

**9<sup>th</sup> Berlin Agriculture Ministers' Conference:**  
**"Agriculture and Water – Key to Feeding the World"**

**Break-Out Sessions: Chair's Summary**

On 21 January, GFFA agriculture ministers discussed the implementation of the GFFA Communiqué in four separate break-out-sessions. Sharing best practices with each other, they identified key challenges and a vision for the future on how to deal with "water and agriculture" in the short and medium term. This document summarises the discussion within each of the break-out sessions. It is a non-binding document to complement the GFFA Communiqué 2017.

**Water Scarcity (Leading Minister: Dora Siliya, Minister of Agriculture, Zambia)**

- Agriculture uses 70 percent of the global water withdrawals; agriculture is on the one hand affected by water scarcity and must on the other also be part of the solution.
- Points of action:
  - Need for investment in efficient water management facilities (pipes, storage, collective management systems).
  - Reduction of water subsidies for agriculture and development of an appropriate pricing strategy for water usage.
  - Need to promote sustainable agricultural practices: more efficient and productive use of available water, promotion of water-conserving soil cultivation, reduction of evaporation (e.g. via direct seeding technology); special focus on smallholder farmers, who must be empowered to produce more efficiently.
  - Research and development are needed in order to develop agricultural practices which produce more with less water input (increase productivity and sustainability).
  - Secure access to water for agriculture; secure priority of food production in competition over water use between industry, agriculture and households.

## Water Surplus (Leading Minister: Blairo Maggi, Minister of Agriculture, Livestock and Food Supply, Brazil)

- It was emphasised that water surplus and its consequences should be regarded in the context of climate change. The phenomenon is a global one. The occurrences of large quantities of water (floods, storms, rising sea levels) are geographically and temporally inconsistent and need supra-regional (if necessary, national) coordination and infrastructural support (through dams, reservoirs, flooding areas etc.).
- Its relevance for the agricultural yield (amount and regularity) and the resulting necessity for risk management is a challenge for which only partial/limited solutions exist. Contingency insurance subsidised by the governments is one of the agripolitical instruments in some countries. Political support/flanking seems urgently needed.
- Every country worldwide is affected in specific ways because of their geographic and agro-ecological conditions (island states, land-locked states, states with mountain areas etc.).
- To protect agricultural areas from erosion, many countries take measures to ameliorate the situation. It is necessary that not only irrigation systems but also drainage systems are provided. The application of advanced technology in this area is being supported.
- There is a particular need for the use of modern technology. On the one hand, it protects villages and cities, as well as farmland, from water (i.e. avalanches, floods, storms at sea). On the other hand, it also makes the storage of water surpluses possible for use in times of drought (reservoirs for agricultural use as well as human use in times of drought).
- Also, the possibility of (interregional/international) transfer/trade of water surpluses in regions that suffer from water shortages was suggested. The concept of virtual water trade deserves to be developed further.
- It was agreed that the sustainable cultivation of wells, brooks, rivers and coastal areas was vital. Government guidelines on how to use surrounding biotopes and ecosystems were seen as self-evident.
- Regarding market and trade policies: certain political instruments are able to benefit suppliers who use water inefficiently and protect them against competitors. Political instruments that allow this should be avoided internationally.

## Access to Water (Leading Minister: Barnaby Joyce, Minister for Agriculture and Water Resources, Australia)

- The food-water-energy nexus needs to be considered in a holistic approach: 60 percent more food by 2050 also means 50 percent more energy demand and 55 percent higher water demand. Demand for water for the production of food and feed are in competition with each other.
- The right to water can contribute to achieving sustainable access to water for all and ensure sustainable protection and use of water as a public good.
- Fragmentation of water governance: often several ministries are involved, similar problems at local (municipalities) and international (United Nations) level. Therefore, it is necessary to coordinate policies between sectors (agriculture, environment, energy, mining etc.) to make them efficient and effective.
- Key role of effective institutions: water association at local (farmers), national (water boards) and international (river basin association) level for achieving sustainable water access (incl. droughts) at all levels.
- Need for appropriate investments for efficient water storage (dams), distribution network and modernisation of irrigation infrastructure.  
Finance: Collaboration between international development banks, domestic sources and private sector is needed. Water must be a political priority.
- Need for the removal of red tape restricting construction of water assets and infrastructure required to achieve SDGs.
- Need for low-cost, non-conventional water sources (rain-water harvesting, reuse of wastewater etc.).
- Need for transboundary water policy.
- Need for inclusive administration of water through involvement of all stakeholders.
- Need for collaboration and best-practice sharing within and between countries.
- Need to find mechanisms to raise awareness that water is very precious and must not be wasted. Subsidies must be reviewed to see whether they give the wrong incentives.

## Water Quality (Leading Minister: Martijn van Dam, Minister for Agriculture, The Netherlands)

- General comments
  - When it comes to the issue of water quality, the safeguarding of the use of clean water for the agricultural sector is also at stake.
  - Pollution does not stop at national borders.
  - Clean water is also of importance for future generations.
  - Global commitments would also be required to define targets for water quality and to make arrangements for the dissemination of knowledge and technologies.
  - Prevention is better than the subsequent cleaning of water. Leakage of fertiliser and pesticides into water should therefore be prevented.
  - In order to achieve this, integrated approaches involving all actors would be necessary.
  - A regulatory framework ('sticks') is vital that would have to be coupled with positive incentives ('carrots') for farmers. Enhancing water quality should make economic business sense for the farmer, or, conversely, not contributing to cleaner water should have negative economic consequences. Extension services can support the development of business models for cleaner water with farmers so that they can associate financial benefits with water purification.
  - Providing support to smallholders would be needed. Technology transfer would also be crucial in order to achieve enhanced agricultural and water management, e.g. by mobile technologies for farmers.
- Cooperation and coherence
  - Cooperation is required to keep water clean so that technologies can be exchanged, know-how developed and investments generated. It is also required for joint management to protect against the pollution of cross-border watersheds. Cooperation between farmers should also be promoted with a view to the development of joint solutions.
  - When it comes to policy development, both cooperation between different government levels and cooperation between different specialist areas should be ensured because this creates policy coherence. In addition, both the public and farmers should be involved to achieve ownership of the policy measures.
- Maintaining water purity
  - It was agreed that precautionary measures make more sense than subsequent measures to remedy damage.
  - Regulatory measures are indispensable and also provide incentives for developing water-conserving measures.

- The prevention of nutrient and pollutant discharges should also provide financial benefits for farmers. Incentive schemes could make an additional contribution.
- Monitoring and control systems are required in order to both detect and combat pollution at an early stage and in good time and to control the success of measures taken.
- Water quality is not yet perceived as a pressing issue in many developing countries, where availability and access to water are seen as more urgent.
- New technologies for precision farming are necessary and must be implemented. To this end, investments in the necessary infrastructure are needed. But technology alone is insufficient. Connecting farmers to supply chains to enable them to recuperate the investments is a necessary condition as well.
- Recirculation (recycling) systems for water use and the use of drainage water could reduce the discharge of nutrients and pollutants. The benefits of recirculation systems exist not only in the agricultural sector but also in industry. Water purification is also necessary there in order to make clean water available to agriculture on a permanent basis.