

IAP Analysis of Food and Nutrition Security and Agriculture

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Introduction to IAP and the FNSA project



IAP - The Global Network of Science Academies New Structure





Strategic objectives for IAP

- To provide evidence-based policy-relevant science, health, engineering and technology advice and perspectives on global issues
- To strengthen the global scientific enterprise
- To champion science education and work towards a scientific literate global citizenry
- To develop and strengthen the global network of science academies



Challenges for food and nutrition security

- Malnutrition (undernutrition, micronutrient deficiencies, overweight/obesity) is a problem worldwide
- Defining the goal to provide access for all to a healthy and affordable diet that is environmentally sustainable and culturally acceptable
- Taking an integrative food systems approach covers all steps from production, harvesting, processing, distribution, marketing through to consumption and recycling of waste: inter-related issues for resource efficiency, environmental sustainability, resilience and public health
- Setting priorities for increasing agricultural production by sustainable intensification must take account of pressures on other critical resources, e.g. water, soil, energy, and avoid further loss of biodiversity



IAP and FNSA project

- 4 parallel regional expert Working Groups, Africa, Asia, Americas and Europe, to share evidence and learning, to tackle societal priorities and build academy capacity
- Agreed common template of themes taking food systems approach and enhancing dietnutrition-health interfaces
- Focus on scientific opportunities for FNSA:
 - Using present knowledge to promote innovation and equity, and inform policy and practice
 - Identify knowledge gaps to fill with new research
 - Mobilising scientific resource



IAP and FNSA project: Template themes

- 1. What are key elements to cover in describing national/regional characteristics for FNSA?
- 2. What are major challenges/opportunities for FNSA and projections for the region?
- 3. What are strengths and weaknesses of science and technology at national/regional level?
- 4. What are the prospects for innovation to improve agriculture at the farm scale?
- 5. What are the prospects for increasing efficiency of food systems?



IAP and FNSA project: Template themes (continued)

- 6. What are the public health and nutrition issues, particularly with regard to impact of dietary change on food demand and health?
- 7. What is the competition for arable land use?
- 8. What are other major environmental issues associated with FNSA at the landscape scale?
- 9. What may be the impact of national/regional regulatory frameworks and other sectoral/inter-sectoral public policies on FNSA?

10.What are some of the implications for inter-regional/global levels?



Issues for food and nutrition security are vitally important for tackling SDGs

- The Sustainable Development Goals provide a critically important framework for understanding and meeting the challenges but require fresh engagement by science to reduce the complexities of evidence-based policies and programmes
- Science-informed analysis of interactions among SDGs can be strengthened to support coherent and effective science-policy dialogue and decisionmaking
- The project themes map onto multiple SDGs