-76.3	47.7	43.9
5	N. Waziristan	436,997	7,685	23.2	17.6	-91.3	-96.3	-93.8	16.0	19.5
6	Orakzai	267,136	6,741	25.5	25.2	-57.4	-57.7	-57.5	24.7	21.9
7	S. Waziristan	500,043	4,348	14.6	8.7	-100.0	-105.2	-102.6	-6.8	-5.7
	<b>Total</b>	<b>11,631,248</b>	<b>850,000</b>	<b>122</b>	<b>128</b>	<b>-117</b>	<b>-112</b>	<b>-114</b>	<b>26</b>	<b>19</b>
Assumptions: (1) Per capita wheat requirement is based on the results of Integrated household economic survey, 2001-02										
(2) Total loss including milling waste is 12.5% (FSA 2003)										
									24	2
										1

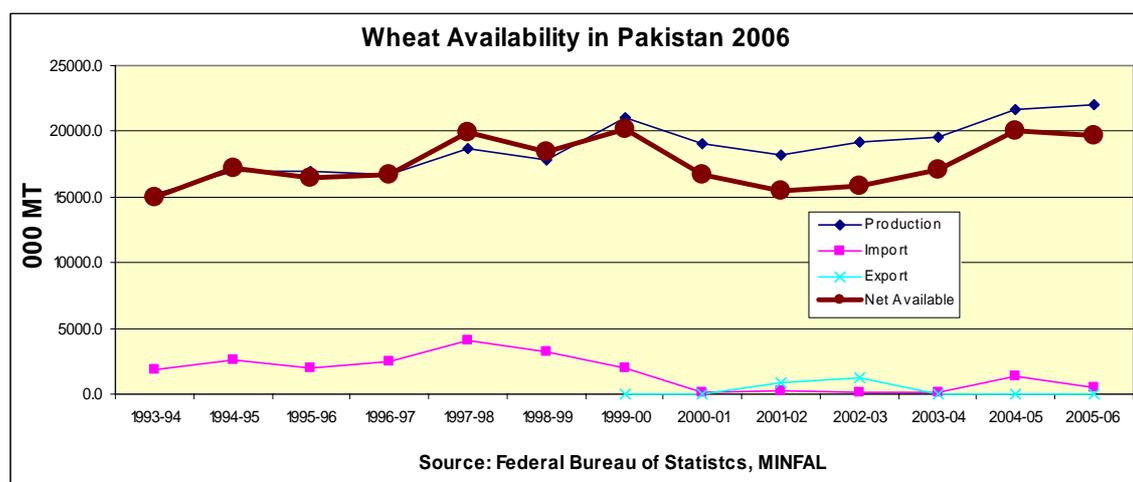
	5	7	9
	1	17	16
	3	7	7
<b>Total</b>	<b>33</b>	<b>33</b>	<b>33</b>

### 3.2 Secondary crops

Rice is another important crop in cereal production. In terms of calories its contribution is 6% in daily caloric intake in Balochistan and about 3% in FATA. Due to cost implication, poor people consume it during special occasions. Rice is mostly used by middle class or export to other countries. However, only 3 districts are producing surplus rice in Balochistan and one agency in FATA. Vegetable oil is contributing 21% of the daily caloric intake of poor class, however, 90% of it is imported to Pakistan. Its production in Balochistan and FATA is almost zero.

### 3.3 Food grain imports and trade regime

Pakistan is a net importer of wheat since independence. The quantum of import of wheat depends on the local production during a particular year. Except for 2006-07, where government of Pakistan estimated a bumper crop with 23 million mt of production, a regular import of wheat is recorded. Since 1993, the highest import of 4 million mt was recorded during 1997-98. Even during 2005-06, 0.45 million mt of wheat was imported in the country.



Government of Pakistan allocate quotas to provinces and provincial governments pay for the transportation of wheat from the port or the source (Punjab) to the respective provincial capitals and also for further supply to districts. Government release wheat to flour mills on fixed prices and thus control the market prices. However, the inadequate allocation, government subsidies and consequently poor private sector result in high prices of wheat in the provinces and in districts.

### 3.4 Wheat availability through market channels

Due to high significance of wheat being the major contributor in daily caloric intake (above 50%), government try to keep hold on market, thus government, through support prices and subsidies to flourmills, controls wheat market. In such circumstances, private market sector is quite weak, instead supply wheat to Afghanistan through formal as well as informal channels. The informal supply of wheat to Afghanistan is very high. This is

one of the reasons that even in good production years, Pakistan could not sustain self-sufficiency in wheat production.

The provinces and particularly, districts, where wheat production is lower than consumption, markets are mostly dependant on imports and subject to crisis due to shortages. Balochistan, FATA and NWFP have experienced shortfalls in markets with higher prices of wheat flour as compared to Punjab.

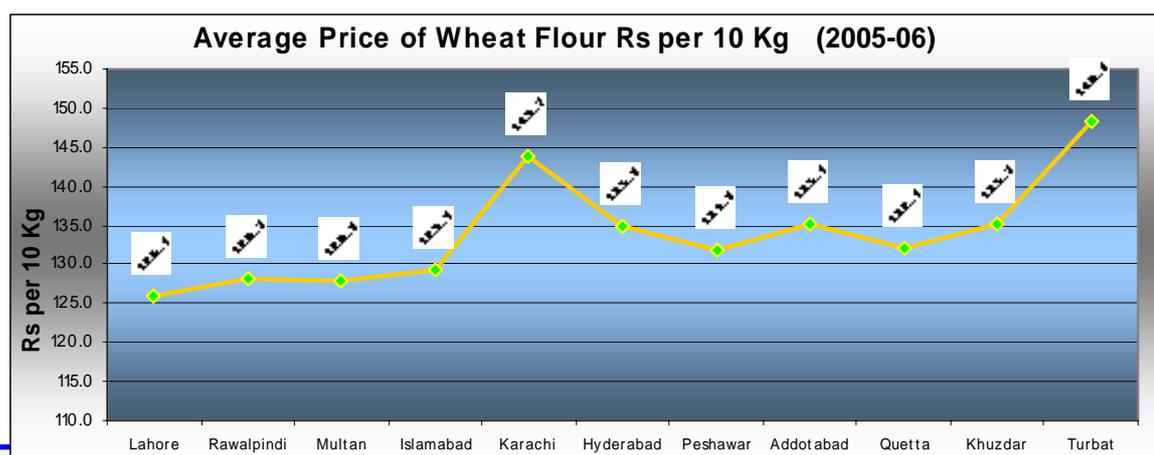
### 3.5 Food price patterns

The prices of basic food commodities are on increase, in Pakistan, since 1995. Wheat flour price was increased from Rs. 5.96 to Rs. 12.95 per kg during 1995-2007. Vegetable Ghee or edible oil has a sharp increase during this period due to high import prices. There is a great fluctuation of prices, mostly depend on local production, shortages,



import prices and transportation.

Market system in Balochistan and FATA is operational but due to accessibility problems, it is quite weak. Transportation cost plays a vital role in setting the prices, while occasional shortages increase the market prices substantially. Wheat flour prices during 2005-06 recorded high in Balochistan as compared to Punjab. The average price of 10 kg bag of wheat flour was Rs. 148.4 as compared to 128.2 in Rawalpindi. This is almost 16% increase, which has compelled the poor people to eat less. The wage rate in these remote districts is less than that of major urban areas, like Karachi and Lahore. Hence, at both the points, people in these food insecure areas are further pushed to the high risk categories in terms of vulnerability.



Opportunities of jobs are scarce in both FATA and Balochistan, because of rural economy and limited development interventions. According to the Pakistan Labour Force Survey 2005-06, about 8.06% of graduates are unemployed in Balochistan as compared to 3.72% of the rural Pakistan. Females' mobility is quite restricted and thus their participation in the formal labour market is negligible except for education sector.

The unskilled wage rate is Rs. 130 per day in Khuzdar (Balochistan) and Rs. 165/day in Loralai as against Rs. 248 per day in Karachi. Similar is the case of other cities in Balochistan<sup>6</sup>.

### 3.6 Concluding remarks

- Pakistan is a net importer of wheat to compensate for its deficit wheat production. Balochistan and FATA, regarding wheat, are dependant on Punjab and import from other countries. The shortfall in both the regions is above 80%.
- Twenty-two (out of 2) districts in Balochistan and seven (out of seven) agencies in FATA are wheat deficit. The major wheat surplus districts are Nasirabad and Jafferabad in Balochistan.
- Market prices of wheat flour is higher in FATA and Balochistan, while wage rates are lower than major cities of Punjab and other provinces.
- The wheat-marketing channel is restrictive and controlled by the government. However, flourmills increase the rate based on the increase in fuel and speculation of shortages. Thus, market is quite volatile and consequently, affects the poor people. In areas like Balochistan and FATA, where the road network is quite poor, market has a serious impact on the prices of food.
- Overall, significant food commodity price increase is observed in all the districts of Balochistan and FATA due to increase in support prices, increase in import prices, domestic shortages, effect of fuel prices and speculations. The price increase is higher in districts/agencies bordering Afghanistan.

