AGRICULTURE PRODUCTIVITY AND SUSTAINABILITY IN THE G20

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• **Increase global agricultural productivity sustainably, with particular attention to small family farms**

• **Recommendations:**
  
  – underline continuity with the 2011 Action Plan
  – focus on institutional design, not specific technical/agronomic solutions
  – build on mechanisms to boost productivity sustainably - by strengthening private investment, trade, innovation, smallholder market integration - improve food and nutrition security
Improving Global Sustainable Agricultural Productivity Growth and Bridging the Gap for Small Family Farms

Interagency Report to the G20
Collaborative effort by Bioversity, CGIAR Consortium, FAO, IFAD, IFPRI, IICA, OECD, UNCTAD, UN High Level Task Force on the Food Security crisis, WFP, World Bank, and WTO

Coordinated by OECD and FAO
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The Interagency report

• Evidence and analysis
  - trends and needs in agricultural productivity and sustainability, Agricultural Innovation Systems, investment, and policies

• Reiterate ongoing activities and accepted principles

• Three main headings focusing on policies, mechanisms and actions to:
  i. create the enabling policy environment
  ii. improve agricultural innovation systems
  iii. close the productivity gap for the small farmer
Why focus on improving productivity?

• Demand grows and resources are limited
• Agriculture is moving from a demand constrained world to a supply constrained world
• Innovation ensures long-term productivity growth
  – pushing out the production possibility frontier (innovators)
  – improving farm management to move closer to the frontier (followers)
• Economies of scale, efficient farm structures
• Smarter use of natural resources
Agricultural Innovation Systems: main features and trends

- Stronger and more inclusive co-ordination within Agricultural Innovation systems (AIS)
- Stronger integration of agriculture in general innovation systems
- Stronger governance: strategic thinking, monitoring and evaluation
- Development of cross-country co-operation
- More project-based, competitive funding
- More private sector involvement, including through Public-Private Partnerships (PPPs)
- But public funds still dominate:
Share of public funds in total expenditures on agricultural R&D

Source: OECD R&D indicators.
Budget expenditures on agricultural R&D as a share of agricultural value added

Source: OECD R&D indicators.
New approaches to agricultural innovation

• More interactive approach, with more diverse actors

• Systems approach to influence long-term changes (more sustainable) production and consumption systems

Source: Adapted from Hall (2012).
Government role in innovation

- Funder and performer of R&D, technology transfer and farm advisory systems
- Governance of Agricultural Innovation Systems (AIS): strategy, evaluation
- Knowledge markets: IPR
- Knowledge infrastructure:
  - General knowledge: ICT, biotech, nanotechnologies
  - gene banks, biodiversity, databases, models, labs, centres of technology convergence
Foster national AIS

- Define clear strategic priorities to guide public and private investment;
- Develop and facilitate access to information systems: databases, modelling tools, gene banks, etc.
- Make agricultural education more relevant
- Foster competition in extension services and focus public efforts on public goods aspects, smaller farmers
- Focus public funds on basic research and public good issues and increase private sector involvement
- Improve regulations to facilitate innovation (such as IPR, standards, SPS)
Strengthen cross-country co-operation

• Global challenges (food security, climate change, price volatility, water scarcity) require international co-operation

• Research requiring high cost infrastructure

• Increase participation in and support to international efforts such as CGIAR, GFAR, Global Research Alliance on GHG, etc.

• Regional co-operation also important, in particular for cross-boundary issues such as pests and diseases, and technologies adapted to a region.

• Facilitate exchange of and access to information and knowledge (banks of research results, gene, data etc.)
Framework policies are important

- The food and agriculture sector does not operate in isolation, but is affected by a full spectrum of policy incentives and disincentives.
- Productivity is impacted by
- **wide range of economy-wide**
  - macro-economic and financial environment, structural policies, governance, infrastructure and human capital, trade and investment policy, etc.
- **and sectoral policies**
  - domestic agriculture policy incl. income payments, risk management, credit, infrastructure, irrigation, transport, information, markets, etc.; agricultural trade policy; agricultural regulations and standards, agricultural innovation policy; agri-environmental policy; fisheries policy
Trade policies to facilitate the flow of ideas and solutions

• Improve trade rules
  – Substantially reduce trade distorting support; substantially improve market access; discipline export measures and maintain appropriate safeguards for vulnerable developing countries
  – support WTO-OECD Aid for Trade;
  – promote adherence to science-based SPS measures; capacity building through STDF

• Support developing countries to establish appropriate IPR systems
  – consistent with international obligations (Agreement on Trade-Related Aspects of International Property Rights and the International Treaty on Plant Genetic Resources for Food and Agriculture)
  – in line with each country’s strategy for food security
Agricultural policies to improve productivity – sustainably

• Remove obstacles to structural change (e.g. land sale and lease)
• Provide an effective framework for risk management
• Use a range of instruments adapted to specific situations to improve the long run sustainability of agriculture
• Improve incentives for farmers to optimize the market orientation of their business (remove distorting support)
• Re-orient policies: Move away from market and income support to invest in innovation, e.g. R&D, education, extension, rural and marketing infrastructure
Composition of support to agriculture

TSE as a % of GDP

- Most distorting producer support
- Other producer support
- Productivity enhancing services
- Other support to agriculture

Australia | Canada | Chile | Japan | Korea | Mexico | New Zealand | United-States | China | South Africa | Russian Federation | OECD
What next?

- G20 Agriculture Vice-Ministers: Undertake further analysis of current national approaches and best policy practices to increase sustainable agricultural productivity growth…we call on the FAO, OECD and other relevant IOs to propose a consistent framework for analysis for our consideration before the end of 2012.

- Los Cabos Summit: G20 Leaders supported the report and the recommendations from their Agriculture Vice-Ministers.

- No agriculture work stream under the Russian G20 presidency in 2013
A Framework for Analysis: Improving Agriculture Productivity Growth, Sustainably

- The Framework being developed will help countries, at various stages of development, review the impact of a wide range of economy-wide and sectoral policies on productivity and sustainability in agriculture.

- The checklist proposed in the framework is a self-assessment tool for countries to:
  1. seek information on factors necessary for improving productivity and sustainability of the food and agriculture sector;
  2. identify the strengths and weaknesses of the policy framework;
  3. develop a set of policy reforms that can act as a catalyst for agricultural productivity growth and sustainable resource use.

- The OECD works with Australia, Brazil and Canada (ABC) to pilot test (and refine) this framework.
For more information

• Visit our website: www.oecd.org/agriculture

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