RAISING ECONOMIC GROWTH AND TRADE THROUGH SCIENCE AND TECHNOLOGY
Outline

1. Major points
2. A few words about MCC
3. Importance of agricultural development, market integration, information
4. The critical role of science and technology
5. Conclusions
Take away points

- MCC committed to poverty alleviation, economic growth
- Agricultural sectors critical; poverty rural
- Modern technologies needed to improve productivity and value chain performance
- Local and export markets, local processing, institutions all key factors
- S&T vital to increase productivity, meet stds.
Core Principle: “Policy Matters”

- Aid most effective when it reinforces sound political, economic and social policies.
- Good policies encourage inflows of private capital and increased trade, the real engines of growth.
- Advanced science, modern technologies critical to agriculture, rural poverty alleviation.
MCC Selection Process

- MCC uses 16 indicators to assess policy performance of individual countries.
- Countries are measured against others at same income level.
- Indicators reflect Millennium Challenge Act of 2003 criteria:
  - * Ruling Justly
  - * Economic Freedom
  - * Investing in People
MCC Emphasizes Policy Reform

- Focuses exclusively on **sustainable growth**
- Relationships with countries characterized by **partnerships**
- Broad **consultative processes** required
- Focus on **results**, establishes **outcome-based standards** up front
- **Accountability** key principle, **M&E ongoing**
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### Threshold Program Countries

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Agriculture Critical to Poverty Alleviation

- 15 out of 16 country proposals contain agricultural components.
- Increasing recognition that rural poverty alleviation depends on modernizing agriculture and linking to markets.
- Science and technology applied to agriculture in MCC countries an urgent need.
“Economic growth is driven by new technologies and its applications, always and in all places,” Michael Mandel, *Bus. Week*

There is enough knowledge today to increase production, streamline and add value to post-harvest handling and processing and improve distribution across the global food system.
Challenge to Adapt Research Findings to Low Income Countries

- Most private and public research is directed at wealthier societies’ markets, preferences, and capacities.
- Need adaptation to function at lower income levels, different eco-agricultural settings.
- Most onerous problem, lack of research attention to poor people’s food crops.
Biological revolution offers promise

- The FAO message: that African and other farmers need millet, cowpeas, cassava crops engineered to resist drought or local pests
- All technologies, including biotechnology, must be marshaled to meet the challenge. The real problem with GMOs is not their presence but their absence.
Recent Positive Developments

- China: $120 million, about 10% of biotech budget, for a GM rice project. Commercial approval of GM rice seeds likely.
- Brazil: has opened policies to molecular breeding, e.g. Vitamin A-rich cassava.
- India: conducting advanced agricultural research using biotechnology procedures
Global Knowledge, Local Adaptation
The Main Challenge

- Knowledge about international best practices
- But gaps bringing practices from the experience of other countries
- Respecting local knowledge and incorporating expertise available in country
- Gaps in staff ability to adapt knowledge to local needs
Technologies Applied Make a Difference

- “Green Revolution”---improved yields
- “Doubly Green Revolution”—yields plus env.
- Food fortification--Vitamin A, folate, iron
- Biofortification—yellow rice, sweetpotatoes
- No till—soil conservation
- Filter strips—water quality
- Water harvesting technology—water mgt.
Needed: A Knowledge Economy:

- An economic and institutional regime that provides incentives for the efficient use of existing and new knowledge,
- And encourages entrepreneurship.
- “Advances in science and technology allow society to mobilize new sources of energy and materials, fight disease, improve and diversify agriculture, mobilize and disseminate information . . .
The Millennium Project recommends:

“International donors should mobilize support for global scientific research and development to address special needs of the poor in areas of health, agriculture, natural resource and environmental management, energy and climate.”
Jeff Sachs: Any strategy to meet the Goals requires a special global effort to build scientific and technological capacities in the poorest countries . . . A focus should be on strengthening institutions of higher education.”

Calls for tripling of CGIAR’s annual budget to about $1 billion.
In Conclusion,

- MCC committed to poverty alleviation, economic growth
- Agricultural sectors critical
- Modern technologies needed to improve productivity
- Export markets and local processing both key factors, S&T vital to meet standards