





Food security through sustainable growth – Farming with limited resources

Goal

The agricultural ministers from all over the world

- define agriculture as an essential part of the Rio+20 process,
- come up with joint answers to the issue of vital importance for the future: feeding the rapidly growing world population,
- combine the ongoing action plans of the G20 with the expertise of other countries.

A step on the path to Rio+20

20 years after the Earth Summit in Rio de Janeiro, the General Assembly of the United Nations is to again stage a United Nations conference on sustainable development in Rio de Janeiro ("Rio+20") in June 2012. The emphasis will be on **the green economy, reducing poverty** and **the institutional framework of the United Nations for sustainable development.**

Agenda 21, adopted in 1992, postulated the "sustainable use of resources" as the main principle for action. In June 2012 the Heads of State and Government will discuss how the global sustainability goals can be implemented through their joint efforts, and how the United Nations can strengthen and enhance its structures with these goals in mind.

Agriculture is an essential component of these sustainability goals because it holds the key to improving global food supplies. Sufficient and healthy food is the prerequisite for sustainable development in the 21st century. At the **Global Forum for Food and Agriculture (GFFA)** in Berlin in January 2012, the agriculture ministers from across the globe will present their concepts and cooperation-based action plans from the agricultural angle – an essential contribution by the agricultural sector to a successful "Rio+20".

The following text sets out the main ideas and subject areas.

The global food situation remains tense.

The subject of food security will continue to top the political agenda at global and national levels in the foreseeable future. The international community is still very far away from striking a balance between the basic needs of all people and preservation of the earth's natural resources. The availability of sufficient food and access to healthy food are decisive factors for sustainable development and increasing prosperity on all continents. The number of hungry and undernourished people remains at almost one billion people.

Agriculture is the key to food security.

Sustainable agriculture, therefore, plays a key role in food security in all countries. Arable farming and livestock husbandry are the core elements in land-based food production. This must be the starting point for all solutions. The production of food takes priority.

Access to food is dependent on fair distribution.

Sustainable rural development, social structures and trade constitute the environment that is conducive to effective production and fair distribution. Hurdles which limit access – and this includes poverty – must be eliminated.

Sustainable solutions make strategic sense.

Different regional road maps for agriculture must take into account economic, ecological and social concerns. There is no universal remedy. The solutions and transformation processes will differ from region to region. They cannot be produced by agriculture alone. They must be designed and implemented by the countries themselves, on their own responsibility.

Charting a political course for more food.

Environmentally sound management and good governance must be combined. The transition to a sustainable, consensus-based green economy touches on all sectors and areas of activity. Forward-looking guiding principles must be coherently shaped by the political stakeholders on all levels. To an equal extent, this is about directly meeting needs and about taking precautionary actions along the lines of good governance. What is needed is the charting of a clear political course towards stable framework conditions, legal certainty and international coordination.

The most important challenges are dealt with in eight subject areas:

1: Areas and soil

Agriculture faces a dilemma: food production must increase but the usable area can only be increased to a limited extent. The latter is also encroached on by competing uses arising from industrial and settlement areas. In many countries, very many of the available agricultural areas are also threatened with degradation, e.g. through nutrient loss, salinisation, erosion, climate change, and the accumulation of toxic substances.

The options available include the optimised use of existing areas, the maintenance and care of natural soil functions, and the use of locally adapted types of plants and of agricultural technology which uses the soil sparingly. These processes are only helpful if they are harmonised with global market relationships and also with goals relating to biodiversity and the climate. Sustainable uses need a comprehensive regulatory framework for working with these land areas, the observance of good agricultural practice, and effectively-functioning markets for land.

2. Water

The amounts of fresh water available are limited. In arid/semi-arid zones, the soils are endangered by salinisation; further risks are caused by the falling levels of groundwater, rivers and lakes.

In the future the challenge will be to achieve sustainable water management and to use stress-tolerant types of plants and water-saving technologies. In this context, efficient utilisation plays a major role. A high-performance infrastructure, regional and transregional regulations and, where appropriate, international agreements are needed to ensure access to water and also sustainable water use.