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<sup>6</sup> Federal Bureau of Statistics, August 2006

## 4. FOOD ACCESS

### 4.1. Poverty and access

Pakistan Human Condition Report (2002) states that 1/3rd of all the households in the country are living below food poverty line. The poverty level was increase from 23.6% in 1993-94 to 34.8% in 1998-99. It means that they are not able to meet their nutritional requirements. However, the Government has claimed reduce poverty to 24% during 2006.

Balochistan has a tribal society, mostly neglected in development process because of feudal system and low priority in the past. Local conflicts and political polarization was also one of the main causes of poverty and vulnerability of the area. Main indicators of poverty are quite high for Balochistan. Adult literacy rate is low as 18 districts out of 26 are among the bottom 30 districts of Pakistan. Similarly, 14 districts in female literacy and 11 in safe drinking water are among the bottom 30 districts on national ranking of food security analysis.

Incidence of Food Poverty by Provinces and Rural/ Urban Areas (1993-94 & 1998-99)						
PERIOD	Head Count Ratios (percentage)					
	1993-94			1998-99		
	All	Rural	Urban	All	Rural	Urban
Punjab	22.8	24.5	19.8	33.5	35.8	27.3
Sindh	28.2	30.4	25.9	34.2	38.9	25.8
NWFP	24.4	27.8	16.1	25.2	26.2	20.1
Baloch-istan	22.0	22.9	17.3	39.8	47.2	23.1
Pakistan	23.6	26.3	19.4	32.6	34.8	25.9

Source: Pakistan Human Condition Report, 2002.

Looking at the historical perspective, food insecurity and consequently food poverty in Pakistan and especially in Balochistan and FATA has been on increase over time. Among the possible reasons inter alia are the sharp increase in market price of food items, compared to wages, non-systematic delivery of food, slow growth in public sector and low level of investment in socio-economic sectors. Moreover, rural development, in long-term perspective, has not been focused per se in national policies. The FSA 2003 findings present a clear picture of the inter play of all these factors.

Due to the isolation of FATA from the main stream of development, very limited interventions have been done in the past. Except for few locations, local resources were not explored and thus communities had to rely on temporary work in transport, trade and service sector. Both poor economic conditions and religious/tribal norms have made a ground for low literacy rate and sending children to madrasas. Madrasas provide free boarding and lodging facilities to students and poor parents have no other option if they want to go for education. One of the serious problems is the physical accessibility of communities to the market and food. Many communities have even no road to reach the market. The prices of food commodities are high due to transportation from main markets to the villages. Because of the poor communication network, small vehicles are used for the transportation of goods, which has a higher cost as compared with the trucks.

According to the Food Security Analysis carried out by WFP in 2003, out of total 26, only 2 (8%) districts in Balochistan, namely Nasirabad and Ziarat, appear to be reasonably food secure. As against these, 22 (84%) districts are food insecure, with insecurity ranging from less insecure in case of 4 (15%) through very low in case of 5 (19%) to extremely low levels in case of 13 (50%) districts<sup>7</sup>. This suggests that 50 percent of districts in Balochistan are net food insecure. Marginalized status of Balochistan in

<sup>7</sup> Food Insecurity in Rural Pakistan 2003

terms of access to opportunities and services could be a factor responsible for this situation.

FATA, as a whole, ranked as the highly food insecure area of Pakistan. Although, farming is the main source of income, it contributes very little to the household food requirement.

Because of its peculiar condition, no humanitarian agency is working in FATA, while resources are not sufficient to meet the challenge. Due to instable security condition in the near past, efforts have not been made to assist the people on a large scale.

Indicators such as literacy, infant and child mortality and life expectancy are all considerably worse there as compared to the rest of country. The development indices both in FATA and Balochistan lag far behind the rest of Pakistan.

## **4.2. Income sources/Livelihoods**

### **4.2.1. Livelihoods and Food availability, households' access to food and Markets**

Both Balochistan and FATA are the vulnerable poor regions with high level of food insecurity. All parameters of poverty and food insecurity suggest that it is lagging behind in many aspects.

Opportunities for employment are less because of low level of investment in the area and there is no industrialization except for marble stone cutting. Lack of opportunities has also encouraged illegal activities in the area.

Balochistan has a pastoral economy. Livestock is the primary source of livelihood for about 67 percent of the population. Balochistan used to provide 40% of Pakistan's livestock requirements; however, due to persistent drought the production has been declined. The leather, carpet and pharmaceutical industries are the main consumers of livestock downstream products. Balochistan has a 1,000-km long coastal belt along the Arabian Sea. It has huge potential for development of fisheries. The enormous fish and seafood potential is yet to be fully tapped. As the diversity of marine life indicates, the coastline is one of the most productive marine ecosystems of the world. According to an estimate, 60 species of fish and 10 of shrimps, including the best in the world, are found in these waters.

In FATA, agriculture is the main occupation of the rural inhabitants/tribesmen and they support themselves by extensive cultivation of their lands in the plains, riverbeds and mountain. Cattle breeding supplement it. Incidentally, Waziristan is famous for Sheep breeding. Wheat and maize are the two principal crops but paddy, barley, mustard and even poppies are grown as alternative crops. Cultivation is done through conventional methods. Oxen are generally used for agricultural purposes in plough, thrashing ground and sometimes used as beasts of burden.

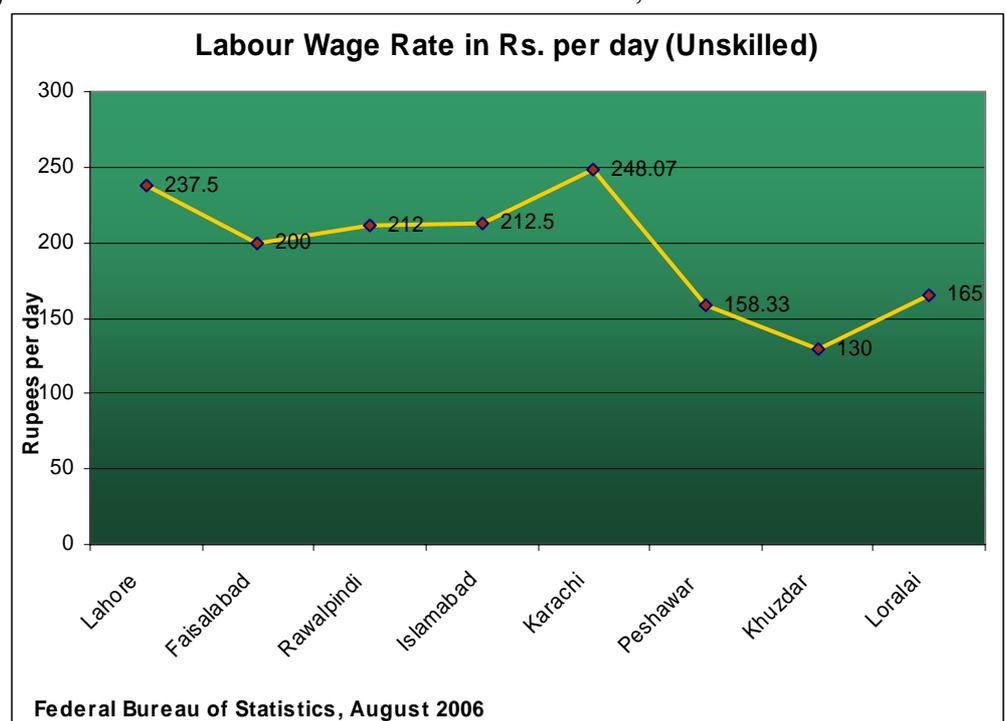
Balochistan has the pattern similar to FATA, however, livestock contribution is quite high. Agriculture is considered to be the primary source of livelihoods, however, trade with Afghanistan and low paid jobs in urban parts of other provinces, like Karachi, are significant sources of livelihood.

Access to food is a serious problem. Income level is low in many parts of the regions because of limited and uncertain livelihood sources. Majority of the population is associated with agriculture for survival, but agricultural productivity is quite low due to scarcity of water, particularly in low rainfed zone of Balochistan and FATA (Mohmand and Khyber agencies). Less than 5% of the work force is engaged in Mineral industry in FATA. Trade with Afghanistan is common in both the regions, which is one of the main livelihood activities. Workforce in markets is associated with trading goods between Pakistan and Afghanistan as well as Iran. However, trading is not a sustainable source because of its legal status and limited absorption capacity.

### 4.3. Purchasing power and households' food access

Opportunities of jobs are scarce in both FATA and Balochistan, because of rural economy and limited development interventions.

