Promoting Food Security following the 2010 Pakistan Floods:
Insights from South Asian Experience

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Overview

• **Background**
  • Previous Floods and 2010 Flood Damage

• **Lessons from South Asia Experience**
  • Market and Trade Policies
    • The 1998 Bangladesh Flood
    • Pakistan Wheat Markets and Policies
  • Institutional Framework and Sources of Financing
  • Livelihood Support Programs and Welfare Transfers
  • Rehabilitation of Agriculture and Infrastructure

• **Towards the Design of a Flood Response Program**
  • Pakistan National Disaster Management Authorities
    • Lessons from the Evaluation of ERRA
  • Public Institutions and Programs
  • Implementation Challenges

• **Concluding Observations**
The 2010 Pakistan Floods

Background
Pakistan and South Asia Floods, 1985-2010
Number of Displaced People

Source: Dartmouth Flood Observatory (2010).
Pakistan and South Asia Floods, 1985-2010
Area Affected

Source: Dartmouth Flood Observatory (2010).
# Pakistan: Regional Impact of the 2010 Floods

<table>
<thead>
<tr>
<th>Agro-ecology</th>
<th>Khyber Pakhtunkhwa Rural</th>
<th>Punjab Rural</th>
<th>Sindh Rural</th>
<th>Balochistan Rural</th>
<th>All Pakistan Urban</th>
<th>All Pakistan Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Barani</td>
<td>Barani (mainly in north) and Canal Irrigated</td>
<td>Canal Irrigated</td>
<td>Barani</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major crops</td>
<td>Wheat, Maize</td>
<td>Wheat, Rice, Cotton</td>
<td>Wheat, Rice, Cotton</td>
<td>Wheat, Rice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact of floods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths</td>
<td>1,121</td>
<td>103</td>
<td>151</td>
<td>48</td>
<td>1,677</td>
<td></td>
</tr>
<tr>
<td>Injured</td>
<td>1,165</td>
<td>350</td>
<td>845</td>
<td>98</td>
<td>2,605</td>
<td></td>
</tr>
<tr>
<td>Houses damaged</td>
<td>192,605</td>
<td>500,000</td>
<td>470,910</td>
<td>75,261</td>
<td>1,248,714</td>
<td></td>
</tr>
<tr>
<td>Population affected</td>
<td>4,365,909</td>
<td>8,200,000</td>
<td>4,746,482</td>
<td>1,060,162</td>
<td>18,372,553</td>
<td></td>
</tr>
<tr>
<td>Crop area affected (hectares)</td>
<td>443,116</td>
<td>1,516,661</td>
<td>998,561</td>
<td>627,992</td>
<td>3,586,330</td>
<td></td>
</tr>
<tr>
<td>Flood damage by type (million US$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crops</td>
<td>156</td>
<td>1,204</td>
<td>557</td>
<td></td>
<td>2,185</td>
<td></td>
</tr>
<tr>
<td>Livestock</td>
<td>65</td>
<td>n.a.</td>
<td></td>
<td></td>
<td>441</td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>1,151</td>
<td>828</td>
<td></td>
<td></td>
<td>3,634</td>
<td></td>
</tr>
<tr>
<td>Non-agricultural establishments</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>13</td>
<td>220</td>
<td>233</td>
</tr>
<tr>
<td>Non-agricultural equipment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>60</td>
<td>62</td>
</tr>
<tr>
<td>Total damages</td>
<td>1,371</td>
<td>2,031</td>
<td>873</td>
<td>509</td>
<td>1,771</td>
<td>6,555</td>
</tr>
</tbody>
</table>

**Note:** Data from September 4, 2010; crop area is defined as land of which at least 60% is cultivated

Source: OCHA (2010)
**FIRST ROUND EFFECTS ON HEALTH**

*Main illnesses reported between 29 July and 18 August*

<table>
<thead>
<tr>
<th>Illness</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute diarrhea</td>
<td>204,040</td>
</tr>
<tr>
<td>Skin diseases (including scabies)</td>
<td>263,356</td>
</tr>
<tr>
<td>Acute respiratory infections</td>
<td>204,647</td>
</tr>
</tbody>
</table>

*Based on patient visits in reporting health facilities in KPK, Sindh, Punjab and Baluchistan*
Lessons from South Asia Experience
The 1998 Floods in Bangladesh
The 1998 Floods in Bangladesh

• From early July to the end of September 1998, floods covered much of Bangladesh.

• At their peak on 7 September, 1998, 51 percent of the country was under water.

• The floods caused 2.04 million tons of losses to rice production, equal to 17.9 percent of target national rice production for the first half of 1998/99.