3. Sustainable production methods and resources

The sustainable production of food is the core task of agriculture and it requires effectively-functioning production methods. Success will decisively depend on good training and consultancy support, as well as on reliable legal framework conditions. This is because such conditions make it possible to create incentives for enterprises to adopt a market orientation and to set up their connection with the market; the result of this is that the population can be better supplied. Involvement in regional development processes is essential for rural areas.

When it comes to plant breeding, crop production, fertilisation and plant protection, as well as animal breeding, animal husbandry and animal health, what is needed is to use the potential available, in order to create solutions adapted to a particular area's needs. Key topics are the adaptation of methods, improved provision of capital to farm holdings, as well as the inclusion of such holdings in development programmes. State incentives and closely-knit networking between professional practice, consultants and research can exert a supporting influence.

4. Food losses

A large part of the harvest does not reach the consumer. Containing losses in developing and industrialised countries is a key step in developing agriculture towards the green economy.

The viable options include plants that are better suited as foods, improved technologies and the introduction of logistical precautions, for instance with regard to storage, drying, packaging,

refrigeration and transport. There is still considerable further scope for reducing losses all along the food chain and for including the final consumers in this. Food losses must be tackled on all levels of economic activity. This includes high-performance marketing infrastructures. Consumers should also rethink their approach to food.

5. Small, family-run farm holdings

Around half a billion very small family-based farm holdings have major potential for operating their businesses on a sustainable basis. Many of them lack the opportunities for marketing their products effectively and for obtaining equipment at favourable prices.

To capitalise on this potential, suitable instruments are community-based organisational forms of regional production and also (among other things) of regional exchange of goods. Infrastructure projects (streets, artificial waterways, transport and information systems, markets) and their use are gaining in significance; training and consultancy are also becoming increasingly significant. Farm holdings must have sufficient (regionally-dependent) production capacity in order to ensure lasting, efficient production.

6. Infrastructure and urbanisation

The largest part of the global population increase over the coming decades is expected in the cities. The massive exodus from rural regions is making the problems even worse.

One solution consists of networking the rural regions better with the urban centres, in order to make possible a purposeful, efficient exchange of goods and services. This way, value-creation chains can reach from the rural areas all the way into the cities.

7. Energy and renewable raw materials

Due to shortages in fossil-based raw materials, a growing part of agricultural production is being used as bioenergy or as basic materials for industry. The production and use of renewable raw materials generate major opportunities but also risks. Further analysis must be made of the interconnection between issues such as the production of bioenergy, the security of global food supplies, global agricultural markets, and the sustainability of agricultural production and climate protection.

Politics is facing the challenge of avoiding possible conflicts between goals. What is required of agricultural research and energy research, as well as of the relevant international organisations, is that they work out solutions that contribute to solving the open questions. Priority goes to the securing of food supplies.

8. Innovations and investments: the keys to sustainable management

The search for regionally adapted solutions and their implementation represents a great challenge for farmers and for those holding political responsibility. What is essential is to multiply knowledge, to deepen it, to network it, to pass it on (in initial training, consultancy and further training) and to apply it. This requires investments – they must be mobilised for developing countries on a priority basis. Financial resources are needed in order to improve means and methods of production, to establish and develop marketing channels and marketing chains, as well as to improve the economic and social infrastructure in rural areas.

Investments are only made on a sustainable basis if they respect existing property and utilisation rights and are oriented towards mutual benefits. Voluntary **guidelines** can provide a suitable basis of orientation for responsible, sustainable investment in agriculture, and also for access to land and natural resources.

GFFA 2012: Concepts for sustainable growth

The challenges facing a sustainable agriculture and food sector, to safeguard tomorrow's global food supply, are huge - but they can be mastered. The 2009 World Food Summit in Rome, the New York Summit on the Millenium Development Goals in 2010, as well as the Action Plan of the G20 Agriculture Ministers in June 2011, provide important guidance in this respect.

The Global Forum for Food and Agriculture (GFFA), to be held in Berlin in January 2012, offers agriculture ministers from throughout the world the platform for defining joint approaches to addressing the problems and thus for making a constructive contribution to the success of Rio+20.