According to the Pakistan Labour Force Survey 2005-06, about 8.06% of graduates are unemployed in Balochistan as compared to 3.72% of the rural Pakistan. Females' mobility is quite restricted and thus their participation in the formal labour market is negligible except for education sector.



The unskilled wage rate is Rs. 130 per day in Khuzdar (Balochistan) and Rs. 165/day in Loralai as against Rs. 248 per day in Karachi. Similar is the case of other cities in Balochistan<sup>8</sup>.

### 4.4. Health services

UNICEF, Multiple Indicators Cluster Survey (MICS), 2004, resulted the following:

- a) Availability of safe drinking water (piped water) facility is available to less than 20% of households in three districts, i.e., Musa Khel, Barkhan and Kohlu. Five districts are between 20-40%, while, 14 districts are in the range of 40-60%. As a whole, 51% of the households have access to safe drinking water in Balochistan. However, access to safe drinking water by rural households in only 43%.

<sup>8</sup> Federal Bureau of Statistics, August 2006

- b) 4.5.2. Maternal Mortality Rate is 600 per 100,000 births. The Ante-natal care by a skilled attendant is only 26% in Balochistan, while 21% in rural areas.
- c) Infant Mortality rate is 82 per 1000 live births, while under-five mortality rate is 142, higher than the country-average. Children of illiterate mothers have expected much higher mortality rates (109 per 1000 live births) than of literate mothers.
- d) The under weight children (under five) ratio is 43 in Balochistan and 44 in rural areas. The ration is higher in boys as compared to girls.

Federal Bureau of Statistics has recently released results of a survey carried out on the social and living standard measurements (2004-5). Main indicators of this survey, i.e., Female Literacy Rate (10 years and above), type of house walls, toilet facility available, piped water availability and pregnant women TT vaccination were analyzed. According to the results 17 districts of Balochistan out of 24 districts (two districts-Dera Bugthi and Kohlu were not covered due to security reasons). See table at Annexure-1.

Both the surveys clearly indicate that major part of Balochistan, especially rural areas are on high risk of food absorption. The Social and Living Standard Measurement Survey (SLSMS) shows that 17 districts are highly vulnerable, while Dera Bugthi and Kohlu (excluded from survey) are already the poorest districts of the province. This means that 19 out of 26 districts (73%) are highly food insecure in terms of food absorption and access to food.

According to Health Department sources, about 40-50% cases reported in health centers of FATA are of malnutrition. This is, among other factors, because of low food intake due to weak purchasing power.

There are huge disparities between provinces and districts in term of road access. This has an impact on people's access to markets, education, health etc. Where the road network is poor, investment is likely to be lower than in areas with good transportation. Improvement of roads has not been a priority in provinces/regions like Balochistan and FATA and can be one reason behind prevailing inequity between districts.

There are however other problems that are related to the development of the health system in the country. The health information system of the MOH, which is operational since long, is in a weak state with little means to verify the quality of the data it collects and processes. Moreover, information utilization by the decisions makers is very low. The pharmaceutical system similarly has several problems. Human resource development and deployment continues to be a major problem in areas like Balochistan and FATA. There is an acute shortage of nurses and medical doctors in these areas.

The current health situation is further affected by the unwillingness of medical professionals to work in the peripheral areas and their over-concentration in large urban centres, depriving the rural population from getting a fair share of the health services they deserve. This imbalanced human resource development and deployment in the health sector has created serious health issues for least developed areas of Balochistan and FATA.

#### 4.5. Education

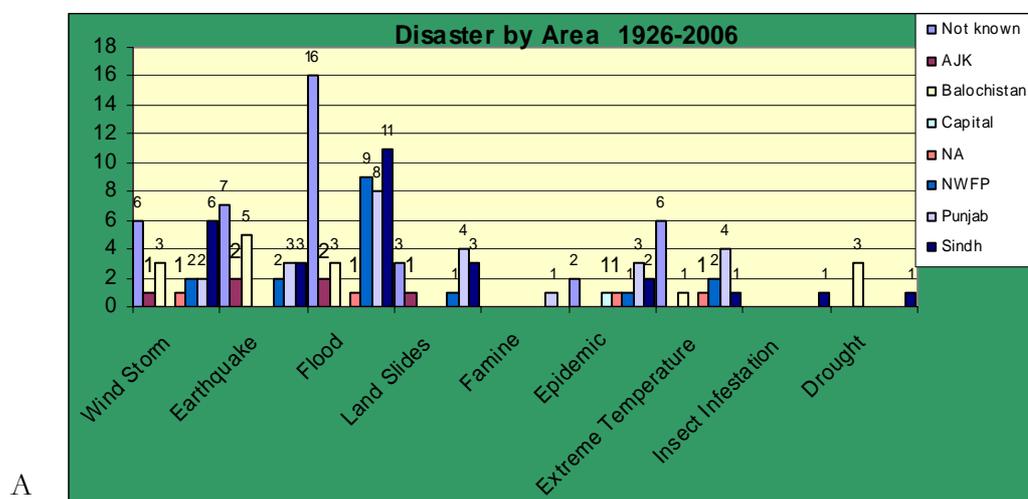
The adult literacy rate is 50 percent in Pakistan, while this ratio is 33% in Balochistan and 18% in FATA<sup>9</sup>. There are 10,986 educational Institutions in Balochistan and 5,145 in FATA. Total enrolment in Balochistan and FATA are 1,110,162 and 605,437 respectively<sup>10</sup>. However, basic facilities in schools are lacking, as 50% of schools in Balochistan and FATA are having no water facility.

It is evident that girls' enrolment is a problem that has resulted in an overall female literacy rate of 3% compared to 29% of male literacy in FATA. Several factors have contributed to the gender disparity in education. Those factors are related to the special socio-economic conditions under the tribal setting where males are the main breadwinners. Parents are not investing in girl's education, on the believe that girls are more productive at home, helping the mothers in household tasks, collecting fire wood, fetching water, looking after the small brothers and sisters, livestock grazing etc. Early marriage of girls and the tradition of "purdha" are also major contributing factors.

The quality of schooling is highly skewed between rural and urban regions and educational outcomes between the provinces differ sharply. Balochistan and FATA have more than 90% of rural population with poor education quality and facilities.

#### 4.6. Drought

Disasters, like earthquake, floods, drought and windstorm are common in Pakistan. Since 1926, 43.6 million people have been affected by these disasters. Drought is quite common in Pakistan, particularly, in the rainfed zones of Balochistan and Sindh. About 2.3 million have been affected by drought alone since 1926. The occurrence of drought is more frequent in Balochistan followed by Sindh. Balochistan experience drought (mild to severe) almost each year.



prolonged drought seriously affected crops and livestock production in Pakistan as it did in the case of a number of other countries in South Asia and the Near East. The drought spell started in 1998 and continued until 2001-02. In year 2000, Balochistan and parts of Sindh and Cholistan in Punjab were particularly affected with serious consequences on the food security of a large segment of population. Continued and extended drought spell, however, in the first half of 2001 had increased the scale and severity of the problem raising humanitarian concerns that required urgent attention. According to

<sup>9</sup> Pakistan Social and Living Standard Indicators 2004-05

<sup>10</sup> National Education Census 2005

NDVI, 17 districts of Balochistan had more than 50% decline in vegetation, which resulted in considerable loss of livestock, being the major source of livelihoods<sup>11</sup>. The persistent drought has compelled the inhabitants to migrate to other regions for livestock rearing and sell part of it on low prices.

#### 4.7. Concluding remarks

- In terms of factors affecting food access in Balochistan and FATA today increasing market prices and its volatility makes it very difficult for the poorest households to obtain enough food.
- There is substantial differences in wages between major urban cities and rural areas of Balochistan and FATA. Low wage rates, accompanied with higher market prices, has reduced the purchasing power of the poor communities and thus increased the risk of food insecurity in the area.
- FATA and Balochistan (except Quetta) are almost rural. FATA has only 3.7% urban population. Poor road access, poor market access, low literacy rate, limited job opportunities and low level of investment have compounded the level of poverty in these areas. Persistent drought in the area has further aggravated the situation and diminished the coping strategies at the household level.
- Migration of people for livelihood activities is quite common, particularly, for livestock rearing, which has increased the risk of vulnerability and tribal conflicts in the area.
- The restricted movement of women has reduced their opportunity for education and social services.

