World Development Report 2008: Agriculture for Development
(Preliminary Findings)

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The WDR is the World Bank’s Flagship Document

- Prepared annually on a special theme
  - Takes stock of the current and projected status of a selected development problem
  - Key messages backed by evidence
  - Last WDR on agriculture in 1982

- 2007 WDR: Development & the Next Generation
- 2006 WDR: Equity & Development
Assessment of Pathways to Development through Agriculture
Agriculture Contribution To GDP Growth 1990-2005

Urbanizing

Agriculture Based

Transforming

Rural/Total Poor, 2002

Data source: World Bank DDP Sep 2006 & Ravallion et al. 2007
All countries have mean population (90-05) > 5 millions
### WDR country typology

<table>
<thead>
<tr>
<th></th>
<th>Agriculture-based countries</th>
<th>Transforming countries</th>
<th>Urbanizing countries</th>
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</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
<td></td>
<td></td>
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<tr>
<td>Rural (million)</td>
<td>520</td>
<td>2010</td>
<td>250</td>
</tr>
<tr>
<td>Share of population in rural areas (%)</td>
<td>71</td>
<td>68</td>
<td>31</td>
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<tr>
<td><strong>Agriculture</strong></td>
<td></td>
<td></td>
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<tr>
<td>Share of ag in GDP (%)</td>
<td>34</td>
<td>20</td>
<td>11</td>
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<tr>
<td>Share of ag in GDP growth (%)</td>
<td>34</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Agricultural growth</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Non-Agricultural growth</td>
<td>3</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td><strong>Poverty incidence (%)</strong></td>
<td></td>
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<tr>
<td>Share of rural poor in total poor</td>
<td>78</td>
<td>72</td>
<td>46</td>
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</tbody>
</table>
Agricultural Growth is Essential for Poverty Alleviation

- Global decline in poverty during past 10 years entirely due to falling rural poverty (not migration)

- Primary determinant of declining rural poverty is agricultural growth
Elasticity of income gains from GDP growth of agric or non-Agric origin, by deciles

![Graph showing income gains from GDP growth](image-url)
Agricultural Productivity Gains are Essential for Poverty Reduction

Need to Achieve Higher Rates of Productivity Growth, particularly in Africa

WDR 2008: Overall framework

- Dual roles of agriculture

  - Sustainable growth
    - Including sustainable use of natural resources
  
  - Poverty reduction
    - And food security in many settings
WDR 2008: Overall Messages

- Under-investment in agriculture severely undermines income growth and poverty alleviation
Agriculture’s Share of Public Spending (%)
Low investments in Irrigation

New Varieties

Fertilizer

R&D + Human Capital + Infrastructure
WDR 2008: Overall Message

- **Invest more - more wisely**

- Need to take advantage of new opportunities to use agriculture for development resulting from emergence of improved market opportunities, government, and civil society
Recognize that Agricultural Markets are Evolving

- Need to meet continuing growth in demand for:
  - Cereals – 50% increase over next 30 years;
  - Livestock products – 120% increase over next 30 years

- High value product markets are fastest growing in domestic consumption: poultry, vegetables...
Local diets are incorporating a growing share of Higher Value Products

**Source:** FAOSTAT (2006)
Developing Country Trade in Non-traditional Agricultural Products of Growing Importance

Notes: Traditional exports include cocoa, tea, coffee, rubber, tobacco, sugar, cotton and spices. Percent numbers represent the share in total exports
Source: WITS, United Nations Commodity Trade Statistics Database (COMTRADE)
Figure 1.5 The share of food processing in agricultural value added rises with incomes.

Source: World Bank (2006) and UNIDO.
Improving the Payoffs to Investments in Market Development

Rural roads +

- Strengthening contract farming – integrated supply chains
- Strengthening farmer organizations
- Market intelligence systems: identify market opportunities
- Improved grading systems
- Warehouse receipt instruments
- Linked loan and savings schemes
- Index-based weather insurance
- Agricultural credit cards
Improving the Payoffs to Investments in Agricultural Research

- Breeding for traits demanded in markets
- Pursue greater water and nutrient use efficiency with conservation and precision farming
- Pursue regional and international technology flows
- Test alternative extension strategies
Improving the Payoffs to Fertilizer Subsidies

- Investments in agricultural research offer higher returns than in fertilizer subsidies.

- But if fertilizer subsidies are offered use them to leverage:
  - expansion of wholesale-retail trade in inputs
  - expansion of private sector extension support
  - Improvement of targeting x nutrients x farmers
Plan Ahead for Natural Disasters

Rainfall & GDP growth: Zimbabwe 1978-1993
Mitigating the Risks of Grain Supply Shortfalls

- Price hedging of grain stocks
  - Call option to resolve deficit
  - Put option to hold surplus until ready to sell
- Index-based macro-weather insurance
WDR 2008: Overall Message

However, agriculture alone will not eliminate rural poverty
Rural Non-farm Development

- **Promote the rural non-farm economy** for good jobs and self-employment opportunities
  - *Investment climate, area (cluster) development*

- **Investment in education** improves farming skills, business skills and facilitates successful transitions out of agriculture
WDR 2008: Chapter outline

Part 1 – Why Use Agriculture for Development

Part 2 – What to do in Using Agriculture for Development

Part 3. How to Implement Agriculture for Development Agendas
WDR 2008: Special focus sections (draft)

1. Decision making by small farmers
2. Rural poverty dynamics
3. Agriculture and food security
4. Biotechnology
5. Climate change
6. Energy and bio-fuels
7. Agriculture and health
Thank you!