

**Systemic and holistic approaches to implementation of climate action
on agriculture, food systems and food security, understanding,
cooperation and integration into plans**

Experiences from LDCs

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Context



Agriculture is critically important for food security, resilience and economic growth in LDCs.

The sector:

- ❖ Provides jobs opportunities and livelihoods to a large majority of the population;
- ❖ Contributes 30 - 60% of GDPs;
- ❖ Employs 40 - 90% of the labour force;
- ❖ Provides 25 - 95% of foreign exchange and;
- ❖ Supplies most of the basic food and income to more than half of the population

Context



Agriculture in LDCs is dominated by smallholder farming systems :

- ❖ With low adaptive capacity;
- ❖ Heavily relies on rainfall;
- ❖ Small-size farms with low external input use due to limited financial capacity;
- ❖ underdeveloped infrastructure, markets and input supply systems.

Climate change exacerbates challenge of food production in the LDCs. Without appropriate action and support, it is likely to increase dependence of these countries on food imports.

LDCs views in the workshop

In light of foregoing stated importance of agriculture for achieving sustainable food and nutrition security; and the acute vulnerability of the sector to climate change, LDCs welcome and commit to engage on this first in-session workshop, as follows

“ Systemic and Holistic Approaches to Climate Action on Agriculture, Food Systems, and Food Security understanding cooperation and integration into plans”, emphasizing the importance of cooperation and integration in planning”

Understanding systemic and holistic approaches in the context of Climate Action, Food Systems, and Food Security



Systemic and holistic approaches (SHA) provide opportunities for inclusive and climate resilient agricultural systems and policies that are productively and economically efficient, while minimizing negative environmental impacts.

SHA are context specific, country driven and do not preclude any approach: apply to all relevant and sustainable food production systems and actions, such as, but not limited to/as appropriate:

- ❖ Integrated land, crop, soil, animal, water and ecosystem management systems;
- ❖ Promoting value chain approaches that are gender responsive;
- ❖ Science-based, innovation development, local knowledge and technologies;
- ❖ NBS, SLM, CSA, Agroecology, integrated water management, etc.

Experiences with systemic and holistic approaches to implement climate action on agriculture, food systems and food security in LDCs.



Case 1: Pastoral units - Integrated Grassland Management Systems in Senegal;

Pastoral units are small-scale integrated livestock systems where communities implement self-determined sustainable soil, water and forest management leading:

- ❖ Reduced deforestation and overgrazing in extensive livestock systems;
- ❖ Improved water access and fodder availability in pastoralism systems;
- ❖ Reduced conflicts related to water and forage use;
- ❖ Best control and efficiency of transhumance;
- ❖ Improved animal health and productivity;
- ❖ More access of pastoralists to services (health; education)



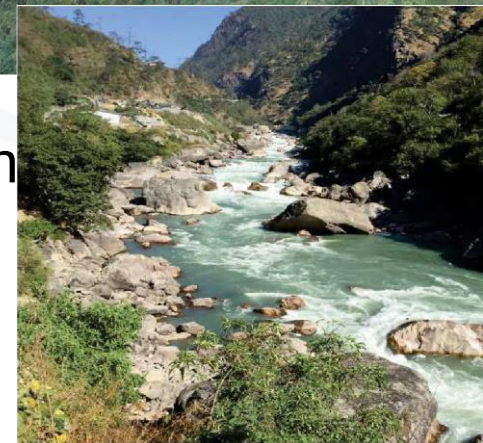
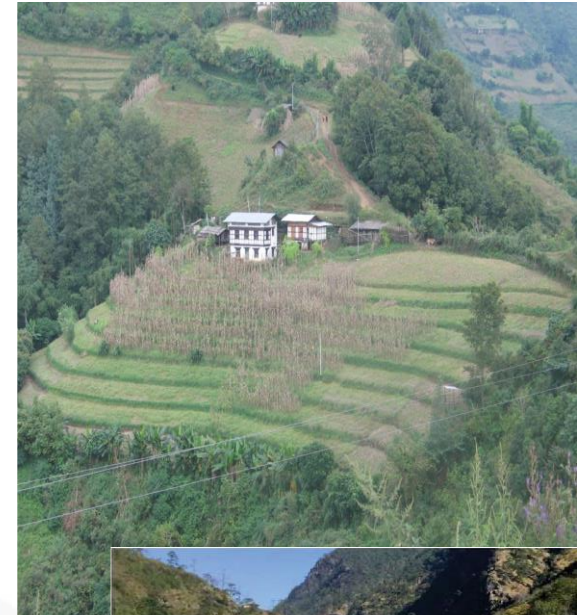
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Case 2 : Sustainable Land and Integrated Watershed Management in Bhutan ;

About 7 746 acres brought under Sustainable Land Management (SLM)

- ❖ **Stone bunding, grass hedgerows and brush layering;**
 - Reduced soil erosion and nutrient loss;
 - Increased rangeland and fodder plantation for livestock;
 - Enhanced agro-biodiversity : pollinators, beneficial insects
- ❖ **Improved agricultural practices and carbon sequestration**
 - Increased nutrient and water efficiency in rice production;
 - Increased biomass through association: perennial and fodder plantation
 - Agroforestry: promoting under cropping with legumes and vegetables;
- ❖ **Water harvesting ponds and high efficiency micro-irrigation systems.**



Experiences with systemic and holistic approaches to implement climate action on agriculture, food systems and food security in LDCs

Case 3: Agroecology as a holistic framework *in Uganda*

- Promotes agroecology as a science, a practice, and a social movement rooted in ecological principles such as diversity, synergy, recycling, and resilience;
- Agroecology offers a holistic response to multiple contemporary climate induced challenges through addressing soil health, biodiversity loss, water management, community empowerment, gender equality, and climate resilience
- Uganda are in advanced stages of developing national Agroecology strategies; these efforts promote the institutionalization of agroecology in national agricultural and climate policies.
- Agroecology empowers local communities by integrating indigenous and scientific knowledge. Community led activities of resilience building which involves usage of indigenous and scientific knowledge systems.
- In Uganda, female-led agroecology groups gained improved land access and decision-making power

How can systemic and holistic approaches to implementation of climate action on agriculture, food systems and food security contribute to achieving the objectives of the joint work?



- . Building synergies and coherence between sectors (Agri, water, soil, energy, ecosystems...)
- . Improve cross-sectoral coordination of climate action and support;
- . Address knowledge and technology gaps and implementation issues both through cooperation, information sharing and capacity building;
- . Promote climate action that addresses sustainably food and nutrition security;
- . Enhance national capacity to address food security and climate resilience;
- . Enhance international cooperation and financial investment.
- . Providing space and platforms for supporting capacity building for small holder food producers, farmers, and local communities involved in food production and distribution.
- . Promote peer learning and technical exchanges across communities, countries and regions

Recommendations

- Strengthening Coordination mechanism (Parties, CBs, FM & organization)- Should focus on elements in decision 3/CP.27, para 14
- Strengthening cooperation and policies implementation – This should include promoting inclusive governance linking communities, policymakers, and researchers
- Dedicated fund for implementation of outcomes of discussions and initiatives by COP Presidencies.
- Investment donor conference to mobilize resources to support the developing countries to implement outcomes

THANK YOU