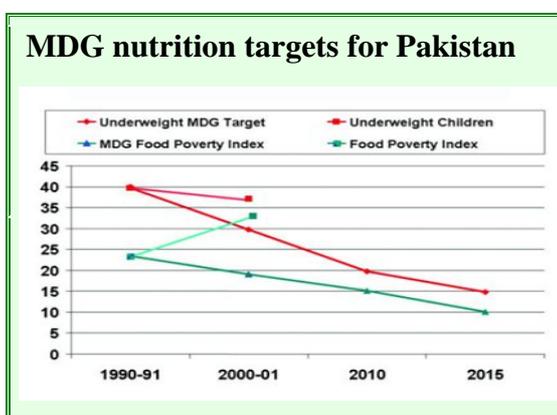
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<sup>11</sup> VAM NDVI Analysis for Pakistan

## 5. UTILIZATION, NUTRITION AND HEALTH

The Millennium Development Goals (MDGs) adopted at the September 2000 United Nations Summit are a set of numerical and time-bound targets that express key elements of human development. They include, among others, halving income-poverty and hunger; achieving universal primary education and gender equality; reducing under-five mortality by two thirds and maternal mortality by three quarter; reversing the spread of HIV/AIDS; and halving the proportion of people without access to safe water. These targets are to be achieved by 2015, from their level in 1990. There are eight broad level goals, which are measured using 48 indicators. Of these 48 indicators, ten have specific targets, which are associated with the broad level goals. In addition, many countries have developed their own specific indicators and targets related to specific MDG targets. Of the MDG health & food security-related targets the most pertinent are goals related to maternal and child health and nutrition. The latter is tied to a general strategy of poverty reduction and overall improvement in nutrition through alleviation of hunger. The goal numbered six relates to reduction in the burden of malaria, HIV/AIDS and other diseases such as tuberculosis.

This state of affairs reflects inter alia on the health security situation in Pakistan. There are several reasons for the poor performance of the health sector in Pakistan, that include overarching issues of overall budgetary allocations for health, health policy frameworks, miniscule social sector investments and resilient poverty. However, a closer look indicates that even where investments have been made in the public sector for primary care, the quality of services is poor.



It is estimated that over 70% of all health related care seeking is from the private sector and of approximately US \$16 per capita spending on health, the government spends only US\$ 4. Although, on paper one finds that there is health care infrastructure in the country, with basic health units linked to rural health centers and Tehsil/sub-Tehsil hospitals, the quality of care and staff within this health system is very poor. This function is particularly significant in the area of maternal and newborn care, and is compounded in many instances by poor governance, staff absenteeism, lack of essential medicines and transparency in the delivery system.

In Pakistan, pneumonia accounts for 24.4% deaths in total under-five children deaths followed by diarrhea, which accounts for 23.2%.

### Basic Indicators of Food Insecurity in Balochistan and FATA

District	% population access to latrines	% Population Access to Tap water	% Kacha Houses	Pop 15 year and older	% Children Aged 12-23 M fully Immunized	CHILDREN UNDER 5 SUFFERING FROM DIARRHEA IN PAST 30 DAYS	Diagnosed as TB the past year (per 100,000)	Maternal Mortality Rate (Numbers)	Maternal Mortality Rate (per 100,000 estimated)	Under 5 Year Old (U5MR) per 1000 live births	Infants (IMR) per 1000 live births	Under Weight Prevalence
<b>Balochistan</b>	<b>23</b>	<b>40</b>	<b>83.1</b>	<b>33</b>	<b>31</b>	<b>13</b>	<b>1,079</b>	<b>88</b>	<b>600</b>	<b>158</b>	<b>104</b>	<b>43</b>
Awaran	2	46	98.7	20	36	14	779	7	750		104	47
Barkhan	8	29	94.3	23	16	12	2,577	6	650		104	48
Bolan	16	33	87.0	28	41	11	134	2	500		104	62
Chaghi	25	54	93.8	29	43	5	483	8	650	158	103	31
Dera Bugti	4	10	98.7	29	41	35	765	3	650		104	73
Gwadar	23	54	82.2	33	35	34	22	0	500		104	68
Jafarabad	29	35	77.3	32	22	12	3,746	1	500		104	27
Jhal Magsi	4	17	89.1	17	17	11	392	1	500		104	59
Kalat	9	29	96.4	25	43	14	732	1	500		104	61
Ketch	11	29	83.6	41	34	18	2,795	0	500		104	42
Kharan	8	25	97.4	25	43	10	206	2	500		104	39
Khuzdar	9	33	86.2	24	31	13	580	4	500	156	102	39
Kohlu	5	10	98.7	29	41	36	958	3	650		104	73
Lasbilla	18	35	59.1	28	22	11	997	4	550		102	33
Loralai	20	30	93.3	28	28	15	185	1	500	190	121	49
Mastung	17	50	80.2	39	25	18	372	0	500		104	49
Musa Khel	8	16	47.7	27	39	18	2,472	7	650		104	45
Nasirabad	17	28	85.3	22	33	15	14	5	600		104	43
Panjgur	26	21	87.9	25	31	15	1,168	12	650		104	58
Pashin	14	62	91.0	54	53	9	351	2	500		104	8
Qilla Abdullah	27	39	62.3	27	4	10	1,529	7	600		104	61
Qilla Saifullah	14	45	93.1	17	4	13	2,497	2	550		104	23
Quetta	76	82	39.0	62	32	13	106	0	450	175	112	36
Sibbi	41	54	67.9	29	31	6	233	2	500	114	78	29
Zhob	20	42	88.6	22	43	9	1,505	7	600		104	74
Ziarat	17	10	83.0	38	58	10	321	0	450		104	67
<b>FATA</b>		<b>19</b>	<b>60.2</b>	<b>18</b>					<b>600</b>		<b>86.8</b>	
Bajour		19	46.3	15					600		86.8	
Khyber		24	45.7	13					600		86.8	
Kurram		29	39.5	25					600		86.8	
Mohammad		8	68.3	12					600		86.8	
N.Waziristan		18	83.8	22					600		86.8	
Orakzai		21	55.8	17					600		86.8	
S.Waziristan		8	82.2	21					600		86.8	

Pakistan Social and Living Standard Measurement Survey 2004-05

UNICEF-Multiple Indicators Cluster Survey, Balochistan, 2004

## 5.1 Health Care

### 5.1.1 Maternal and child mortality

Pakistan is ranked 47 among the World Nations on account of Under-five Mortality Rate, which is 99 per 1000 live births (2005)<sup>12</sup>. It has been declined from 103 (2003) during two years of period. The Under-five Mortality rate in Balochistan is much higher than the national average and recorded as 158 per 1,000 live births. Data, on this account, for FATA is not available, but it will not be less than Balochistan due to lack of health services and restrictions on women's mobility.

The Maternal Mortality rate in Pakistan is 530 (1990-2005 reported), while this ratio in Balochistan and FATA is 600/100,000 pregnant women. Infant Mortality Rate per 1000 live births was 79 in Pakistan during 2005, which was 81 in 2003 and 100 in 1990. However, IMR for Balochistan is 104 and 86.8 for FATA<sup>13</sup>. Nevertheless, many districts and agencies have higher rates than the provincial average.

### 5.1.2 Immunization

Overall, immunisation coverage in Pakistan for one-year-old children is 82% for TB, 84% for DPT1 and 77% for Polio (2005)<sup>14</sup>. However, the coverage for fully immunized children (12-23 months) is 31 for Balochistan. Due to accessibility problems, immunization rate is low in FATA, particularly, the fully immunized children. However, special campaign has been launched by Health Departments to increase the rate.

### 5.1.3 Malaria

In Pakistan, the septums of malaria were found in 7.4% of under-five children recorded by health institutions<sup>15</sup>. The incidence of malaria has been reduced since 2002 in the country, except for few districts in Punjab. However, except for Punjab and Pakistan Administered Kashmir (PAK/AJK), very few institutions in other provinces are examining blood slides for malaria parasite. Malarial parasite with falciparum was found higher in Balochistan and Sindh provinces than in other provinces (HMIS).

### 5.1.4 Tuberculosis (TB)

The prevalence of tuberculosis (TB) is recorded as 5/10,000, in Pakistan, during 2004 as it increased from 3/10,000 in 2002<sup>16</sup>. The highest incidence was recorded in FATA as well in Sindh as 10/10,000, while it was 4 in Balochistan. However, very few slides were examined in Balochistan, otherwise, it could be much higher.

### 5.1.5 HIV/AIDS

The prevalence rate of adult HIV (15+ years) is 0.1 (2005), while the overall estimate for HIV positive during 2005 is 85,000<sup>17</sup>.

## 5.2 Nutrition

The World Health Organization has identified deficiencies in iron and folic acid as a severe problem in Pakistan that has devastating impacts on health and survival, and high costs to national economic development.

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<sup>12</sup> UNICEF Report

<sup>13</sup> UNICEF, MICs Balochistan, 2004

<sup>14</sup> UNICEF

<sup>15</sup> National Health Management Information System (HMIS)-National Feedback Report, 2006

<sup>16</sup> National Health Management Information System (HMIS)-National Feedback Report, 2006

<sup>17</sup> UNICEF Report 2006

About 40% of women, 65% of children, and a substantial number of men suffer from anemia. It is estimated that over 10 years, iron deficiency leads to 22,000 maternal deaths and more than \$4.6 billion in lost productivity. Meanwhile, folic acid deficiency also causes an estimated 40,000 deaths from heart disease and birth defects.

