

#### UNIVERSITY OF HOHENHEIM





Food Security and Nutrition in the context of the 2030 Agenda:
Science and Knowledge for Action

International Colloquium 27 September 2016 University of Hohenheim

# Panel 1 - Emerging Issues for Food Security and Nutrition and Knowledge Gaps— What do we need to know?



## Panel 1 - Emerging Issues for Food Security and Nutrition and Knowledge Gaps— What do we need to know?

#### 1) Fangquan Mei

- HLPE Steering Committee Member
- Chinese Academy of Agricultural Sciences (CAAS)

#### 2) Hamady Diop

 New Partnership for Africa's Development (NEPAD)

#### 3) Sheryl Hendriks

University of Pretoria

#### 4) Tara Garnett

University of Oxford

#### 5) Bärbel Höhn

- Member of German Parliament
- Chair of Committee on the Environment

#### 6) Ramy Zurayk

- HLPE Steering Committee Member
- American University of Beirut

Chair: Regina Birner, University of Hohenheim



## Background Global processes to identify issues and priorities

#### Several global processes

• to identify issues and priorities for research and action on agriculture, food security and nutrition – with broad participation – scientists / experts / stakeholders

#### Examples

- International Assessment of Agricultural Knowledge, Science and Technology for Development 2005-2008 (IAASTD, 2009)
- World Development Report 2008: Agriculture for Development
- Process to identify "the top 100 questions of importance to the future of global agriculture" (Pretty et al, 2010)
- Priority setting process of the CGIAR system (since 2009)
- First HLPE Consultative Process to identify Critical and Emerging Issues 2014



#### What can we learn from past processes? Areas of agreement – in line with the SDGs

- Need for sustainable intensification of smallholder farming systems
  - **SDG 2.3**: By 2030, double the agricultural productivity and incomes of small-scale food producers
- Need to make agriculture more sustainable, resilient and climate-smart
  - **SDG 2.4**: By 2030, ensure sustainable food production systems and implement resilient agricultural practices ... that strengthen capacity for adaptation to climate change
  - **SDG 6.4**: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater
- Need to address gender issues in agriculture
  - SDG 5: Achieve gender equality and empower all women and girls
- Need to make agriculture sensitive to nutrition
  - **SDG 2.1:** By 2030, end all forms of malnutrition



## What can we learn from past processes? Areas of disagreement

#### Modern agriculture

- Science as basis of agriculture
- New technologies as opportunities
  - Examples: CRISPR/CAS
- Managerial approach to problem-solving
  - Environmental and social problems are not denied, but seen as manageable,
    - e.g., using market-based instruments and corporate social responsibility

### Organic agriculture Agro-ecology

- Nature as basis of agriculture
- Focus on local / tacit / indigenous knowledge
- Key concepts
  - Holistic approach
  - Multi-functionality of agriculture
  - Food sovereignty

#### Critique

- "Productionist" approach
- "Industrial mass production"
- Driven by the interests of big business
- Inherently unsustainable

#### Critique

- "Naïve" and romanticizing approach
- Depriving poor people of their development opportunities



## Questions for the panelists

#### **New Issues**

- Considering the time horizon of the Agenda 2030,
  - which new and emerging issues in your field of expertise have not yet received sufficient attention
  - in current research and in existing assessments and priority setting exercises?
- What type of knowledge is needed to better understand these new and emerging issues?

#### **Contested Issues**

- Which issues related to food security and nutrition are,
  - from your perspective,
  - particularly contested?
- What type of knowledge should be generated
  - in what types of knowledge systems
  - to provide **better guidance** for stakeholders and policy-makers on such contested issues?



Food Security and Nutrition in the context of the 2030 Agenda:
Science and Knowledge for Action

International Colloquium 27 September 2016 University of Hohenheim

#### References

 Pretty , Jules, William J. Sutherland , Jacqueline Ashby , Jill Auburn , David Baulcombe , Michael Bell, Jeffrey Bentley, Sam Bickersteth, Katrina Brown, Jacob Burke, Hugh Campbell, Kevin Chen, Eve Crowley, Ian Crute, Dirk Dobbelaere, Gareth Edwards-Jones, Fernando Funes-Monzote, H. Charles J. Godfray, Michel Griffon, Phrek Gypmantisiri, Lawrence Haddad, Siosiua Halavatau, Hans Herren, Mark Holderness, Anne-Marie Izac, Monty Jones, Parviz Koohafkan, Rattan Lal, Timothy Lang, Jeffrey McNeely, Alexander Mueller, Nicholas Nisbett, Andrew Noble, Prabhu Pingali, Yvonne Pinto, Rudy Rabbinge , N. H. Ravindranath , Agnes Rola , Niels Roling , Colin Sage , William Settle , J. M. Sha , Luo Shiming, Tony Simons, Pete Smith, Kenneth Strzepeck, Harry Swaine, Eugene Terry, Thomas P. Tomich, Camilla Toulmin, Eduardo Trigo, Stephen Twomlow, Jan Kees Vis, Jeremy Wilson & Sarah Pilgrim (2010): The top 100 questions of importance to the future of global agriculture, International Journal of Agricultural Sustainability, 8:4, 219-236



Food Security and Nutrition in the context of the 2030 Agenda:
Science and Knowledge for Action

International Colloquium 27 September 2016 University of Hohenheim

#### References (continued)

• IAASTD (2009). Agriculture at a Crossroads: International Assessment of Agricultural Knowledge, Science and Technology for Development - Synthesis Report. Washington, D.C.: Island Press. Online at: http://www.agassessment.org/reports/IAASTD/EN/Agriculture at a Crossroads\_Synthesis Report %28English%29.pdf