“75% of the world’s poor are rural and most are involved in farming. Agriculture remains a fundamental instrument for development and poverty reduction.”
1. Agriculture remains fundamental for development, and differentially by context
2. But the powers of agriculture are often under-used
3. There are new opportunities to use agriculture that open multiple pathways out of poverty
4. With new (and lingering) challenges to be addressed
5. Differentiated agendas and improved governance
6. WDR positions on emerging issues
Roles: A large economic sector in poor countries

The share of agriculture in GDP can be 30-50% in poor countries; the share in employment 60-90%
Roles: A source of livelihoods for many, but a huge reservoir of poverty

- 2.5 billion people related to agriculture, 1.3 billion smallholders
- 1.9 billion rural poor ($2/day), 800 m extreme rural poor ($1/day)
Fundamental role: Agricultural growth has unique powers for poverty reduction

GDP growth from agriculture especially benefits the poorest
Fundamental role: Impressive successes at rural poverty reduction

Rural poverty fell sharply in India and China as yields rose.
Roles: An important user and often mis-user of natural resources

- Agriculture uses 85% of water withdrawals and causes most of deforestation in developing countries
- Contributes to global warming: 21% (up to 35%) of Green House Gases
There are three worlds for the roles of agriculture in growth and poverty.
Message 1:
The role of agriculture for development is fundamental and differs in the three worlds: growth, equality, inclusion

- **Agricultural-based countries: growth**
  - Agriculture essential for growth: large sector, price of food with limited tradability, and comparative advantage where tradable
  - Importance for poverty and food security

- **Transforming countries: equality**
  - Rapidly growing nonagricultural sectors
  - Agriculture key to reduce rural-urban income disparities and extreme rural poverty

- **Urbanized countries: inclusion**
  - Subsectors with comparative advantage
  - Include smallholders as suppliers to modern food markets and provide remunerative employment in agriculture
There is also deep heterogeneity across areas, households, and within households

- **Favored vs marginal areas**
  - Agro-ecology, market access, social exclusion

- **Household heterogeneity**
  - Market-oriented vs subsistence farming
  - Rural non-farm enterprises—low vs. high productivity
  - Labor markets—high vs low skills
  - Migration—out of vs. into poverty

- **Intra-household differences**
  - Gender roles and decision making
  - Access to assets and consumption

**Differentiated approaches are required in enhancing the role of agriculture for development**
1. Agriculture remains fundamental for development, and differentially by context

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Under-use as global trade distortions remain pervasive

Real international commodity prices have been suppressed by current global trade policies (% of price)

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Suppression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>-21</td>
</tr>
<tr>
<td>Oilseed</td>
<td>-15</td>
</tr>
<tr>
<td>Dairy products</td>
<td>-12</td>
</tr>
<tr>
<td>Other grains</td>
<td>-7</td>
</tr>
<tr>
<td>Wheat</td>
<td>-5</td>
</tr>
<tr>
<td>Processed meat</td>
<td>-4</td>
</tr>
<tr>
<td>Rice</td>
<td>-4</td>
</tr>
<tr>
<td>Sugar</td>
<td>-3</td>
</tr>
</tbody>
</table>

Trade share losses to developing countries due to current global trade policies (% point loss to developing country trade shares)

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>-27</td>
</tr>
<tr>
<td>Oilseed</td>
<td>-34</td>
</tr>
<tr>
<td>Dairy products</td>
<td>-7</td>
</tr>
<tr>
<td>Course grains</td>
<td>-5</td>
</tr>
<tr>
<td>Wheat</td>
<td>-21</td>
</tr>
<tr>
<td>Processed meat</td>
<td>-18</td>
</tr>
<tr>
<td>Rice</td>
<td>-2</td>
</tr>
<tr>
<td>Sugar</td>
<td>-9</td>
</tr>
</tbody>
</table>
Under-use as taxation of agriculture exports remains high in the agriculture-based and transforming countries.
Under-use as public spending on agriculture is low in the agriculture-based countries compared to the share of agriculture in GDP

Transforming countries in 1980 had a much higher share of public spending on agriculture as a share of Ag GDP (10%) than the agriculture-based countries do today (4%) even though they had similar shares of agriculture in GDP.
Mis-use is also pervasive: Subsidies are now four times larger than public investment in Indian agriculture.
Under-use as donor support to agriculture has declined while rural poverty remained dominant.
WDR 2008-Agriculture for Development

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6. WDR positions on emerging issues
Opportunities: Improved macro-economic conditions favorable to agricultural growth in SS-Africa

Higher agricultural growth with improved macroeconomic scores since 1995
Opportunities: Demands for a new agriculture of high value products and non-traditional exports

Diets in the developing world are changing toward higher value products

Non traditional exports from developing countries are increasing in absolute values and as a share of total exports
Opportunities: Institutional and technical innovations