### 5.2.1 Underweight

More than one-quarter (27%) of all under fives in the developing world are underweight. This accounts for about 146 million underweight children in developing countries. Of these 146 million underweight children, nearly three-quarters (73%) live in just 10 countries<sup>27</sup>.

Significant variation in underweight prevalence exists among children under five of the developing world. The highest levels of underweight prevalence are found in South Asia, where almost half (46%) of all children under five are underweight. In Sub-Saharan Africa more than one-quarter (28%) of all children under five are underweight. The lowest levels are found in Latin America and the Caribbean (7%) and CEE/CIS (5%)<sup>27</sup>.

South Asia has staggeringly high levels of underweight prevalence with nearly half (46%) of all children under five in the region underweight. Three countries in this region drive these high levels - India, Bangladesh and Pakistan - which alone account for half the world's total underweight children. Note that these three countries are home to just 29% of the developing world's under-five population<sup>27</sup>.

The percentage of infants with low birthrate is 19 in Pakistan, while this rate is 38% in under-five children<sup>18</sup>. Pakistan ranks 122 in the world on this account. The underweight prevalence in Balochistan is 43%, higher than the national average. The highest rate is recorded in Zhob as 74%, while Dera Bugthi and Kohlu has 73% of underweight children. Ten districts in Balochistan has above 50% rate of underweight in children. FATA has no statistics of underweight, but it is not different than Balochistan on this count.

### 5.2.2 Stunting

The level of stunting in under-five children is 37% in Pakistan<sup>19</sup>. Wasting rate in under-five children is 13%. Recent data at Provincial or district level is not available for comparison. According to National Nutrition Survey 2001-02, the stunting rate was 39.2% in Balochistan as compared to the national average of 17.3%. Similarly, wasting rate was 14.2% compared to 5.5% at the national level.

### 5.2.3 Food intake

VAM Unit recent surveys suggest that poor people rely on cheaper food, which provide calories less than the required amount. Majority of the rural poor eat bread of wheat flour with tea, pepper and onion. Consumption of wheat flour, per capita per month, is the highest in Balochistan, i.e., 9.73 kg as compared to the national average of 8.96 kg<sup>20</sup>. Milk consumption is 2.93 liters per person per month in Balochistan, much less than the national average of 5.8 liters. Similar is the case of other vital food items. This situation clearly translates into low caloric and protein intake in Balochistan.

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<sup>18</sup> UNICEF Report 2006

<sup>19</sup> UNICEF Report 2006

<sup>20</sup> Pakistan Household Integrated Economic Survey, 2001-02

### 5.2.4 Child feeding

Poor child feeding practices, especially for infants and toddlers, is an issue identified as being an underlying cause for the high child malnutrition rates in Pakistan. The duration of exclusive breast-feeding is still short compared to universal recommendation. There is only 16% children (<6 months) who are exclusively breastfed, while 31% of children (6-9 months) are breast fed with complementary food.

## 5.3 Micronutrient deficiency

Prevalence of iron deficiency in Pakistan is 45 percent in mothers and 66.5 percent in under five age children ( $ug>12$ )<sup>30</sup>.

### 5.3.1 Iron deficiency anemia

Anemia continues to be a serious problem in Pakistan. A survey in 2001-02<sup>21</sup> revealed an average anaemia prevalence of 28.3 percent amongst mothers. The anemia among children under-five is 47.3 percent in the country. Government of Pakistan, through Prime Minister Programme, has been working for its improvement.

A number of initiatives are being taken by the government to overcome this problem. Among these are the school feeding programme, and iron supplementation through Lady Health Workers (LHWs).

### 5.3.2 Iodine deficiency

WFP has been working on the salt iodization project, jointly with the Government of Pakistan through Micro-Nutrient Initiatives. At present only 17% of households are using iodized salt in Pakistan.

## 5.4 National nutrition programme

Nutrition Division, Government of Pakistan, has been entrusted with the duty of monitoring and surveillance of nutrition in the country. The division has undertaken specific programmes for the control of malnutrition. It acts as advisory body to the Federal Government for food and nutrition policies and future planning. The division actively participates in the development of Food Standards and Pure Food Laws. It monitors the food quality control of both processed and unprocessed foods in the country. It also acts as Reference Laboratory at national levels.

- i. Strengthening of food quality control in Pakistan.
- ii. Iron fortification of wheat flour. The Planning & Development Division, Islamabad, has prepared this project with collaboration of Nutrition Division, NIH, Islamabad.
- iii. Improvement of nutrition through Primary Health Care Research Component to be implemented by the Nutrition Division.
- iv. The project "Improvement of Nutrition through Primary Health Care and Strengthening of Food Quality Control in Pakistan" has been approved and the following activities are being under taken:
- v. Surveillance and Strengthening of Vitamin-A fortification and Quality Assurance in edible oil and Banaspati ghee.

<sup>21</sup> Medical Research National Nutrition Survey 2001-02, Planning Commission, Government of Pakistan & UNICEF

- vi. The HPLC has been calibrated to determine Vitamin -A in banaspati/edible oils, further work is in progress.
- vii. Supplementation of single dose of Vitamin-A and monitoring of serum retinal levels in women during lactation.
- viii. Identification and estimation of goitrogenic substances in food and water.
- ix. Preliminary work on detection of goitrogens in food and water is underway.

### 5.5 Water and sanitation

About 91 percent of the population in Pakistan has access to improved drinking water sources, however, this ratio is 89 percent in rural area. Provincial and regional situation has a great variation. In Balochistan, 40% of the population has access to tap water, while this estimate is only 19% for FATA. This has resulted in the water-borne diseases in these areas. This factor also determines the level of investment in the poorest regions of the country. Dera Bugthi and Kohlu in Balochistan have 10 percent of population with access to tap water. North Waziristan and Mohmand agencies in FATA have 8 percent of population with access to tap water. Majority of the districts in Balochistan and all agencies in FATA, based on access to tap water, are below the national average.

Regarding sanitation, in Pakistan, 59 percent people are using adequate sanitation facilities<sup>22</sup>. The use of flush latrines is availed by 54 percent people in Pakistan and 30 percent in rural area<sup>23</sup>. The usage of flush latrine in Balochistan is limited to only 23 percent of the population. There is no data for FATA, but people in the rural area are not aware of flush latrines benefits.

### 5.6. Concluding remarks

- Health indicators are quite low in Balochistan as rates of Maternal Mortality, U5MMR, IMR and Underweight are high. FATA situation is worse than Balochistan.
- Prevalence of TB is 1079 per 100,000 population in Balochistan, while 13% of children under five having diarrhea.
- Access to sanitation is very poor and even worse in many districts of Balochistan, while access in FATA is negligible.
- Exclusive breast feeding for 6 months is still a problem. The trend of breast feeding is on decline.
- Micronutrient deficiencies are common in Balochistan and FATA, especially anaemia. Due to poor health infrastructure, the efforts of health departments are not efficiently resulting in its alleviation.
- Nutritional knowledge is still seen as an underlying cause for high prevalence of under-nutrition as well as for micronutrient deficiencies.

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<sup>22</sup> UNICEF Report, 2006

<sup>23</sup> Pakistan social and Living Standard Measurement Survey, 2004-05

## 6. CONCLUSIONS AND RESPONSE OPTIONS

### 6.1. Conclusions and recommendations

*Food availability* is an issue in all districts of Balochistan except, Nasirabad, Jafferabad and Barkan, and in all agencies of FATA. Due to a combination of remoteness, poor access to markets and deficit production, both the regions are insecure in terms of food availability. Poor road network is an important underlying factor to increasing poverty disparities in these areas and thus improving transportation and access to remote areas should be a priority in solving the problem of availability in above mentioned districts. Liberalization of market system and incentive for private sector will ensure stable wheat flour prices across the regions.

*Access to food* is an issue in almost all districts for the poorest households due to increased market prices associated with low wage rate. The poor status of the inhabitants has further added on the problem. There is also the issue of high price volatility that affects access for those living below or just above the poverty line. Income losses in the conflict affected areas of Balochistan and FATA is a huge limiting factor, which in combination with higher market prices has reduced the purchasing power for large numbers of households. Under employment, which is common in rural economy of Balochistan and FATA, is another factor which influences. Poor households in the districts could be assisted through skills training and livelihood diversification to increase their chances for better incomes.

*Utilization*, of food is a serious issue in this poverty stricken region. All health indicators are below the national average and even worse in Balochistan and FATA. The wasting and underweight rates in Balochistan and FATA are very high in all districts and require a holistic approach including health, growth monitoring, promotion of suitable feeding practices as well as child care practices. The health institutions should be strengthened in Balochistan and FATA for better services. Nutrition interventions are needed in the area. Non Governmental Organizations should be encouraged to work in these difficult areas.

