11th Global Forum for Food and Agriculture from 17 to 19 January 2019 in Berlin

"Agriculture Goes Digital – Smart Solutions for Future Farming"

One of mankind's greatest challenges is the fight against hunger and the sustainable stewardship of natural resources. According to the FAO, agricultural production would have to be increased by around 50 percent from 2012 to 2050 in order to meet the global demand for food and feed for an estimated 9.7 billion people.

It is true that global agricultural production has tripled over the past 50 years thanks to mechanical, technical, biological, chemical and business management innovations. Nevertheless, at present almost 800 million people are suffering from hunger all around the world and about 2 billion people are undernourished due to the lack of vitamins and micronutrients that are crucial to survival. In addition, the growing world population and the associated developments will intensify competition for scarce resources such as soil, water, energy and biodiversity. At the same time, it is not yet possible to predict how climate change will affect the global potential for production.

Increasing agricultural production on all continents is a key element in the fight against hunger and poverty. This increase must be implemented in an intelligent, location-specific and sustainable manner, because soils, water and other natural resources must not be overexploited. At the same time it is necessary to better protect the environment and biodiversity in agricultural landscapes, reduce greenhouse gas emissions from agricultural production, improve animal health and welfare, and reduce losses along the value chain up to the consumer level.

The digital transformation (digital technologies and innovations, information and communications technologies (ICT) and the use of artificial intelligence) in agriculture provides new state-of-the-art technologies in the fight against hunger and food insecurity as well as for the sustainable use of agricultural resources. Digital innovations already affect many people in every kind of situation in life and will have an even greater impact on the way we communicate, consume and work in the future.

These digital technologies are already readily available in most cases, affordable and ready for operation all around the globe. This increases efficiency in land and resource use as well as in labour input. At the same time, digital applications are an important basis for many farmers for education, information and consultancy relating to their own agricultural production, and offer efficient access to financial services in particular. They thus help to

compensate for the infrastructural disadvantages of remote production and residential locations.

Digital technologies can also give agricultural businesses access to regional and international markets, increase market transparency and reduce transaction costs. Digital technologies also make important contributions in the areas of animal health, animal welfare and animal disease control.

Starting right at producer level, digital innovations lay the foundations for traceability and certification in the value chain and for improved consumer information.

The use of digital technologies offers new opportunities, particularly for small-scale family farms, which account for around 90 percent of the 570 million farms worldwide and produce around 56 percent of all agricultural products worldwide. Compared with other technologies, these opportunities offer easier and faster access, usually lower costs and the almost worldwide availability of digital systems.

Nevertheless, questions regarding the opportunities, benefits, risks and implications for the environment, industry and society that result from the use of technologies in the value chain still remain unresolved. This also holds true for the introduction of digital technologies.

Against this backdrop, the following questions, inter alia, are to be discussed at the 11th GFFA in Berlin:

- How can we make better use of the potential of digital technologies for the agricultural sector?
- How can we further develop and secure farmers' access to these technologies?
- How can we ensure data security and data sovereignty, avoid dependency on individual digital systems and promote connectivity?
- What are the profound structural changes that we can expect to see in agriculture and rural areas as a result of the digital transformation, and how could structural change be supported politically?

Following the discussions in the different fora and formats of the GFFA, the participating ministers will provide a political assessment of these issues in a final communiqué.

The goal of the GFFA is to find common political positions, to initiate and monitor an international process and to promote the exchange between policy makers, economic operators, the scientific community and civil society.