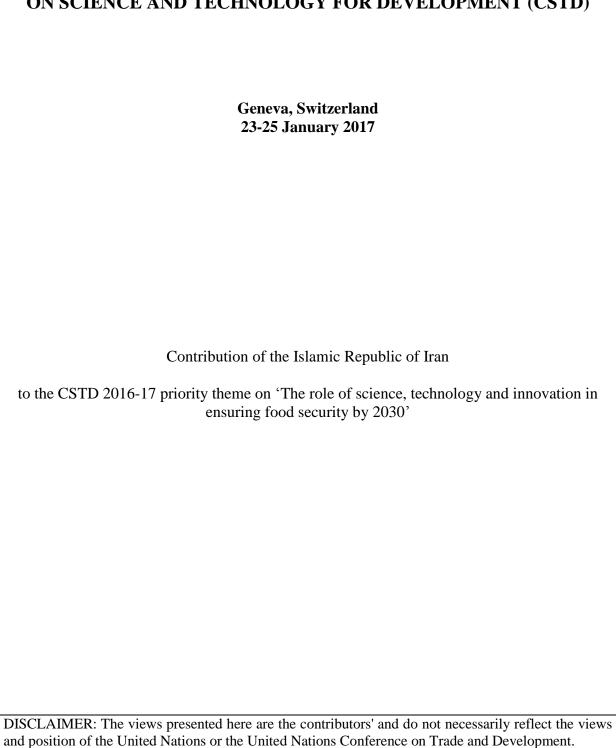
INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)



Submission by the I.R. Iran

On

'The role of science, technology and innovation in ensuring food security by 2030'

(29 December, 2016 – Geneva)

The world population is projected to increase to approximately 9.7 billion by 2050 and, at the same time, the international community is determined to improve the existing living conditions in which many people are suffering from malnutrition and hunger. It means that there should be more and adequate food stuff production, coping with the increasing needs of the population. It goes without saying that any possible food crisis, at present and in future, will deteriorate the ongoing various crises across the globe and intensifies instability and conflicts within and between the countries. Like the other relevant issues, food and food security must be given priority in the agenda of the international community.

There are, fortunately, 12 references to the word "food" in the 2030 Agenda for Sustainable Development. Goal 2 of the SDGs is titled: "End hunger, achieve food security and improved nutrition and promote sustainable agriculture." Goal 12, which highlights "sustainable

consumption and production patterns, two references to the word "food" were made.

It is worth noting that in 2030 Agenda, the terms "food commodity markets", "food reserves", "food price volatility", "nutritious and sufficient food" and "safety and affordability of food" are being used. The Agenda addresses "food producers" and "sustainable food production systems" which affect food productions and also refers to some threats to the food security, such as "food loss" and "food waste."

Although there is no specific reference to food in the other 15 Goals, one can strongly emphasize the mutual impacts of food security and the other parameters referred to in the other Goals, such as: poverty, health, water and sanitation, education, environment, energy, industrialization, etc. As stipulated in the Agenda, international cooperation is required if food crisis is to be avoided or tackled effectively. All stakeholders must be involved in the process of decision-making and implementation. A coordinated response at national, regional, and global level can be counted as a reliable solution to this problem, which affects all countries and the regions.

It is evident that desertification, biodiversity loss, climate change, land degradation, dust storms, water scarcity and pollution, as the environmental challenges, are among the major threats to food security. Needless to emphasize the compelling need for exchange of knowledge and experiences, capacity building enhancement, as well as transfer of appropriate and advanced technologies for the implementation of the Sustainable Development Goals, particularly those related to food security.

Although it is widely recognized that the intellectual property rights aimed at protect the achievements of entrepreneurs, inventers, and all others involved in innovation and advanced technologies, it continues to impose some undue limitations on access of developing countries to science and technology as an essential tool for maintaining food security. The international community should find a solution to this long-standing dilemma. On the same vein, the Commission on Science and Technology for Development (CSTD) could play an important role.

Against this backdrop, one can conclude the followings:

- The need to respect for the sovereignty of states over their resources;
- Respect for the principle of common but differentiate responsibilities, as a principle, at global level;
- Progress in the eradication of poverty and hunger requires progress in the achievement of all SDGs;
- Ensuring food security, improving nutrition and building inclusive, resilient and sustainable food systems are central to the success of the 2030 Agenda;
- Ensuring sustainable patterns of production and consumption;
- Achievements in reducing hunger and malnutrition requires additional investments in agricultural sector;
- Importance of South-South, North-South and triangular cooperation;
- Natural disasters, massive displacement and refugees, forced migration and human tragedies will increase the threats to food security;
- Economic and social development as well as environmental protection are key to maintain food security;
- The need to focus further on the most vulnerable populations;
- Minimization of food wastes and food losses are important factors in addressing food security;

- There is enough fresh water and food globally, but it is unevenly distributed among nations and lacks sustainable patterns of consumption;
- Enhancement of the water use efficiency, including through enhancing the irrigation systems in agricultural sector, is key to improving food security;
- Importance of science, technology and adequate investment in sustainable water management;
- Importance of education on responsible use of water to enhance food security;
- Removal of all barriers which prevent developing countries from achieving food security;
- The sustainable development of agriculture and livestock is essential for poverty reduction and the achievement of food security and adequate nutrition;
- Recognition of desertification, inadequate water resources, dust and sand storms, drought and the water scarcity as challenges to food security;
- Acknowledging the key role of forests to help reduce carbon emissions, preventing desertification, land degradation and drought;
- The need for assisting the low forest cover countries, as well as arid, semi-arid and mountainous countries which have fragile ecosystems;
- Fostering the conservation of biodiversity, supporting watershed protection and producing food;
- Agricultural subsidies in some countries will contribute to the distortion in the global agricultural products markets and will lead to food insecurity in developing countries, particularly those which rely on income generating from food production;
- Increase in assistance and investment in food production and enhancing productivity in developing countries, including through

- providing cheap and reliable credit for small farmers and enhanced public investment in infrastructure and irrigation;
- Increase substantially the level of ODA to agricultural sector in developing countries.