Food for Education is one of the important activity to improve the nutrition status of children, reduce short time hunger and help poor families in sending children to school. The rate of literacy in Balochistan and especially in FATA is a clear evidence that parents need children to work with them. Therefore, food incentive will improve the situation by contributing food to the families and reduce part of financial burden on parents.

Supplementary feeding programme: Due to increased malnutrition rates in the most food insecure and poorest districts (also the conflict affected districts), supplementary feeding is recommended to prevent children from becoming severely malnourished.

### 6.2. Population in need

Based on the IPC exercise and the classification of districts into the four phases applicable for Balochistan and FATA, the following calculations have been made to facilitate programme targeting:

- Some 677,000 people are in need of life saving humanitarian emergency assistance. These include not only the IDPs but also those households that were living below poverty line, prior to the conflict, and whose access to food has become unsustainable due to the conflict.
- About 2.39 million people need support with livelihood protection as their coping strategies are depleting.
- About 670,000 people are at the verge of livelihood's depletion and need assistance.

Calculations of Population in Need are based on percent living below poverty line by district

Province/ Region	Districts/ Agency	Population Estimate 2005	Chronic Food and Livelihood crisis	Acute food and Livelihood crisis (AFLC)	Humanitarian Emergency
<b>Balochistan</b>	Quetta	1,008,814			
	Pishin	469,375		200,423	
	Killa Abdullah	502,536		264,837	
	Chaghi	217,176	103810		
	Loralai	327,969		137,091	

	Musa Khail	157,079		108,228	
	Barkhan	128,128		65,986	
	Zhob	305,576	173,567		
	Killa Saifullah	216,002		107,353	
	Sibi	231,386			
	Ziarat	33,833			
	Kohlu	114,692			65,489
	Dera Bugti	228,038			166,468
	Nasirabad	320,543			
	Jaffarabad	529,423			
	Bolan	312,060			
	Jhal Magsi	133,932	68,975		
	Kalat	250,779	124,386		
	Mastung	180,349			
	Khuzdar	494,544			
	Awaran	121,522		65,500	
	Kharan	252,061		172,914	
	Lasbela	385,360			
	Turbat	427,885	199,394		
	Panjgoor	273,123		127,549	
	Gawadar	227,984			
FATA	Bajaur	829,637		319,410	
	Khyber	738,868		305,152	
	Kurram	543,979		223,031	
	Mohmand	464,419		189,947	
	N. Waziristan	436,997			213,255
	Orakzai	267,136		104,984	
	S. Waziristan	500,043			231,520
	<b>Total</b>	<b>11,631,248</b>	<b>670,133</b>	<b>2,392,406</b>	<b>676,731</b>

### 6.3. Summary of issues and response options

The table below summarizes the main findings, highlighting district level issues related to food insecurity with possible response options to be considered.

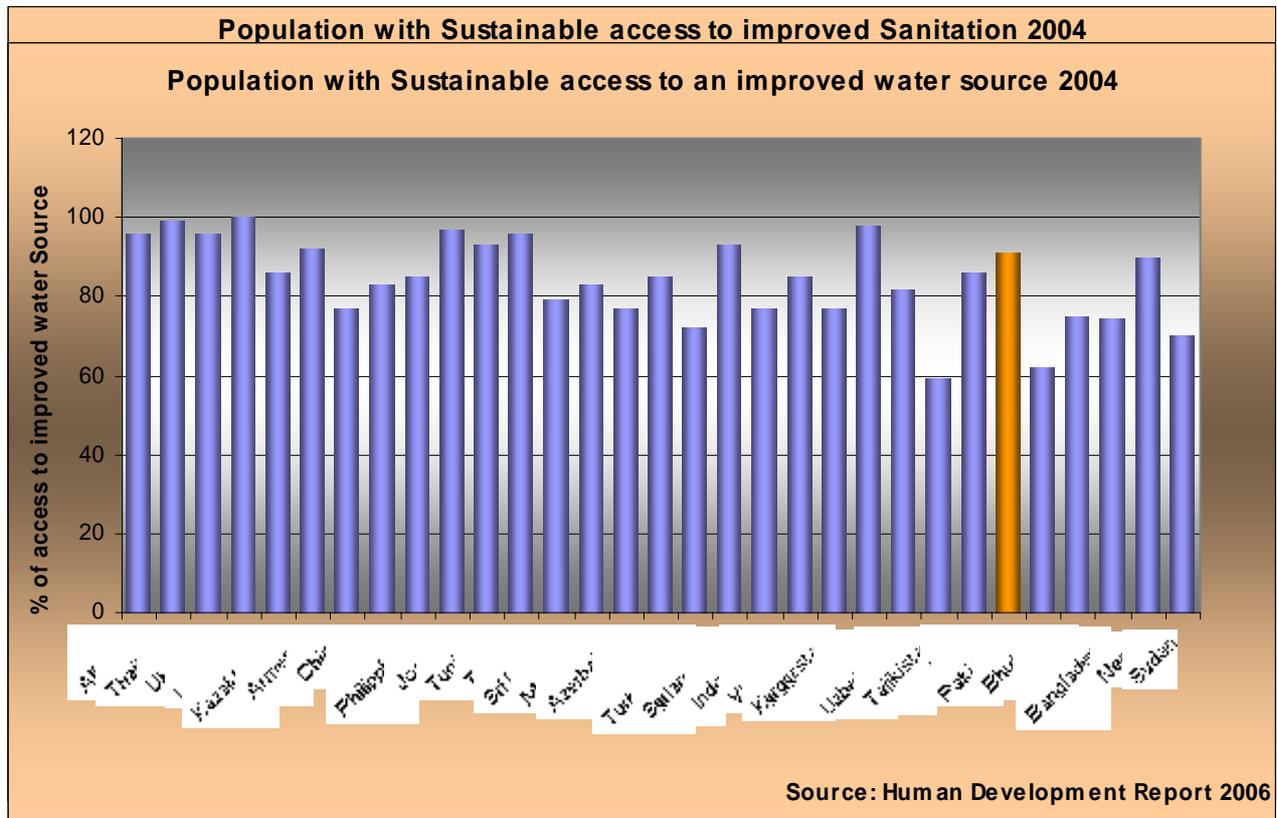
Province	District	Issues for food supply/availability and demand/access	Response Options
Balochistan	Quetta	Wheat deficient by 96% but food is available through markets (wholesale center) and household food access is relatively good due to better wealth status being the major urban area in Balochistan.	
	Pishin	85% wheat deficient with poor market system and high food prices. It has a major route to Afghanistan and always volatile to refugee pressure and disputes.	PRRO interventions needed
	Killa Abdullah	94% wheat deficit with poor market, higher food prices and uncertain farming. Drought has affected the area in the past and depleted orchards. High risk of drought and livelihood crisis.	PRRO interventions needed
	Chagai	16% wheat deficit with depleting livestock due to persistent drought. Food is available in markets (imported from Iran). It is not severely deficit, however, market prices are higher. A mild growth of 1.6% was witnessed during 2005-06.	
	Loralai	About 43% food deficit and growth of wheat has been declined. Wheat deficient but food is available through markets. Wheat production and productivity slightly increased over the last four years. Food price increases are moderate. High poverty levels. Consumption inequality amongst the poor.	Food security Improvement is needed
	Zhob	About 91% wheat deficit, however, Food is available through markets. no increase in the production, while growth of wheat was declined. The district is comparatively in moderate rainfall zone and have better livestock prospects.	
	Killa Saifullah	About 20% wheat deficit, but poverty level is high as 50%. Poor market system with high food prices and low wage rate. Refugees concentration and prone to drought. Productivity growth was less than one percent. Major livelihood assets were depleted by prolong drought. inequality amongst the poor.	PRRO interventions needed
	Sibi	About 55% food deficit, while growth of wheat has a modest increase. Wheat deficient but food is available through markets. Wheat production and productivity slightly increased over the last four years. Food price increases are moderate. Consumption inequality amongst the poor. Overall situation is reasonable	
	Ziarat	Wheat deficit, but better in fruit orchards with comparatively better road network. Food availability is limited by remoteness of rural areas from markets. Wheat production and productivity declined but substituted with fruits, while some affected by drought. Poverty level is low and have better access to markets.	

