

# Food at any price is not sustainable

Hunger, social divisions and environmental destruction will increase unless there are radical changes in the way agriculture is developed, practised and protected.

This is the stark conclusion of the first international assessment of agricultural knowledge, science and technology for development (IAASTD), published in April 2008, and sponsored by FAO, GEF, UNDP, UNEP, UNESCO, the World Bank and WHO.

It concludes that unless agriculture is fundamentally changed, it will not be possible to feed the projected 9 billion world population and sustain the planet. The levels of degradation of soils and water, to mention but two resources under threat, is alarming.

Recognising the threats, IAASTD confirms that biologically diverse “agro-ecological” farming and grazing methods, especially those that are practised sustainably by small-scale food producers, in particular women, makes agriculture more resilient, adaptive and capable of eliminating hunger and rural poverty. Even though these methods of crop and livestock production can help reduce hunger and inequality in the face of global warming and reverse environmental destruction, they are being virtually ignored in international research, agreements and programmes, which are now being re-branded in the white heat of the current food crisis, to promote more of the same technical solutions that lie at the root of the social and ecological crisis.

The report confirms that policy and institutional failure has limited the use of sustainable practices; it could also be argued that this is the underlying reason why people are malnourished, farmers are poor and the price of food is rising. In particular, unfair trade agreements are identified as causes of current economic problems.

IAASTD acknowledges the importance of agricultural knowledge, science and technology to the multifunctionality of agriculture and its intersection with other local to global concerns, including loss of agricultural biodiversity and agroecosystem functions, climate change, and the concentration of ownership of land and water resources and the food chain.

These conclusions are, of course, not new. Any smallholder farmer organisation will say that this has been their message for decades; but their voices have been marginalised. What is new is that following four years of rigorous evidence gathering and analysis by scientists, IAASTD has confirmed the views of small-scale food providers and their organisations.

Four hundred natural and social scientists, biologists and economists, biotechnologists and anthropologists from all regions of the world worked on the assessment. Their report was peer reviewed twice. Furthermore, IAASTD was overseen by a 60 member Bureau made up of 30 governments, and the same number of public research bodies, the private sector and NGOs (including Practical Action).

Achieving sustainability and development goals will involve creating space for diverse voices and perspectives and a multiplicity of scientifically well-founded options, through, for example, the inclusion of social scientists in policy and practice of Agricultural Knowledge, Science and Technology.

(IAASTD Key Finding #22)

The Bureau set the rules for the methodology, analysis and how to deal with any conflicts of interpretation of the evidence - which proved an important safeguard in the process of adopting the report - ensuring the authors' views prevailed.

When Agricultural Knowledge, Science and Technology is developed and used creatively with active participation among various stakeholders across multiple scales, the misuse of natural capital can be reversed... A powerful tool for meeting development and sustainability goals resides in empowering farmers to innovatively manage soils, water, biological resources, pests, disease vectors, genetic diversity, and conserve natural resources in a culturally appropriate manner.

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The result is a report of over 2,000 pages which builds up to summaries, intensely negotiated line by line, of 22 Key Findings covering all aspects of food and agriculture policy, rural development and scientific research; and a Synthesis Report focusing on seven key themes ranging from bioenergy, trade and markets to traditional and local knowledge and community-based innovation.

While 57 governments approved the report, a few disagreed with specific wording in particular paragraphs and recorded their reservations. Australia, Canada and USA did not adopt all the conclusions nor the summary reports, variously citing concerns about the report's findings on trade, transgenics and the imperative for fundamental change. At the time of going to press the UK had still not approved the report, with ministers having problems swallowing the IAASTD's assessment of the failures of GM crops.