• Yet, no reported deaths from starvation occurred after the flood and food markets were stable.
Bangladesh: Flooded Area and Aman Rice Production
Bangladesh 1998: Private Sector Imports

- As part of its price stabilization strategy, the government of Bangladesh encouraged private sector imports through the elimination of a 2.5 percent import tax on rice and other measures.

- In response to market incentives, hundreds of private sector traders imported an estimated 2.42 million tons of rice from July 1998 to April 1999 (according to official data).

- Government net distribution in this period was 1.58 million tons, only 0.19 million tons more than originally planned.
Bangladesh 1998: Rice Price Stabilization

• Private sector rice imports thus set a ceiling on domestic rice prices, equal to the import parity price of rice, (equal to the cost of rice in Indian markets plus trade and transport margins), preventing a major price increase.

• Adequate levels of government stocks may have also helped stabilize markets through influencing private traders’ expectations of the ability of the government to intervene in local rice markets
Note: Price data for April 2000 is up to the fourth week only; private sector imports are as of 26th April, 2000. From November 1998, the carrying cost has increased by 1.1 Tk/kg to 4.1 Tk/kg. From January 2000, 5% tax imposed on rice import.

Bangladesh 1998: Market Prices in the Absence of Imports from India

- In the absence of trade with India, the next lowest cost source of imports would likely have been Thailand.

- From December 1997 to November 1999 import parity prices from Thailand averaged 16.1 Tk/kg, 21 percent higher than the Dhaka price.

- If private trade with India had not been feasible, (and assuming no change in GOB interventions), rice consumption would have fallen by an estimated 4.2 to 6.3 percent and rice imports (from Thailand) would have been 0.7 - 1.0 million tons less.
Bangladesh: Government food and cash transfers

- In 1998, immediate relief through the Gratuitous Relief program went mainly to severely flood-exposed households
  - 35.7 percent of severely flood exposed households received the transfer compared to 9.7 percent of non flood exposed households

- Vulnerable Group Feeding transfers, were better targeted to the poor than to the flood exposed households
  - 38.8 percent of the households in the bottom quintile received grain transfers compared to 17.2 percent and 11.2 percent in the top two quintiles
### Bangladesh: Coping strategies, flood exposure and poverty in November 1998

<table>
<thead>
<tr>
<th></th>
<th>Flood Exposed</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>All</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bot 40%</td>
<td>Mid 40%</td>
<td>Top 20%</td>
<td>All</td>
<td>Not exposed</td>
<td>All households</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly households expenditure (Tk)</td>
<td>2,414.3</td>
<td>3,973.9</td>
<td>7,720.6</td>
<td>4,063.6</td>
<td>3,843.5</td>
<td>4,000.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of food expenditures (percent)</td>
<td>72.4</td>
<td>69.5</td>
<td>62.2</td>
<td>67.4</td>
<td>68.4</td>
<td>67.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households in debt (percent)</td>
<td>68.2</td>
<td>58.9</td>
<td>62.6</td>
<td>63.5</td>
<td>53.5</td>
<td>60.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of monthly expenditure (percent)</td>
<td>186.1</td>
<td>138.7</td>
<td>131.3</td>
<td>144.4</td>
<td>140.2</td>
<td>143.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household purchasing food on credit (percent)</td>
<td>56.7</td>
<td>54.1</td>
<td>50.5</td>
<td>54.4</td>
<td>29.5</td>
<td>47.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of monthly expenditure (percent)</td>
<td>37.6</td>
<td>27.2</td>
<td>17.3</td>
<td>25.8</td>
<td>20.0</td>
<td>25.0</td>
<td></td>
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</tr>
<tr>
<td>Households receiving government transfers (percent)</td>
<td>60.7</td>
<td>54.1</td>
<td>32.7</td>
<td>52.6</td>
<td>33.6</td>
<td>47.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of monthly transfer on expenditure (percent)</td>
<td>3.4</td>
<td>2.4</td>
<td>0.8</td>
<td>2.0</td>
<td>2.1</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households selling assets (percent)</td>
<td>25.2</td>
<td>21.3</td>
<td>15.9</td>
<td>21.9</td>
<td>20.3</td>
<td>21.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of monthly expenditure (percent)</td>
<td>45.5</td>
<td>51.3</td>
<td>75.3</td>
<td>51.9</td>
<td>44.2</td>
<td>49.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of households</td>
<td>226</td>
<td>207</td>
<td>107</td>
<td>540</td>
<td>217</td>
<td>757</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bangladesh 1998 Floods
Household Borrowing

• In order to cope with the loss of incomes from the floods, most poor and flood-exposed households borrowed heavily from private sector sources.

• Even fifteen months after the flood, household debts still averaged about 1.5 month’s average consumption for the 64.2% of flood-exposed households in the bottom 40% of the expenditure distribution who were in debt.

• To eliminate borrowing following the flood would have required a transfer of approximately $100 for each household.