Dera Bugthi	Acute food insecure with 71% wheat deficit and no other agriculture products have significant impact. Disrupted markets due to total isolation of the district due to conflict, commodity shortages, high commodity price increases and high price volatility. Wheat productivity declined due to lack of rainfall. Livestock is the main source of livelihood, but affected by conflicts. Increasing malnutrition amongst children, lack of material and medication at hospitals and clinics. Depletion of coping strategies.	Special programme is needed
Kohlu	Acute food insecure with 70% wheat deficit and no other agriculture products have significant impact. Disrupted markets due to total isolation of the district due to conflict, commodity shortages, high commodity price increases and high price volatility. Wheat productivity declined due to lack of rainfall. Livestock is the main source of livelihood, but affected by conflicts. Increasing malnutrition amongst children, lack of material and medication at hospitals and clinics. Depletion of coping strategies.	Special programme is needed
Nasirabad	Food availability is eased by surplus production and fairly accessible market places from rural areas. The district has good irrigation system and export food to other districts. Food price increases are not high and follow the government policies on market prices of wheat. Consumption inequality amongst the poor exist.	
Kalat	Food availability is limited both by deficient production of wheat (65% deficit) and fairly remoteness of rural areas from market places. Wheat production and productivity increased slightly over the past years. The district is drought prone. Food price increases are moderate. High poverty levels of 50% exist. The district is overall food insecure.	
Mastung	Food availability is limited by low production of wheat (50% deficit), weak markets. Production decreased over the past years. Food price increases are high and volatile. Poverty levels is moderate. Consumption inequality amongst the poor exist but less intense.	
Khuzdar	The district is meeting its requirement of wheat. Wheat production and productivity increased slightly over the past years. Food price increases are according to the government control prices and volatile some time. Accessibility is better.	
Lasbela	Food availability is limited by deficient production of wheat but has modest increase in productivity of wheat. The district is joining Karachi and has better roads network. Prices of food commodities are compatible with Karachi with slight increase.	
Kharan	Food availability is limited both by deficient production of rice and remoteness of rural areas from markets. Poverty level is about 69%, while 63% deficit in wheat production. Prone to drought, while productivity declined over the past years. Food price increases are subject import from Iran. Consumption inequality amongst the poor is high.	Food security Improvement is needed

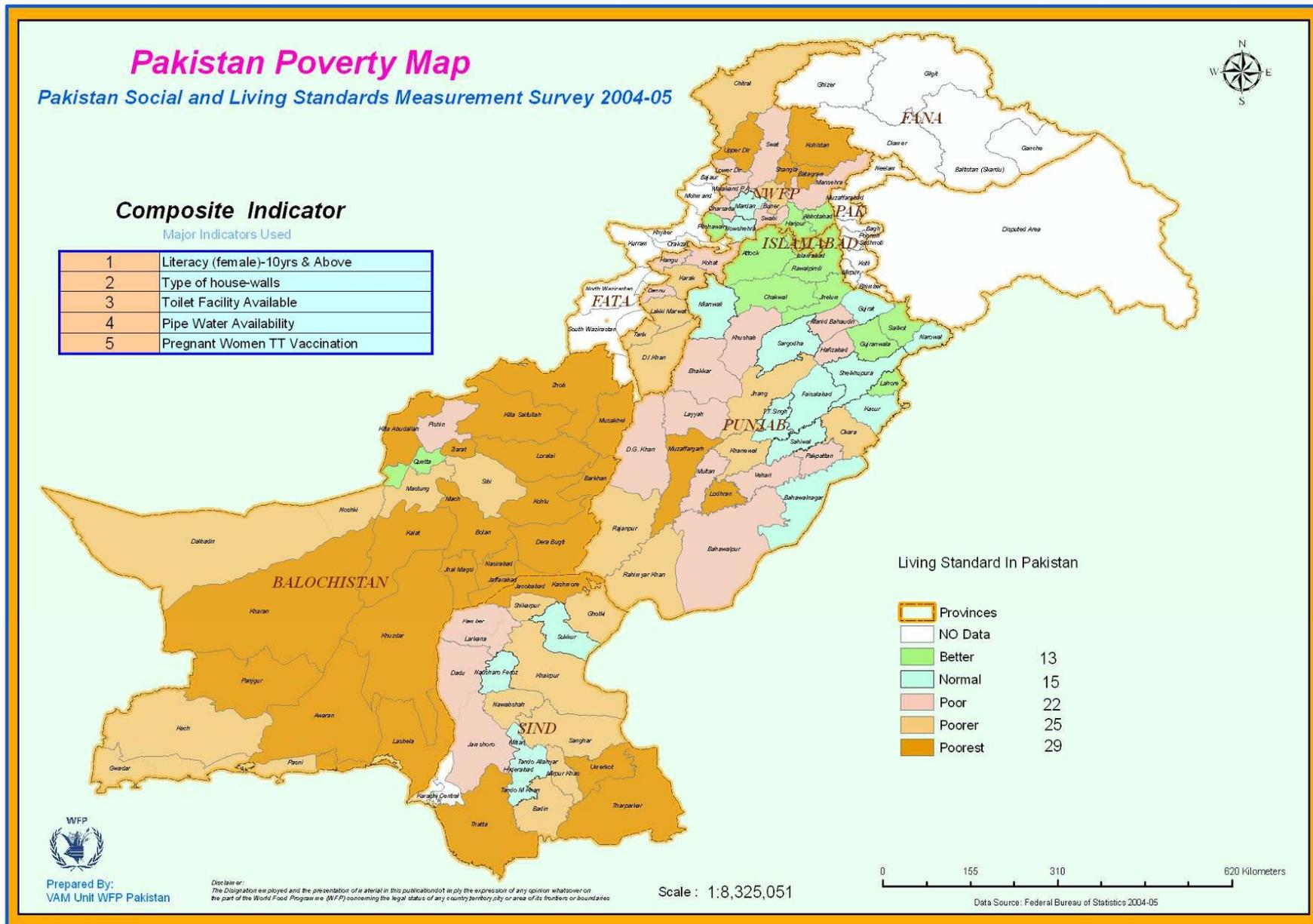
	Turbat	Food availability is limited both by deficient production of wheat (98% deficit) and fairly remoteness of rural areas from market places. Wheat productivity increased slightly over the past years. The district is neighboring Iran and trading with it. Food price increases are moderate. Poverty levels is moderate. The district is overall food insecure.	
	Panjgur	Food availability is limited both by deficient production of wheat (94% deficit) and fairly remoteness of rural areas from market places. Wheat productivity increased slightly over the past years. The district is neighboring Iran and trading with it. Food price increases are moderate. Poverty levels is moderate. The district is overall food insecure.	
	Gawader	It is 100% food deficit and depends on Iran for all food import. Fishing is one of the major sources of communities, while commercial activities are being started due to Gawader Port. The district is moderately food insecure and some times need special attention. It is prone to floods	
	Barkhan	The district is meeting its requirement of wheat. Wheat production and productivity increased slightly over the past years. Food price increases are according to the government control prices and volatile some time. Accessibility is a problem, while poverty level is high.	Food security Improvement is needed
	Bolam	Limited food deficiency exist. The poverty level is moderate, while neighboring the food surplus districts. Reasonability food secure in the short run.	
	Jaffarabad	Surplus food is produced in the area. prices are the farm gate prices and competitive with Punjab. Poverty exist but availability of food is not a problem.	
	Jhal Magsi	Wheat production is about 30% surplus with reasonable market prices. Poverty level is 52% (higher). No significant increase in the productivity. Accessibility, because of low wages is a problem. Food security problems exist.	
<b>FATA</b>	Bajaur	73% wheat deficit with poor market, higher food prices and uncertain farming. Poverty level is high with poor access. Market prices are high. Acute food insecure.	
	Khyber	89% wheat deficit with poor market, higher food prices and uncertain farming. Poverty level is high with poor access. Market prices are high. Acute food insecure. Major route to Afghanistan and suffered by movement of Afghans	PRRO interventions needed
	Kurram	83% wheat deficit with poor market, higher food prices and uncertain farming. Poverty level is high with poor access. Market prices are high. Acute food insecure. Major route to Afghanistan and suffered by movement of Afghans	PRRO interventions needed

Mohmand	89% wheat deficit with poor market, higher food prices and uncertain farming. Poverty level is high with poor access. Market prices are high. Acute food insecure. Major route to Afghanistan and suffered by movement of Afghans.	PRRO interventions needed
N. Waziristan	Acute food insecure with 91% wheat deficit and no other agriculture products have significant impact. Disrupted markets due to total isolation of the district due to conflict, commodity shortages, high commodity price increases and high price volatility. Wheat productivity declined due to lack of rainfall. Livestock is the main source of livelihood, but affected by conflicts. Increasing malnutrition amongst children, lack of material and medication at hospitals and clinics. Depletion of coping strategies.	Special interventions Needed
Orakzai	86% wheat deficit with poor market, higher food prices and uncertain farming. Poverty level is high with poor access. Market prices are high. Acute food insecure. Poor market system with remoteness of area.	PRRO interventions needed
S. Waziristan	Acute food insecure with 92% wheat deficit and no other agriculture products have significant impact. Disrupted markets due to total isolation of the district due to conflict, commodity shortages, high commodity price increases and high price volatility. Wheat productivity declined due to lack of rainfall. Livestock is the main source of livelihood, but affected by conflicts. Increasing malnutrition amongst children, lack of material and medication at hospitals and clinics. Depletion of coping strategies.	Special interventions needed

