

## **Reporting from your panel**

**Title of panel:** Bridging the gap between water, sanitation and food production for food and nutrition security

**Conveners:** Helfrid Schulte-Herbrüggen (KTH), Björn Schulte-Herbrüggen and Ngolia Kimanzu (Frälsningsarmén).

**Presenters:** Gunnar Jacks (KTH), Florencia Harari (KI), Helena Skröder Löveborn (KI), Kim Andersson (SEI), Johan Wikström (SCB), George Obondo (Salvation Army - Kenya)

Please write about 200 words divided between the two headings below, and e-mail to [devres2016@humangeo.su.se](mailto:devres2016@humangeo.su.se) within two weeks after the conference. Structure of the short reports:

### **a) Summary of main conclusions from the panel – about 100 words**

The theme of our panel was “bridging the gap between water, sanitation and food production for food and nutrition security”. Presentations and discussions included research and practitioner experience from the fields of a) safe drinking waters supply, b) human nutrition and c) productive sanitation systems. The aim of the panel was to discuss benefits and challenges of addressing the provision of safe water, sanitation and food (nutrition) in a holistic manner, rather than as separate components as often is the case. The conclusions below draw from the presentations as well as discussions and insights from the audience.

**Benefits** from combining water and hygiene with “productive sanitation” is that the re-use of human waste, in conjunction with water and hygiene measures can increase food production and nutrition outcomes and lead to effective implementation of sanitation and nutrition programmes. The benefits include improved health, food and nutrition security (through increased nutrition through fertilizers from “waste” and reduced disease as a result of clean water and hygiene), environmental benefits (less use of chemical fertilizers) as well as economic benefits. Some elements (e.g. selenium) are only taken up through diet (rather than through e.g. supplements), and thus a holistic perspective must be applied to achieve good nutritional status.

**Challenges** identified, included the need to bridge the gap that exists between traditional academic disciplines and also sectors of practitioners. There is a need for conceptual linkages between the different thematic areas. There is a need for more empirical evidence and knowledge sharing. There are legal barriers to use of human fertilizers (e.g. in Sweden), as well as traditional taboos (low-middle income countries). Practical challenges include the likely added work for the user of sanitation systems if there is a re-use component.

### **b) Message to policy & practice – about 100 words**

**Access to safe water and food for all, is essential in order to improve health and well-being. Sustainable development goals concerning safe water, sanitation and nutrition are best achieved by working across sectors.** Recycling of urban and human waste into agriculture using productive sanitation systems can be a win-win situation for implementation of both nutrition and sanitation programmes, leading to improved human health, environmental health (water and resource management) and social outcomes.

**There is a need for research:** Empirical evidence is needed of effects of working across water-sanitation-nutrition sectors, assessing human health, economic and environmental aspects.

**There is a need for guidelines:** Minimum as well as maximum drinking water and food guideline values should be established to improve nutritional status of susceptible and deficient populations.

**Need for monitoring:** Less common trace metals and elements should be included into regular drinking water screening. There is a need for screening of nutritional status of pregnant women and children, since up-take of nutrition early in life is essential.

**There is a need for continuous learning:** Learning and adaptation *during* implementation of development projects is needed. Adaptive and frequent monitoring and evaluation are important tools for learning.

**Importance of context in international development:** knowledge, skills and resources within local communities should be used in development. Technology selection must take into account local context, affordability and maintenance aspects of rights holders.

**There is a great opportunity** to achieve sustainable development, health and nutrition goals by combining productive sanitation, re-use of human fertilizer in agriculture and safe water and good hygiene practices. It is crucial that we work in partnership and across sectors and there is a need for **common goals** and guidelines.