Problem smallholder
The technopark
The role of agriculture in the national economy

In the implementation of this program especially valuable was the experience of governments, employers and workers of developing countries in the development and implementation of policy measures in the field of decent work in areas such as employment, social protection, fundamental rights in the labour sphere, including freedom from child and forced labour, freedom from discrimination and freedom of Association, social dialogue. This experience formed the basis of initiatives on capacity building, exchange of knowledge and best practices, providing training and transfer of knowledge and regulatory approaches. Cooperation South-South has become an ideal mechanism for implementing such initiatives.

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Reasons for food insecurity

- High food price: 5%
- Less domestic production: 10%
- Commercial farming: 5%
- Poverty: 10%
- Less money: 10%
- Less poultry and livestock: 5%
- Less government intervention: 5%
- Salinity: 10%
- Cyclone: 25%
- Flood: 15%
CLIMATE CHANGE

Regional weather changes
- Heatwaves
- Extreme weather
- Temperature
- Precipitation

Microbial contamination pathways
- Transmission dynamics

Agro-ecosystems, hydrology

Socioeconomics, demographics

Modulating influences

Health effects
- Temperature-related illness and death
- Extreme weather-related health effects
- Air pollution-related health effects
- Water and food-borne diseases
- Vector-borne and rodent-borne diseases
- Effects of food and water shortages
- Mental, nutritional, infectious and other health effects

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Global impact on potential agricultural products.

The problems associated with food availability and agricultural production in conditions of climate change.

In general, the yields will increase in colder areas, where currently the low temperature inhibits the growth of plants. On the other hand, the thermal influence on crops and water will decrease yields in warmer areas. Globally, food production may increase, but it is expected an overall negative effect, if the night temperature will rise, and the average temperature will rise by more than a few degrees Celsius. In addition to the potential negative impact on global agricultural products, there is a problem with population growth in most developing countries.
To assess food security in light of climate change for smaller countries and different populations within one country, it is important to have fine-scale climate information and the need for it now than ever. Any planning for adaptation to climate change requires climate information to finer spatial scale that is introduced into the model to assess the impacts. Reliable historical climatic data required for model calibration, influence, along with future prospective evaluations of climate for calculation of crop yields in the future.
Climate change has different effects on smallholders. However, due to improved climate prediction and the effective use of climate information to ensure food security at all levels – from individual farmers to governments. Agriculture has great potential for reducing greenhouse gas emissions, this creates favourable conditions for adaptation and development of rural areas. However, while the agricultural sector has not received adequate recognition as a major participant in the negotiations on climate change. I propose the following principles to overcome this crisis:

1. increasing public and private investment and international cooperation to improve food security in the face of the threats posed to climate change, particularly for adaptation to the adverse effects of climate change, sustainable use of natural resources, rational water use and preservation of soil fertility;
2. development of comprehensive measures of land use, taking into account the need to strengthen food security and adaptation to climate change, contributing, as appropriate, to mitigate the effects of climate change through the application of the Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security, in accordance with defined country priorities

3. providing data received in the process in coordination with countries in multilateral evaluations and studies for use in strategies for agricultural development, aimed at mitigating the negative effects of climate change, taking into account differences between agricultural systems, agricultural practices, and regional, national and local conditions;
4. to facilitate the holding of multilateral forums at the local, national and regional level to enhance involvement of local communities and the most vulnerable groups and the private sector in the decision-making process;

5. facilitate the exchange of information between research programs in the field of food security and climate change

The international community needs to deal with the problem of climate change today, creating the conditions to ensure that agriculture, forestry and fisheries it was possible to introduce a climate-production methods. This will depend on the ability of humanity to successfully eradicate hunger and poverty by 2030 and to provide food for all the inhabitants of the planet. The inertial scenario is not suitable. Agriculture has always been an area of interaction between nature and man. And today it is the key to solving the two greatest problems facing mankind: to eradicate poverty and maintain a stable climate corridor, which can flourish civilization.
Thank you for your attention