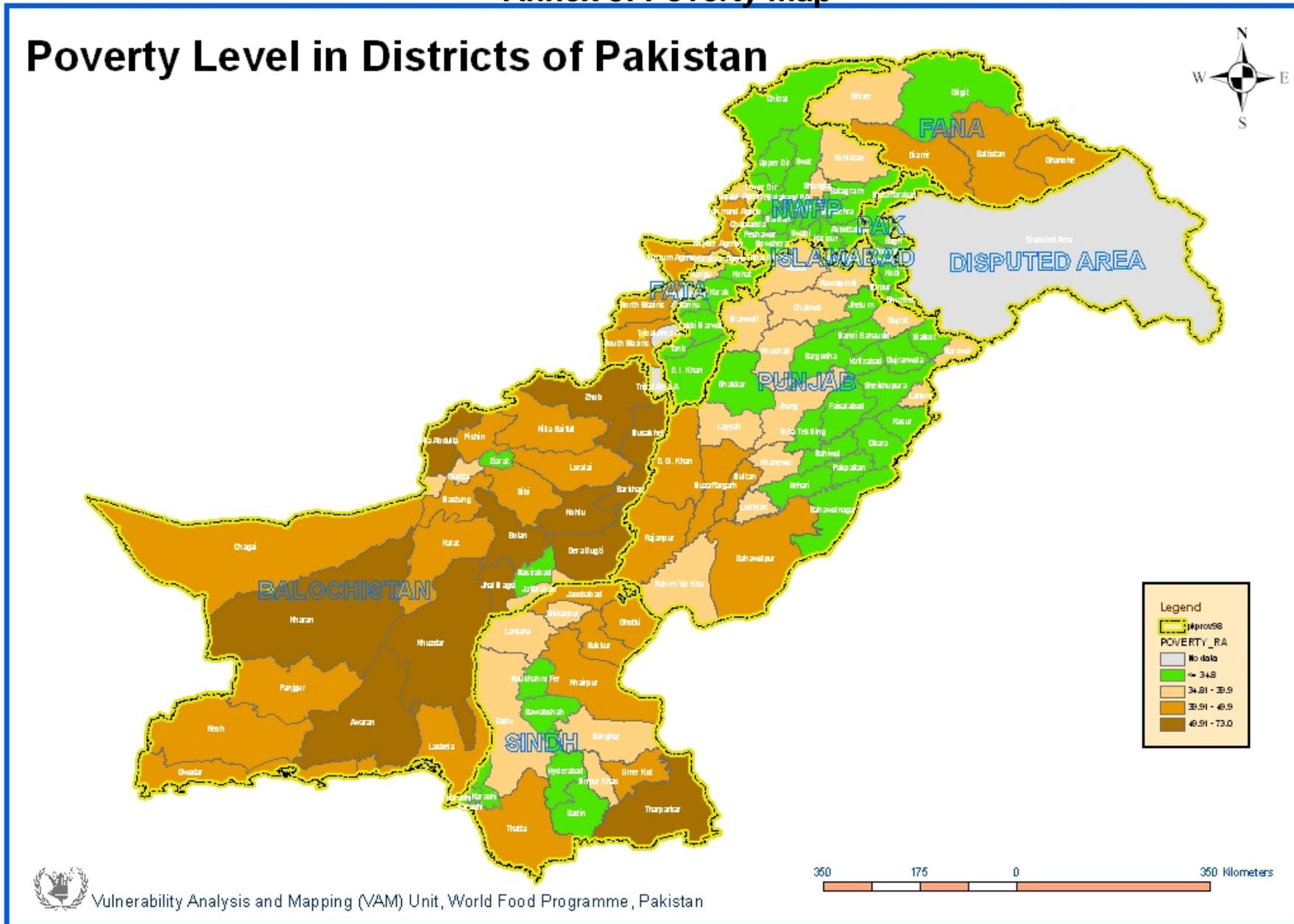
**Annex 1: Water and Sanitation situation in Pakistan 2004**



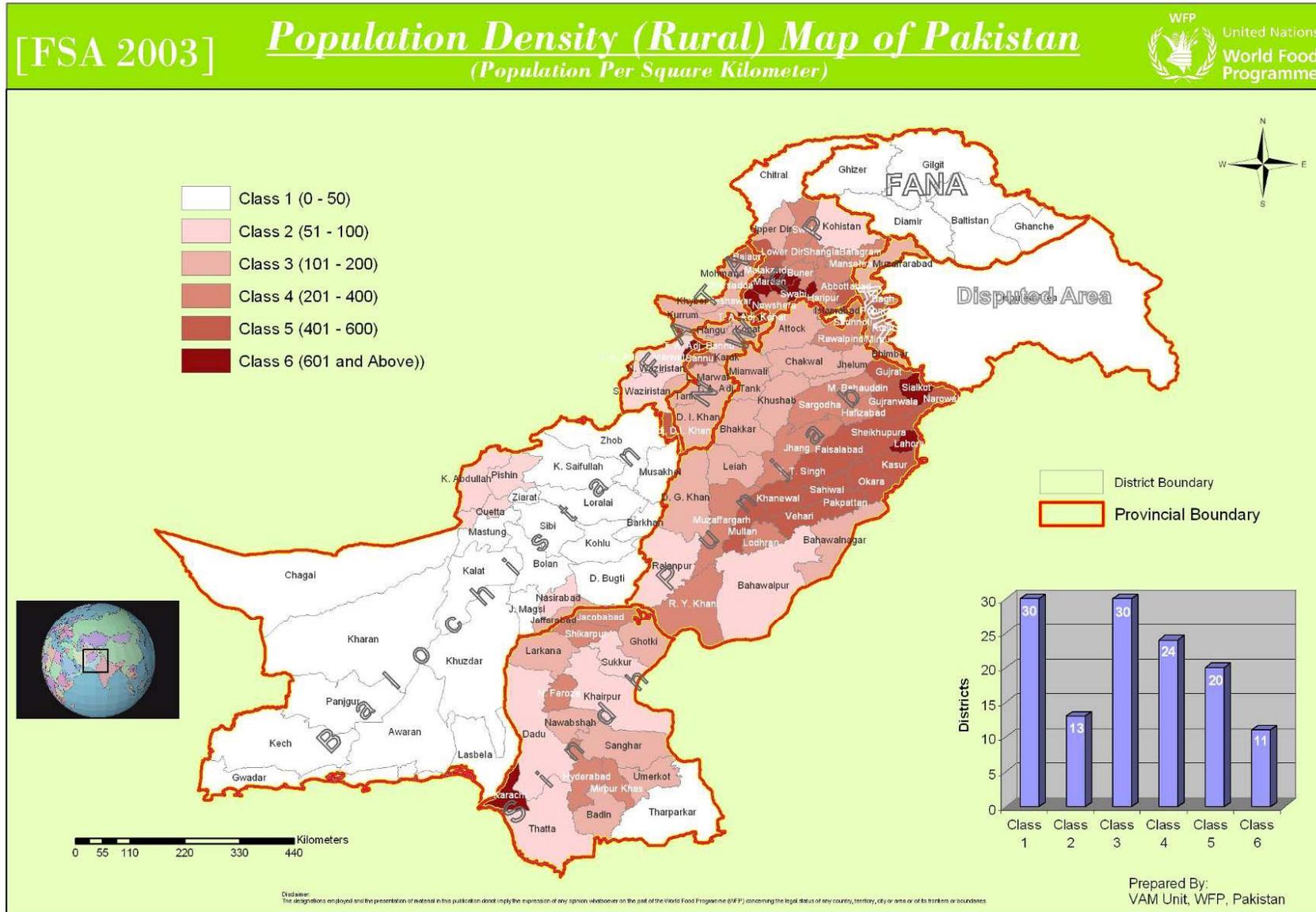
### Annex 2: Living Standards Poverty Map



### Annex 3: Poverty map



Annex 4: Population Density Map



## Annex 5: List of References

1. UNICEF Report, 2006
2. Pakistan social and Living Standard Measurement Survey, 2004-05
3. UNICEF Report 2006
4. Pakistan Household Integrated Economic Survey, 2001-02
5. Medical Research National Nutrition Survey 2001-02, Planning Commission, Government of Pakistan & UNICEF
6. UNICEF, MICS Balochistan, 2004
7. UNICEF
8. National Health Management Information System (HMIS)-National Feedback Report, 2006
9. Pakistan Social and Living Standard Indicators 2004-05
10. National Education Census 2005, Ministry of Education, Government of Pakistan
11. Bureau of Statistics, Government of Balochistan
12. Federal Bureau of Statistics, Government of Pakistan
13. Bureau of Statistics, Government of NWFP
14. FATA Secretariat, Peshawar
15. Food Insecurity in Rural Pakistan 2003
16. Federal Bureau of Statistics, August 2006
17. FSAU (2006): Integrated Food Security and Humanitarian Phase Classification: Technical Manual, Version 1, Technical Series, Report IV.11, May 2006
18. Economic Survey of Pakistan 2005-06

