



IAASTD: 2003 - 2007

**The International
Assessment of Agricultural
Science and Technology for
Development**

www.agassessment.org



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What is IAASTD?

- An international assessment, co-sponsored by 5 UN agencies (FAO, GEF, UNDP, UNEP, UNESCO, WHO) and the World Bank
- A three year process 2003-2007
- Managed by a multi-stakeholder steering committee (Civil Society, Government representatives, Private Sector, Academia and research institutions) – about 70.
- Carried out by a team of agricultural experts – about 125



Purpose

- Assess Agricultural Knowledge, Science and Technology (AKST) in order to use it more effectively to:
 - Reduce hunger and poverty
 - Improve rural livelihoods
 - Facilitate equitable, environmentally, socially and economically sustainable development
- Evaluates the relevance, quality and effectiveness of AKST
- Evaluates effectiveness of public & private policies, & institutional arrangements



The Scope of the Study – The World

Divided into 5 regions

- LAC – Latin America & the Caribbean
- SSA – Sub Saharan Africa
- CWANA – Central & West Asia and North Africa
- NAE – North America and Europe
- ESAP – East and South Asia & the Pacific
- Secretariat based at the World Bank but supported by all 6 agencies + Finland
- **Budget – 11.1m \$**



Uniqueness

- Brings together all categories of stakeholders in AKST
- Applies one framework for global and sub-global assessments
- Integrates scientific info on a range of inter-linked topics
- Highlights linkages amongs Qns on agric, climate, biodiversity, natural resources, hunger, poverty and development.
- Will enable decision makers understand the connections between issues



Users

- The co-sponsoring agencies
- National governments and civil society
- International organisations
- All stakeholders
- The scientific community



Key Outputs

- Ensemble of peer-reviewed sub-global and global assessment reports on the role of AKST in development
- With near to long term perspectives
- Looks at policy and institutional issues
- In the light of history and plausible future scenarios
- Reports in the 6 UN languages
- To be presented and discussed at international, national and sub-national user forums



Where we are in the Process

- **Public review of the drafts at www.agassessment.org 19/9 - 22/10/2007. Comments !!!!**
- Global Synthesis report
- Global summary for decision makers
- Sub-regional summary for decision makers
- Final plenary meeting in January, 2008 in Nairobi;



Key findings

1. **Agric faces unprecedented challenges;** -
 - urbanisation,
 - Migration
 - diet changes
 - climate change
 - shift to biofuels
 - population pressure etc – **putting immense pressure on natural resources**
 - **To respond - AKST must acknowledge the multi-functionality of agriculture – see later**



Findings cont'd

2. AKST has contributed to reducing hunger, poverty and under nutrition – but in **an uneven way** for some countries and communities
3. Need to **direct AKST toward relieving pressures on Natural resources** but stronger efforts in;
 - Limiting GHG emissions
 - Adapting to climate change and variability
 - Strengthening Food sovereignty
 - Reducing risk of conflict – competing resources
 - Coping with HIV/AIDS
 - Determining risks associated with new techs (transgenics + nanotechnology)
 - Equitable national and international trade relations



Findings cont'd

4. Many of the challenges (50 yrs) require targeted application of formal, traditional and community based approaches – including organic agriculture **BUT**
 - No technology will help unless the **institutional arrangements are appropriate.**
5. Increased public research investment + favorable policy environment - enhancing productivity, profitability and env sustainability of small scale agri-systems



Findings cont'd

6. Need for creative new approaches involving collective decision making – **multi-stakeholder processes – including groups in the South.**
7. Opening national Agr Mkts to international competition before basic institutions and infrastructure are in place = long term –ve effects on poverty, food security & environment (**differentiated policy farmeworks is the way**)
8. Public policy, regulatory frameworks and int. Agreements are critical in driving more sustainable practices – **Policies can no longer externalise the economic, environmental and social costs of ag production (the case with SA and organic agriculture).**



Findings cont'd

9. **Resource efficient agri systems are linked to innovation in institutional and org arrangements** e.g. SA is more likely when legal frameworks and associations exist to support access to credit, markets, land etc
10. Neither the **supply side R-E-F** link nor the **demand side chain linked approach** will be suitable without multi-organisational partnerships. **Requires public & private investment**



Findings cont'd

11. More and better targeted AKST investments taking into account **multi-functionality of agriculture by both public and private sector** is key.
12. **Investment in multi-stakeholder partnerships** – require codes of conduct + civil society involvement in decision making



Findings cont'd

13. There are **diverse and competing interpretations** of past and current events related to AKST (values and contributions).

