Agriculture Investment in South Asia: trends, opportunities and challenges

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Outline

• Background
• Value added in agriculture
• Challenges to Food and Livelihood Security
• Public investment
• Private investment
• Gender dimension of investment
• Opportunities
Background

• South Asian economy suffers from structural problems
  – Large portion of working population in low productive agriculture
  – Small population in high earning sectors
• Huge gap in income and living standards
  – Discourages private investment in agriculture
  – Low level of capital formation
• Inadequate public sector investment on capital formation
• Agricultural investment essential to promoting
  – agricultural value addition and growth,
  – reducing poverty and hunger, and
  – promoting environmental sustainability.
Trend of Agriculture Value Addition

Data source: The World Bank 2015
Agriculture Value Added

• Depends on
  – Size of the agrarian economy
  – Area and productivity of farmland
  – Size and productivity of labor force engaged
  – Climatic stresses
  – Public investment
  – Private investment
Contribution of agriculture to the economy

<table>
<thead>
<tr>
<th>Country</th>
<th>AGDP (%)</th>
<th>Work force (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>19</td>
<td>55</td>
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<tr>
<td>India</td>
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<td>47</td>
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<tr>
<td>Nepal</td>
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<td>Pakistan</td>
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<td>43</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>11</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: Economic surveys of respective countries
Trends of agriculture value added per worker

Data source: The World Bank 2015
Agriculture value added per worker

Depends on

• Land productivity
• Capital formation – irrigation, machines
• Investment per worker
• Full employment of labor force
• Suitable climatic conditions
• Technology adopted
• Farmers’ confidence
Cereal grain yield in South Asian countries

Data source: The World Bank 2015
Challenges to Food and Livelihood Security

• Safeguarding production from Climate change
• Protecting livelihood assets
• Increasing productivity of available assets
• Improving public goods
• Accelerating capital formation
Climate change in agriculture

• Agriculture depends on natural processes
• Suffers from CC and related natural disasters
  – Warming climate accelerate the hydrologic cycle, altering rainfall, magnitude and timing of run-off
• Larger impacts feared in future
• Agriculture in South Asia highly vulnerable to climate change (IFPRI 2010).
Public investment in agriculture

Testing suitability

- **Public burden test**: Taxes to consumers and benefits to farmers and consumers
- **Poverty reduction test**: Most poor in agriculture, cheaper food to poor consumers
- **Social protection test**: Income security for the poor
- **Gender safeguard test**: Larger portion of females in agriculture
- **Responsiveness test**: Are agri programs responsive to farmers’ preferences?
- **Accountability test**: Are farmers empowered to demand accountability from elected and appointed officials? (Shaha 2005).
## Budgetary outlays in agriculture, forestry and fisheries (USD million)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Bangladesh</td>
<td>238</td>
<td>369</td>
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<tr>
<td>India</td>
<td>3,862</td>
<td>6,412</td>
<td>20,881</td>
<td>19,271</td>
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<td>Nepal</td>
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<td>1049</td>
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<td>Sri Lanka</td>
<td>168</td>
<td>234</td>
<td>610</td>
<td>602</td>
</tr>
</tbody>
</table>

Data source: FAOSTAT
Proportion of Agriculture Sector Budget

% budget in agriculture, forestry and fisheries

Nepal
Bangladesh
India
Sri Lanka
Pakistan
Other sources of investment in agriculture

• Larger portion of govt. agri. budget to recurrent costs
  – Small investment for capital formation
• Lower level of FDI in agriculture as compared to manufacturing sector
• Limited foreign assistance in agriculture
• Weak capital formation in agriculture challenges in hunger reduction in rural areas (Dave, 2014)
Gross fixed capital formation per hectare

Data sources: World Bank and FAOSTAT
Private investment in agriculture

- **Households**: farm equipment, machinery, irrigation, land improvement and land reclamation
- **Private corporates**: agricultural production, marketing, value addition and trade
- Agricultural credit
- Public investment
  - Provides public goods that increase the profitability of private investment in agriculture.
  - Public investments crowd-out private investment
Gender Dimension of Agriculture Investment

• Women produce half of the world’s food supply (60 to 80% in developing countries) (Momsen, 1991; Mehra and Rojas 2008)

• Women shape rural economy in South Asia by contributing as farmers, labourers and entrepreneurs (Fontana, 2003; Gulati and Fan 2008)
  – Women often concentrated in less profitable stages of the value chain

• Gender responsive budgeting (GRB) for mobilization of public resources for gender equality
Opportunities

• Better targeting and **downsizing of recurrent expenditures** while increasing those in capital formation, production of public goods

• Regional investment **hill/mountain farm technology** for areas not benefitting from green revolution technology

• Investment and regional **sharing of technologies for adaptation** to CC and reducing vulnerabilities

• Investment for regional collaboration in **agri market linkages** and B2B relations
Thank you for your kind attention

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