**Institutional innovations**—a fertile field (with gaps)

- Land administration and markets, with use of IT
- Financial services: microfinance, use of IT
- Risk management: weather insurance
- More effective producer organizations & new approaches to extension using IT

**Technological innovations**—progress (with under-investment)

- Continued spread of improved varieties to rainfed areas and better pest resistance
- GMOs--potential but only Bt cotton widely adopted by smallholders
- Conservation agriculture--especially zero tillage
- Improved livestock and fish breeds
Expanding income opportunities in the rural non-farm economy

Mexico: Sources of income rural population

Bangladesh: Sources of income rural population

Rising share of non-agricultural employment and transfers helping diversify rural household incomes
Opportunities: Agriculture for development goes beyond farming

- Promoting rural nonfarm development
  - Investment climate, clusters of agro-industries, entrepreneurship
- Expanding and formalizing rural labor markets
  - Skills, working conditions, gender inclusiveness
- Investing for successful out-migration
  - Manage huge population transitions
- Providing social safety nets
  - Safety nets for welfare and risk-taking
Opportunities open multiple pathways out of poverty for rural households

- **Pathways out of poverty**: not by agriculture alone
  - Farming
  - Agricultural wage employment; wage and self-employment in the rural non-farm economy
  - Migration and remittances

- Recognize important **gender dimensions** to each pathway at household level and within household labor allocation
Opportunities: New actors and new roles

- **A redefined role for the state**
  - Regulation, decentralization, and partnerships

- **Private and corporate sector**
  - Agribusiness and the supermarket revolution

- **Civil society**
  - Rapid increase in producer organizations
  - Growing role of NGOs

- **New philanthropy**

  → New opportunities for public-private-civil society partnerships in using agriculture for development
From opportunities to objectives: a policy diamond

1. Access to markets
   Establish efficient value chain

2. Enhance smallholder competitiveness
   Facilitate market entry

3. Improve livelihoods in subsistence agriculture and low skill rural occupations

4. Increase employment in agriculture and the RNFE; enhance skills

Pathways out of poverty: farming, labor, migration

Demand for Ag products

Social transition
Message 2:
The new agriculture is market- and value chain-driven, opening multiple pathways out of poverty for rural households.

Message 3:
Livelihoods and food security for poor rural populations can be improved by developing more resilient farming systems, facilitating market entry, and improving skills.
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Rise of supermarkets: A challenge for the inclusion of smallholders

The graph illustrates the share of supermarkets in retail food sales against GDP per capita (PPP) for various countries. The countries mentioned include Argentina, Brazil, Colombia, Costa Rica, Ecuador, Indonesia, China, Bangladesh, Kenya, India, and others. The trend shows a positive correlation between GDP per capita and the share of supermarket sales in retail food.
Message 4:
Reducing agriculture’s large environmental footprint is an inevitable requirement for success, and providing environmental services one of the development contributions of agriculture.

Key for this are removing perverse input subsidies, better definition of property rights, wider use of conservation technologies, devolution to communities of control over common property resources, and developing markets for environmental services.
The rising cost of climatic instability on agriculture-based countries must be urgently addressed.

Rainfall & GDP growth

Ethiopia 1982-2000

Zimbabwe 1978-1993
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Agenda for agriculture-based countries (SS-Africa): agriculture for growth

**Structural features**
- Diverse local conditions
- Small and landlocked countries
- Low population density
- Deficits in human resources
- Limited food tradability
- Some foreign exchange constraints

Policy diamond for agriculture-based countries
Agenda for transforming countries (Asia, MENA): agriculture to reduce disparities

**Structural features**
- Demographic pressures & declining farm sizes
- Water scarcity
- Lagging areas
- Political economy of ag policies

Policy diamond for transforming countries:

1. **Infrastructure to support diversification**
2. High value activities
   - +++
3. Food staples and livestock; safety nets
   - +++
4. Rural nonfarm economy; Skills for successful migration
   - +++
Agenda for urbanized countries (LAC, ECA): agriculture for social inclusion and jobs

**Structural features**
- Supermarket revolution
- Resilient rural poverty & high inequality
- Weak governance for agriculture

Policy diamond for urbanized countries

1. Weak governance for agriculture
2. Inclusion in new food markets
3. Subsistence agriculture; social assistance; environmental services
4. Territorial development; skills for the rural nonfarm economy

+++

+++
Improving governance to implement agriculture-for-development agendas

- **Double weakness of governance as a hurdle**
  - Governance weakest in agriculture-based countries
  - Governance weak in agriculture vs other sectors
  - Global governance needed for successful national agendas

- **Improving governance at national, local, and global levels**
  - National and local: Inter-sectoral coordination, Min of Ag., decentralization
  - Global: Coordinate sectoral agencies for complex and inter-related issues (trade, climate change, diseases, IPGs)
  - New corporate and philanthropic actors