• At the national level, total private borrowing by households may have reached $1.0 to $1.5 billion, equivalent to nearly one-fourth of total government expenditures in 1998–99, and about double of the combined annual loan disbursements of Grameen Bank and BRAC at that time.
Bangladesh 1998 Floods
Household coping mechanisms

- Private borrowing was the dominant coping mechanism for flood-exposed households

- Public and NGO interventions, though well targeted, were too small to have a major impact on household food security

- Poor households bore the weight of substantially increased debt more than a year after the floods

- Given the sharp increase in debt for the poor, there was a need for additional efforts in providing rural employment, transfers and credit to poor households following the flood
Pakistan: Nominal Wholesale, Import Parity and Support Prices of Wheat
Pakistan: Real Wholesale, Import Parity and Support Prices of Wheat
Pakistan: Initial and Estimated Peak Wheat Stocks*
1991-92 to 2010-11

* Peak wheat stocks are estimated as end-April stocks plus May-June domestic procurement.
SOUTH ASIA – LESSONS
Incorporating Livelihood Strategies in Relief and Rehabilitation

• **Social protection has to be prioritized** in a disaster response so the most vulnerable groups are protected.
  - Awareness-raising is an important component to ensure participation.

• **Encourage active participation of key stakeholders from a multi-sector base as well as the community**, in the decisions made for each program.
  - Activities, where possible, should be linked with government, local enterprises, organizations and industries.

• **Interventions need to be tailored** to target specific needs of different groups

• **Enhance livelihood opportunities for people** through provision of temporary work schemes
  - debris clearance, construction, public awareness, project management, assessments, etc.
SOUTH ASIA – LESSONS
Incorporating Livelihood Strategies in Relief and Rehabilitation

• **Partnering with NGOs**
  – in sustainable livelihood support (provision of seeds and tools, animals, capacity building). NGOs can play a big part in relief initiatives and micro-crediting.

• **Developing forums and focus groups for particular industries**
  – to pool resources, share equipment and experiences, and support each other as well as plan for the future. Setting up a community funding scheme can help people restart businesses.

• **Availing of loans**
  – from the government or private sector and utilizing government grants can fill consumption shortfalls.

• **Enhancing skills through training**
  – to supply more construction sector artisans (masons, carpenters, electricians etc) and training them in hazard-resistant construction technology can upgrade the future workforce.

• **Compensation should be paid to people without delay to enable them to rebuild their lives.**
• All phases of the disaster response should be handled by the same institution.

• All stakeholders should be included in the disaster response mechanism.

• Need to account for long-term, medium-term and short-term goals in the post-disaster responses and connect them together in one framework.

• The necessity to ensure participation of two key stakeholders: the government and the affected communities.
Learning from ERRA 2005-Onwards
BUILD BACK BETTER........(contd.)

• Post-disaster improvement **should not be confined** to physical infrastructure/facilities
  – must include “soft” components: policy-making, planning, systems and procedures, human resource management etc.

• **Capacity development has to be an integral and concurrent component of all reconstruction work.**

• The recovery process and the effectiveness of the programmes and the strategy should be **monitored, evaluated and fed back** into the process at all stages
The Benazir Income Support Program
for
Flood Relief and Rehabilitation

- The task of registering the flood victims is huge.
  - A large percentage of the victims do not possess CNIC cards.
- It is imperative, therefore, that immediate priority be given to the comprehensive listing of all flood victims.
The Pakistan Poverty Alleviation Fund

- There are significant gaps in the effective coverage of PPAF POs at the grassroots.
  - Overall coverage can be claimed, in perhaps, only a few districts.
- The capacity and quality of community organizations (COs) through which the POs work also vary by region and type of interventions.
  - Even where a large number of Union Councils (UCs) are covered in a particular district.
- The Floods will have diminished the capacity of the COs to be effective.
- PPAF strengths, even when controlled for the above qualifiers, positions PPAF to effectively contribute in the national flood relief effort.
  - Quick response in terms of resource mobilization, networking with other partners (chiefly the army and NDMA), and efficient strategizing for provisioning relief goods and medical services.
IMPLEMENTATION CHALLENGES

• Disconnects between Federal and Provincial Authorities and within
• Need for Rapid Damage Assessment
• Political Inconsistency
• Role of Hard-line Religious Groups in Flood Relief
• Capacity and Delivery Issues
  – Channeling Funds
• Lack of Early Warning Systems
• Mainstreaming concerns for the gender and the vulnerable
  – Women and children are the worst affected during the recent floods
Conclusion

• In the context of:
  – Weak and Unstable Economic and Political Conditions
  – Low level of International Humanitarian Response
  – Lack of Coordinated Effort
  – Governance Issues

• Serious short, medium and long term implications for food security and poverty must be addressed
References


