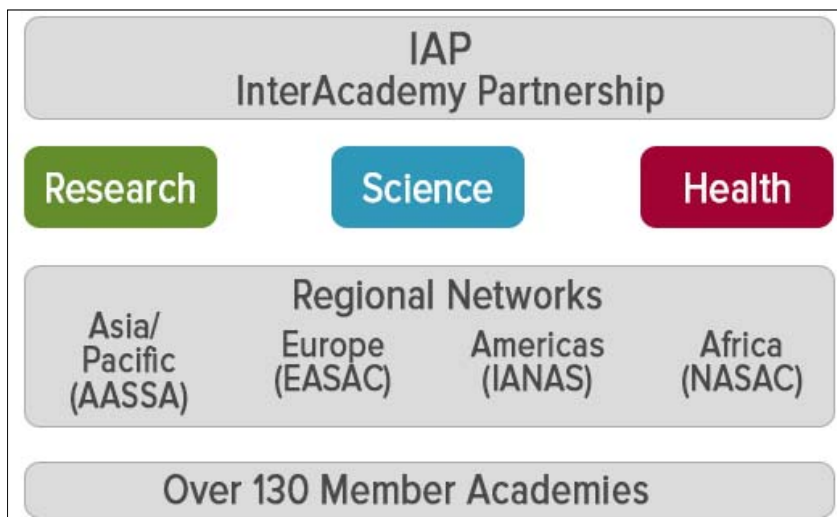




IAP Project: Food and Nutrition Security and Agriculture (FNSA) *General Introduction*

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Global Challenges for FNSA

- **Malnutrition:** undernutrition, micronutrient deficiencies and overweight/obesity
- **Poverty:** 400 Mill. small farms have largest share of poor people in the world.
- **Hunger, undernourishment:** rose to over 821 mill. in 2017 from 777 mill. in 2015.
- **Micronutrient deficiencies:** harm over two billion.
- **Obesity:** tripled to more than 800 million people between 1975 and 2016.
- **Low production and high losses and waste:** About one-third lost or wasted.
- **Environment:** damage to land, water, seas, atmosphere.

Regional differences and global Similarities

- **Differences:**
 - Agricultural productivity, access to knowledge and services
 - Food and nutritional security context
 - Scientific infrastructure and research capabilities
 - Policy making at the regional level: EU, AU,.....
- **Similarities:**
 - Fragmentation of the research system, policy and support
 - Consumption and nutrition behaviour: *cheap, energy-dense food leading to obesity*
 - Co-dependence on global trade, prices and investment

Power of IAP process in preparing the report

➤ Science base:

- Use the science power of academies to address FNSA challenges
- Issues spanning health, nutrition, agriculture, climate change, ecology and human behaviour
- Find sustainable STI-based solutions for national and global food systems with access for all

➤ Collective academy work, aiming for:

- A strong consensus around controversial issues
- Recognition and appreciation of diversity
- Evidence-based messages about the global opportunities and challenges
- Learning between regions, sharing, evidence, experience, good practice

IAP FNSA project design

- 4 parallel regional expert **Working Groups** selected by regional networks in Africa, Asia, Americas and Europe to address regional challenges, opportunities and priorities
- 4 Regional **reports** and a fifth global report
- Agreed common **template of themes** based on **food systems approach**
- Focus on scientific opportunities and challenges for FNSA:
 - Using present knowledge to promote innovation and inform policy
 - Identify knowledge gaps to fill with new research
 - Mobilising scientific resources

IAP template

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?
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?

FNSA project and SDGs

- Project strongly relates to **SDG 17**: international partnership
- Speakers will present their regional conclusions with particular regard to key SDGs
- All participants are encouraged to participate in discussion:
 - What are the messages from this project for SDGs and their interdependencies?
 - What is still controversial, what knowledge gaps need to be filled and how?
 - What has been the impact so far of this project?
 - How can academies follow up the conclusions to influence technological and social change?
 - What has been learnt from the design of this project – to apply to next IAP interregional project?

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