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SEMINAR ON BUILDING SMALL HOLDERS' RESILIENCE UNDER CLIMATE CHANGE ALONG VALUE CHAIN MANAGEMENT



### World Food Programme in the Kyrgyz Republic

## "CHALLENGES AND NEEDS FOR SMALLHOLDERS ALONG CLIMATE CHANGE ADAPTATION/ POTENTIAL FOR SOUTH-SOUTH COOPERATION"

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## Structure of the presentation



#### • Country context (Kyrgyz Republic)

- Key vulnerabilities facing smallholders in context of climate change
- Agricultural methods to address food security

#### **o** Challenges and opportunities

- Main challenges and opportunities for strengthening smallholders' resilience along the value chain
- Specific challenges and opportunities for cooperation with WFP in building smallholders' resilience

#### South-South cooperation needs

 Specific needs in Kyrgyz Republic that South-South cooperation should address to help build smallholder's resilience and support the value chain

## **Country content**





#### **GENERAL INFORMATION**

- $\circ~$  Territory: 199,000 sq. km
  - Mountain areas 95 percent
  - Pastures: 86 percent from all agricultural lands
- $\circ~$  Land for crop production are only 7 percent
- Population: 6,000,000 (of which 67 percent rural citizens)
- $\circ~$  Size of a rable land per farmers - 0.5 to 3 hectares
- Number of smallholders 400,000

#### POVERTY

National poverty level – 25.4 percent
The extreme poverty rate – 0.8 percent
Rural poverty – more 70 percent
Overall, around one third of population moves in and out of poverty during exposure economic shocks

#### FOOD SECURITY AND NUTRITION

- Spend income on food 74 percent
- $\circ~$  Energy deficiency, is 6% of the population
- Prevalence of chronic malnutrition, or stunting, was estimated at 13% among children under five years old
- 43% of children and 35% of women in reproductive age were diagnosed with anemia while pregnant
- $\circ~$  33 percent of children are Vitamin A deficient

## Key vulnerabilities facing smallholders in context of climate change



Climate change is a serious danger for rural communities in all mountainous regions of the Kyrgyz Republic. It covers such areas as food security, access to resources and market, rural infrastructure, clean drinking water, as well as the threat of natural disasters

#### CHANGES:

- Temperature increase
- Further periods of drought
- Decrease in precipitation during growth period
- Increase in frequency and scale of natural disasters and manmade disasters (avalanches, landslides, floods and mudflows, fire and car accidents)

#### **PROBLEMS**:

- Increase of soil degradation degree
- Limited access of irrigation water/ decrease of water volumes
- Decline and loss of harvest
- Stress of animals and decrease in productivity
- Outbreaks of diseases and pests
- Damage to private and public property and infrastructure
- Loss of lives and livestock
- Destruction of natural resources (soil, water, forests)
- Loss of livelihoods and production
- Threat of food insecurity and undernutrition
- Prolonged recovery from disasters
- Income decline
- Food security threat

## Agricultural methods to address food security

- Development of sectoral plans for adaptation (Ministry of Agricultural)
- Regional support through the regional specialists and representatives of relevant departments
- Agrarian education and science (Agrarian University, Vocational lyceums, colleges, Research institutes)
- Support to farmers from international agencies
- Change in farming practices terracing, resilient seeds, innovation technologies etc.

#### Support and development system for farmers and agricultural production in Kyrgyz Republic





CASE STUDY: Skills, knowledge and practice (SKaP) - teaching, transferring knowledge and coaching to ensure effective and efficient small holder practices



Ministry of agriculture Ministry of education Ministry of labour and social development

Kyrgyz National Agrarian University/ Agency of primary vocation education







## **Country wide Challenges**

- Degradation of resources (soils, pastures, forests)
- Climate change risks and limited adaptation/natural disasters
- Outdated practices and technologies in agriculture/low level of awareness of innovation
- Poorly developed or non-functional infrastructure (irrigation, drainage, pasture roads, etc.)
- Lack of regional planning for crop production
- Seasonal price changes
- Global and regional political uncertainty







## **Specific Challenges**

## WFP wfp.org

#### Individual level:

- Fragmentation of small holders and as a result small volume of production and low quality production, including varying types, that do not make them attractive to processors and exporters
- Lack of trust and unstable relations between producers and potential buyers/processors
- Small production volumes of individual local producers
- Poor/expensive access to quality inputs
- Poor storage conditions at a household level, or limited community or commercial storages / safety centers
- Limited access to processing facilities/absence of specialists working with equipment for processing and packaging
- Outdated or non-existence of agricultural machinery/high payment for rent
- Lack of processing facilities
- Limited access to modern technologies and skills, no extension/coaching
- Lack of insurance schemes in agricultural, including for climate/disaster risks
- Limited collective organization, such as cooperatives and cooperation between farmers, which leads to spontaneous
  production and different kind of crops
- Lack of food safety and quality control: absence of laboratories and specialists for these laboratories
- Weak marketing/lack of market search skills, and focus on small internal market





More than 1000 activities in 142 sub-districts and more 100,000 beneficiaries. Using food and cash mechanisms with a focus on the most poor and vulnerable.

#### In partnership with the Kyrgyz government local authorities, and activities co-financed:

- 1. WFP supports the creation or rehabilitation of key rural infrastructure and community prioritized assets including irrigation networks, bridges and internal roads
- 2. WFP provides support and advice to develop strategies aimed at building resilience of the most vulnerable populations to natural shocks and climate change.
- 3. WFP supports the implementation of structural disaster mitigation measures and development of mitigation infrastructure at community level to boost coping capacities of the rural population.

# Specific needs in Kyrgyz Republic that South-South cooperation should address to help build smallholder's resilience



- Training modules on climate change practices to improve resilience among communities, reducing decline and loss and waste of harvests, handling stress of animals and decrease in productivity and how to prevent outbreaks of diseases and pests.
- Training modules on adequate and modern agronomic practices to improve harvesting, handling, transportation and storage of fruits and vegetables in order to reduce post-harvest losses and waste; promoting consumption of fruits and vegetables in fresh and processed form.
- Measures to ensure the local manufacturing of food storage containers/packaging, using locally available materials.
- Measures to improve commercialisation of local produce by target communities.
- Awareness raising among local communities on climate change adaptation practices, post-harvest loss and waste reduction priorities and commercialisation opportunities through training, workshops and mini pilots.
- Identifying and linking manufacturers and producers of storage containers and packaging from locally available materials to smallholder farmers.
- Possible setting up of demonstration sites to raise awareness on improved practices.



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