FORUM: United Nations Commission on Science and Technology for Development

QUESTION OF: Measures to Combat Food Insecurity Using Technology in Developing Nations

MAIN SUBMITTED BY: The Russian Federation

CO SUBMITTED BY: Afghanistan, Austria, Canada, China, Denmark, Dominican Republic, France, Norway, Spain, Saudi Arabia

THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT,

*Keeping in mind* that more than 820 million people could not maintain good health due to the limited access of food,

*Recognizing* that physical factors such as climate change and disasters today are present as the main causes of hunger, contributing to the affordability and nutritional values of food,

*Recalling* that United Nations has stated hunger as one of its 17 sustainable development goals and Millennium Development goals, aiming to achieve “Zero Hunger” by 2030

*Understanding* food insecurities are present ubiquitously among countries, despite the country’s development level,

*Further recalling* the first food summit held in Rome, Italy, 1974, summit has gathered representatives from various countries for the first time in discussing resolutions targeting food insecurities,

*Aware* of the rate of hunger caused heath concerns increases each year by 10 million people, according to the following trend, predicted more than 7% of the world’s population will be food insecure, where opposing United Nations’ Sustainable Development goal of Zero Hunger,

*Further recognizing* every 1°C increase in mean temperature will result in 10% drop of crops yield,

*Emphasizing* the potential issues caused by climate changes in related to impact on the food system, agricultural production and crop stability,

*Recalling* 17.4 million U.S households were in severe food insecure in 2014,

1. Urges all the developing nations to adapt developed agricultural technologies which reaps benefits and can be seen in ways including, but not limited to:
	1. Increasing the usage of agricultural drones, which prevents the situation from getting by:
		1. Helping farmers to optimize the use of inputs,
		2. Saving time crop scouting,
		3. Improving variable-rate prescriptions in real time,
	2. Developing filtering technologies in such ways to:
		1. Improve farmland conditions to produce more and better crops,
		2. Reduce environmental pollution that affects food producing and processing,
		3. Offer clean, drinkable water source,
	3. Collecting observational data related to weather, preventing temperature to increase, and to maintain the rates of evaporation and transpiration by method such as:
		1. Doppler radar,
		2. Global Positioning System (GPS),
		3. Aerial images;
2. Urges all nations to investigate in various plantation improvements, for sufficient and adequate amount of yield in ways such as but not limited to:
	1. Detect suitable areas for crops to grow using technology such as Azure Farmbeats preventing insufficient and slow production of crops,
	2. Crops with climate resistant characteristic, in such that would not be affected by climate effects such as but not limited to:
		1. Drought,
		2. Deluge,
		3. Extreme temperatures,
	3. Foreign specialists could potentially assist countries’ in optimizing best planting methods for greater production overall in areas for improvement such as but not limited to:
		1. Suitable amount of water needed to water over a period,
		2. Suitable amount and type of fertilizer to be added;
3. Requests all nations involved in the Organization for Economic Cooperation and Development (OECD) to cooperate with the UN Framework Convention on Climate Change (UNFCCC) to produce viable solutions or technologies to alleviate the issues of climate change such as but not limited to:
	1. Climate repair, which is mutating the ionosphere shooting high frequency waves to manipulate global climate,
	2. Carbon capture to isolate CO2 from the atmosphere by collecting, compressing, and transporting carbon dioxide from sources such as power plants generated at high concentrations injecting it into bedrock layers underground the ocean,
	3. Reduce wasted energy by working with International Renewable Energy Agency (IRENA) through developing renewable energies such as:
		1. Solar energy,
		2. Hydro energy,
		3. Geothermal energy,
		4. Tidal energy;
4. Recommends all member states and the National Aeronautics and Space Administration (NASA) to cooperate and to build developing countries understand how to use satellite data to monitor crop conditions for better agricultural productivity through means such as but not limited to:
	1. Holding two months of online workshop on the application of a crop monitoring system using satellite data which will include:
		1. Learning the theory, methodology and application of the satellite monitoring,
		2. Stressing the seriousness of crop insecurity,
	2. Introducing Crop Watch Innovative Cooperation Program (Crop Watch-ICP) to facilitate and stimulate agricultural monitoring of 14 developing countries which will:
		1. Enhance the capacity of the countries to independently carry out agricultural monitoring,
		2. Fill the food-related information gaps to promote the achievement of national food security;
5. Requests all nations to expand the usage of GM (Genetically Modified) crops which increases the amount of food that can be provided to developing nations and benefits them through its high proteins, safety, and long quality guarantee period in ways including but not limited to:
	1. Tolerating farmers to use herbicides or pesticides by:
		1. Controlling weeds without damaging the crops,
		2. Eradicating every insect pest that harm the crops,
	2. Allowing easier transportation of food to remote regions by improving the qualities of food,
	3. Producing higher yields and having strong viability that allows them to survive through extreme environment and weather conditions;

1. Establishes the Developing Countries of Sea Technological Development Fund (DCSTD), for the purposes of funding sea investigational technologies in effort for less economically developed countries (LEDC), with contributors to the fund including most economically developed countries (MEDC), health insurance commission (HIC) and relevant non-governmental organizations (NGO), in technology development with such functionality such as but not limited to:
	1. Detecting trends and existence in sea organisms and most favorable location of capturing sea organisms to increase the amount of catch by such technologies cooperating with Oceanographic Technology and Interdisciplinary Coordination (OTIC) but not limited to:
		1. Sonar technology which uses acoustical waves to sense the location of objects in the ocean,
		2. Wearable diving technology,
		3. Remote diving technology,
		4. Monitoring sensor,
	2. Baiting technologies which could attract various sea organisms in such ways but not limited to:
		1. Visual stimulation,
		2. Olfactory stimulation,
		3. Taste stimulation;

1. Highly suggests developing countries to approach in decreasing amount of pollution produced by industries where damages the environment, causing the insecurity of foods, using purification and filtration technologies in such ways but not limited to:
	1. Filtrating air pollution directly produced and emitted by factories reducing the number of harmful chemicals such as but not limited to:
		1. Carbon dioxide,
		2. Carbon monoxide,
		3. Nitrogen,
		4. Sulfur,
	2. Neutralizing harmful components being emitted by industrial production in binding chemicals to achieve similar effect where it would result in minimal hazard,
	3. Purifying water supply contaminated by industrial pollution, for use of plantation and human consumption.