Message 5: Using agriculture for development requires fixing the current serious deficiencies in local, national, and global governance for agriculture
Managing the political economy of agriculture-for-development agendas

- **Political management** of regressive subsidies, price distortions, and restrictive trade policies
  - Roles of information, decentralization, new actors

- **Coalitions of interests** on specific policies
  - Winners and losers: role of dealmakers

- Need to explore potential **pathways to reform**
  - Role of second best instruments and of sequencing
WDR 2008-Agriculture for Development

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6. WDR positions on emerging issues
Doha must progress
- Emphasis on anti-poor policies such as cotton subsidies
- But even more important is to introduce complementary supporting policies for investment and smallholder response

Food staples (special products) may need protection but only as part of transition strategies
- Recognize gainer-loser tradeoffs especially for the poor by country
- And only use as clear transition policies at best

Subsidies can be used to trigger change
- “Market smart” subsidies can be needed to assist learning and promote market development when there are economies of scale
WDR positions (cont.)

- **Public investment in agriculture must increase**
  - Especially in Africa, but emphasize quality first

- **GMOs have unrealized potential for the poor**
  - Offer promise but need public R&D (or private incentives) and efficient regulatory frameworks
  - IPRs are not the immediate constraint, but innovative formulas are needed to build capacity for the future

- **Biofuels will be important, but require caution**
  - Improve efficiency, and recognize food and environmental tradeoffs

- **Climate change requires immediate attention**
  - Urgency of funding adaptation for poor countries
  - Extend carbon financing to provide agriculture incentives
Development of WDR: used a collaborative approach to raise issues, suggest an approach. Follow up on WDR: pursue a collaborative effort to customize and implement.

Thank you

World Development Report 2008

APPENDIX TABLES
1. Growth and poverty in agriculture’s three worlds
2. Agriculture’s performance, diversity, and uncertainties
3. Rural households and their pathways out of poverty
4. Realizing gains from trade, price, and subsidy policy reforms
5. Bringing agriculture to the market
6. Supporting smallholder competitiveness through institutional innovations
7. Innovating through science and technology
8. Making agricultural systems more environmentally sustainable
9. Moving beyond the farm
10. Emerging national agendas for agriculture’s three worlds
11. Strengthening governance, from local to global
Short focus sections

- Declining rural poverty has been a key factor in aggregate poverty reduction
- What can biofuels do for agriculture and the environment?
- What are the links between agricultural production and food security?
- Agribusiness for development
- Capturing the benefits of GMOs for the poor
- Adaptation and mitigation of climate change in agriculture
- Education and skills for rural development
- The two-way links between agriculture and health
### Characteristics of the three worlds

<table>
<thead>
<tr>
<th></th>
<th>Agric-based</th>
<th>Transforming</th>
<th>Urbanized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural population (million)</td>
<td>417</td>
<td>2,220</td>
<td>255</td>
</tr>
<tr>
<td>Agriculture GDP growth rate*</td>
<td>4.0</td>
<td>2.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Non Agriculture GDP growth rate*</td>
<td>3.5</td>
<td>7.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Agricultural % of GDP growth</td>
<td>32</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Number of poor ($1/day)</td>
<td>170</td>
<td>592</td>
<td>32</td>
</tr>
<tr>
<td>% of rural poor in total</td>
<td>70</td>
<td>81</td>
<td>45</td>
</tr>
</tbody>
</table>

*Growth rates correspond to the 1993-2005 period*
Heterogeneity across smallholders: Sources of household income differ by country context

- Subsistence farming high in Ghana
- Market-oriented farming and diversification high in Vietnam
- Non-farm incomes and diversification high in Guatemala
Technological innovations: Sustained gains in yields, but falling behind in Sub-Saharan Africa
Smallholder inclusion and employment as two options for rural poverty reduction

Green bean export production in Senegal: Participants – whether as contract farmers or as farm workers in estates – had higher income than non-participating households.

Household participation

- Contract farmers
- Estate farm workers
- Total participants

Incidence of poverty and extreme poverty among participating households

- Poverty
- Extreme poverty

Participants – whether as contract farmers or as farm workers in estates – had higher income than non-participating households.
Agricultural population transitions: the need to prepare surplus populations

**Population in developing countries** will remain predominantly rural until 2020.

Rural population has been declining in **Latin America and East Asia** since 1995 due to slower population growth and rapid urbanization.

Population in developing countries will remain predominantly rural until 2020.

Rural population has been declining in Latin America and East Asia since 1995 due to slower population growth and rapid urbanization.
The increasing land and water constraints on agriculture must be addressed.

Water scarcity affects millions in Asia and over 60 percent of population in the Middle East and North Africa.

Cropland per capita of agricultural population is falling in Asia and Africa.