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## CONCEPT NOTE

for International Conference

“Cooperation on Food Security in the context of Climate Change”

### BACKGROUND

One of the important elements to ensure global stability and security is the consolidation of the international community efforts in enhancing food security, including uninterrupted operation of the world agricultural production, and sustainability of food delivery transport chains.

According to the United Nations, the number of undernourished people in the world continued to rise in 2021, when between 702 and 828 million people faced hunger<sup>1</sup>.

Climate change is of particular concern. Among the most pressing challenges is that of the desertification trends, which threatens the food security of a number of countries, entails increased migration flows and humanitarian crises.

Besides, climate change also increases the cost of resources in food production, primarily of water and energy. In this context, the problem of food and nutrition security should be considered within the food - water- energy nexus.

It is important to highlight that food and climate impacts go both ways. Climate change creates significant risks to the food system, with rising temperatures and changing weather patterns threatening enormous damage to crops, supply chains and livelihoods in the decades ahead<sup>2</sup>. At the same time, the IPCC estimates that the food system is responsible for 21%–37% of heat-trapping gases emitted by human activities globally from the food-related forestry and land use change to the food loss, waste and disposal.

Climate system, food system and socio-economic system are closely interlinked. For the Central Asia countries, the link with ecosystems is critical, especially with issues related to land and water, including glaciers. These systems

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<sup>1</sup> [FAO \(2021\). The State of Food Security and Nutrition in the World 2021](#)

<sup>2</sup> [COLUMBIA – SIPA, Center on Global Energy Policy \(2021\). FOOD AND CLIMATE CHANGE INFOGUIDE](#)

operate at multiple scales, both global and regional. Food security is an outcome of the food system leading to human well-being, which is also indirectly linked with climate and ecosystems through the socio-economic system. Adaptation measures can help to reduce negative impacts of climate change on the food system and ecosystems. Mitigation measures can reduce GHG emissions coming from the food system and ecosystems. Given the current food system, the FAO estimates that there is a need to produce about 50% more food by 2050 in order to feed the increasing world population. With significant part of total greenhouse gas emissions attributable to the food system, slow implementation of mitigation measures could engender significant increases in GHG emissions and other environmental impacts, including loss of biodiversity.

In accordance with IMF developed scenario-based approach to assess the possible impact of climate change on the economic activity, the scenarios reflect the rigor of collective policy responses to contain carbon emissions globally<sup>3</sup>. In a high-emissions scenario, which reflects business-as-usual with no mitigatory action, cumulative output losses in the region could reach 7 percentage points by the midst of the century. The sensitivity of output to climate shocks varies by the income level - with Caucasus and Central Asia low-income countries being the most susceptible. Hence, sustaining the status quo could substantially beset countries' income convergence and equality aspirations. It is therefore critical for the region to prioritize mitigation and adaptation policies to alleviate vulnerabilities with respect to changing climatic patterns.

In 2021, the UN Food Systems Summit (UNFSS) was held with the aim of setting the stage for global food systems transformation to achieve the Sustainable Development Goals by 2030. Prior to the Summit, multi-stakeholders' dialogues were initiated to encourage Member States to develop National Pathways towards a more sustainable food systems. The dialogues had the aim of enable participants to work together on exploring different lines of enquiry such as: 1. purpose of current food systems and how they function; 2. expectations of food systems in the coming years; 3. changes that must be made; 4. ways on how stakeholders could work together and build strong partnerships<sup>4</sup>.

The UNFSS has been widely considered a means to gain insights on holistic and integrated food systems transformation. The conference can support Central Asia countries and beyond to continue discussing their experience on the UNFSS follow up and development/implementation of national pathways.

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<sup>3</sup> [IMF Staff Climate Notes](#)

<sup>4</sup> [Food Systems Summit Secretariat, 4SD \(2020\). Handbook for Member States Dialogues](#)

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## THE INTERNATIONAL CONFERENCE

The issue of food and nutrition security is a multidimensional one and requires close international cooperation. *Firstly*, the resolution of the problem depends not only on the development of food and agriculture sectors, but on other factors as well, climate change being among the most important ones. *Secondly*, food security is an inseparable part of the system of overall indivisible security, stability and development.

Ensuring food and nutrition security *in a changing climate* requires completion of a large number of objectives set out in Sustainable Development Goals. The efforts of each country matter, so do the joint efforts of countries, international and regional organizations, as well as involvement of companies, non-governmental organizations, and research institutions in a broad dialogue. A multilateral exchange of information, views, knowledge and technologies is needed.

The Conference will offer an opportunity for establishing such an exchange at the regional level and provide a platform for developing common views on a wide range of issues affecting food security due to climate change. Based on available international experiences, the participants will also discuss real solutions to address regional and global food challenges.

The participants will discuss the issues of food security in the context of climate change, in particular adaptation and mitigation. The informed exchange supported with reliable assessments of the climate change impacts on socio-economic development and ecosystems in the region is vital for improving national regulatory environments and strengthening regional cooperation. Learning about, and applying best international practices, as well as using current experiences in adaptation and mitigation technology transfer are of high importance in this regard. The Regional Center for Climate Technology for Central Asia could become one of the instruments to implement this task.

Another issue to discuss can be the achievement of the SDG Target 2.A,

namely increasing investment in rural infrastructure with a focus on food security and climate change. Moreover, during the conference, countries will be given the opportunities to discuss about the current food systems and their functions with the aim of sharing – for the countries that already did it – or developing – for the ones which did not – their National Sustainable Food Systems Pathways. The dialogue would help the participants to agree on expectations and talk about the ones that were not fulfilled in the past years, since the UNFSS, as well as identify the challenges in the coming years.

### **OBJECTIVE OF THE CONFERENCE**

*Provide a better understanding of the global/regional food systems challenges and the links with climate change and establish a platform of exchange for discussing, sharing and implementing solutions.*

### **GOALS**

1. Give an opportunity for establishing a multilateral exchange of information, views, knowledge and technologies at the regional level;
2. Provide a platform for developing common views on a wide range of issues affecting food security due to climate change;
3. Discuss real solutions to address regional and global food and climate change challenges;
4. Discuss the issues of food security in the context of climate change, in particular adapting agriculture to global climate change;
5. Become more familiar with the challenges in the region, as well as consider possibilities to increase financing for targeted projects and programs in the area of food security and climate change;
6. Help countries of the region to develop/implement their Sustainable Food Systems Pathways, sharing their experiences and supporting each other's preparations for the UNFSS 2023 Stocktaking Moment.