- Political, economic and social influences have privileged some over others – **urgent to create space for diverse voices and perspectives.**



Multi-functionality Of Agriculture

- **Recognises agriculture as a multiple output activity** (commodities e.g. food & bio fuels + non-commodities e.g. ecosystem services, landscape amenities and cultural heritage)
- Some of the non-commodity outputs that exhibit **x-tics of externalities or public goods** imply that their mkts function poorly or are non-existent.
- **Highly contested in trade negotiations;**
Pro = the multi-functionality justifies subsidies, Opp = Detach the non-commodity items



OPTIONS FOR ACTION

Decrease hunger and increase food security

- The **best suited strategies are controversial** – acknowledge competing but well supported narratives of S & T processes for effective policy making.
- Combining community based knowledge and formal AKST approaches is the best.
- AKST should be directed to poverty affected livelihoods and **sustainability**.
- There is urgent need to **develop and retain knowledge in agriculture** (curricula reform, ICT infrastructure, ... and encouraging University participation in recovering and recognising ITK –Incl. Org



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- Alliancing between consumers and producers has potential in addressing inequities created by industrial agriculture and to **internalise environmental and social costs**
- Global food security and national food sovereignty calls for **ending the marginalisation of producers** in developing countries



Improve human health & nutrition

- Developing and implementing Good Agricultural Practices (GAPs), including **integrating ecological concepts across production systems**
- **Safety standards need to evolve** to keep abreast with effects of climate change, new technologies and human mobility
- **Integration of policies along food chains** rather than at specific points within a chain.
- **Grounding AKST in ecological principles** will help address merging outbreaks of pests and diseases



Decrease poverty & improve rural livelihoods

- Policy options that buffer developing countries to enable response to crises & achieve food security and sovereignty (e.g. democratic control, public sector investment in empowerment of FOs, regional trading blocks etc.)
- Access to & control over land
- Diversification
- Access to inputs
- Policy options that stabilise and increase farm gate prices (coz liberalization has not benefited the poor since it contributes to externalising the ecological footprint and social effects of agric. Production)



Increase equity

- Poorest countries being net losers in most liberalisation scenarios – **differentiation in policy frameworks and app Institutional arrangements** prior to opening mkts
- **Fundamental changes to trade relations** – to support AKST deal with –ve effects of liberalisation
- The **quality and transparency of governance** (incl. participation of stakeholders in AKST decision making is fundamental)
- Brokered contractual arrangements – but also;



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- Expanding access to micro finance, financing of value chains, local markets, **supporting fair trade and organic agriculture** and encouraging large scale pvt trading initiatives
- Promote **innovation systems for pro-poor** development not tech transfer per se
- Strong policy and inst arrangements to balance private, communal and national **rights over K & resources**
- Investments that improve **women's status, enhance their role & reduce their burdens** (preparing poor women to participate in mkts)



Environmental sustainability & NRM

- **Address water scarcity due to competing econ forces thru;**
 - pricing policies targeted at developing whole water sources
 - Allocation polices taking into account whole water basins
 - Integrating food production with other ecosystem services in multi-functional systems



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- Innovative and better targeted AKST investment policies to build natural, human, financial, social and physical for social & environmental sustainability
- **Reverse ecological footprint of industrial agriculture thru** – policies that promote SA practices (e.g. using mkt incentives to reward environmental services) – **PES**
- Recognises multi-functionality of agric, creates mechanisms to value and pay for benefits of resource conserving ecosystem services e.g.SA



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- **Fisheries;** Employ integrated coastal mgt to make appropriate choices on utilisation and resource & benefit sharing
- Design regulatory and incentive systems which ensure stable income for SFFs – more research needed.
- Harness AKST to mitigate –ve effects of climate change – which will be heavier in tropics and sub-tropics **but watching against increased competition for resource use (e.g. agric for food or for bio-energy & forestry for C sequestration)**



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- Limit the magnitude of human-induced climate change e.g. a negotiated long term Clean Development Mechanism – comprehensive & equitable regulatory framework
- More research is needed into the benefits & risks of producing bio-energy



Improved governance, org & inst arrangements

- Resources to support transaction costs among partners by all parties e.g. the need for FOs to contract services from AKST, Farmer field school interactions with research etc.



Why be involved and How?

- A unique opportunity to develop a common vision for the future
- Critically assess info related to contentious issues
- Develop new partnerships
- Influence the future of ag. Research and policy
- Influence decision makers in public and private sector
- Provide consumers with info they need to choose about nutrition & food safety
- Provide farmers, foresters and fisherfolk with info needed to increase productivity in an environmentally and socially sustainable manner.