This assessment provides the evidence that donors, UN organisations, inter-governmental processes, research institutions, NGOs and others can use to justify why it is essential to transform agriculture, policy and institutions in order to realise vital social and sustainability goals concerning hunger, poverty, equity and the environment: essentially, to support food sovereignty. It will also help them with arguments about how to do this through increasing support for smallholder farmers who are producing affordable food in ways that are environmentally sustainable, while protecting them from the corporate-controlled, industrial food system. ■

## ANNEX: 22 KEY FINDINGS OF IAASTD – at a glance

- 1. PRODUCTION INCREASES:** Agricultural Knowledge, Science and Technology (AKST) has contributed to substantial increases in agricultural production over time, contributing to food security.
- 2. UNEVEN BENEFITS:** People have benefited unevenly from these yield increases
- 3. NEGATIVE CONSEQUENCES:** Emphasis on increasing yields and productivity has in some cases had negative consequences on environmental sustainability.
- 4. ENVIRONMENTAL DEGRADATION:** The environmental shortcomings of agricultural practice [is] increasing deforestation and overall degradation.
- 5. INCREASED DEMAND EXPECTED:** Global cereal demand is projected to increase by 75% between 2000 and 2050 and global meat demand is expected to double.
- 6. MULTIFUNCTIONALITY OF AGRICULTURE:** Agriculture operates within complex systems and is multifunctional in its nature.
- 7. STRENGTHEN AGROECOLOGICAL SCIENCES:** An increase and strengthening of AKST towards agroecological sciences will contribute to addressing environmental issues while maintaining and increasing productivity.
- 8. REDIRECT AKST:** Strengthening and redirecting the generation and delivery of AKST will contribute to addressing a range of persistent socioeconomic inequities,
- 9. INVOLVE WOMEN:** Greater and more effective involvement of women and use of their knowledge, skills and experience will advance progress towards sustainability and development goals and a strengthening and redirection of AKST to address gender issues will help achieve this.
- 10. BUILD ON EXISTING KNOWLEDGE:** [using] more innovative and integrated applications of existing knowledge, science and technology (formal, traditional and community-based).
- 11. USE NEW AKST APPROPRIATELY:** Some challenges will be resolved primarily by development and appropriate application of new and emerging AKST.
- 12. RESEARCH FOCUS ON SMALL-SCALE:** Targeting small-scale agricultural systems helps realize *existing* opportunities.
- 13. CREATE OPPORTUNITIES FOR POOR FARMERS:** Significant pro-poor progress requires creating opportunities for innovation and entrepreneurship, which explicitly target resource poor farmers and rural labourers.
- 14. DIFFICULT POLICY CHOICES:** Decisions around small-scale farm sustainability pose difficult policy choices.
- 15. PUBLIC POLICY AND REGULATION CRITICAL :** Public policy, regulatory frameworks and international agreements are critical to implementing more sustainable agricultural practices.
- 16. NEW INSTITUTIONAL ARRANGEMENTS REQUIRED:** Innovative institutional arrangements are essential to the successful design and adoption of ecologically and socially sustainable agricultural systems.
- 17. NEGATIVE IMPACT OF INTERNATIONAL TRADE:** Opening national agricultural markets to international competition can lead to long term negative effects on poverty alleviation, food security and the environment.
- 18. EXPORT AGRICULTURE UNSUSTAINABLE:** Intensive export oriented agriculture has adverse consequences such as exportation of soil nutrients and water, unsustainable soil or water management, or exploitative labour conditions, in some cases.
- 19. CRUCIAL CHOICES:** The choice of relevant approaches to adoption and implementation of agricultural innovation is crucial for achieving development and sustainability goals.
- 20. MORE INVESTMENT IN MULTIFUNCTIONALITY:** More and better-targeted AKST investments, explicitly taking into account the multifunctionality of agriculture.
- 21. CODES OF CONDUCT NEEDED:** Codes of conduct by universities and research institutes can help avoid conflicts of interest and maintain focus when private funding complements public sector funds.
- 22. MULTIDISCIPLINARY APPROACHES REQUIRED:** Diverse voices and perspectives and a multiplicity of scientifically well-founded options, through, for example, the inclusion of social scientists in policy and practice of AKST.