

Identification and Demonstration of Technologies in Water & Agriculture

National Inventory of Adaptation Technologies for Gender and Social Equity

One of the key objectives of the SAKTEE project is to identify, evaluate and demonstrate innovative climate change adaptation knowledge and technologies (CCAT) in water and agricultural sectors for multi-level institutional adoption as well as to empower women and poverty-stricken disadvantaged groups in the project districts. The project engaged with identifying and demonstrating CCAT and best practices that are proven and have the potential for benefiting vulnerable women and disadvantaged groups in the project areas.

Literature review and expert consultations were conducted to prepare an inventory on CCAT. The consultations with sectoral experts and relevant government officials and engagement of stakeholders at regional and local levels also provided information on appropriate technologies. A technology inventory report was prepared based on relevant published and unpublished reports, documents, and scientific papers as well as consultations with sectoral experts.

Key objectives of preparing a national inventory on adaptation technologies:

- Learn about the current adaptation technologies in agriculture and water sectors in project locations;
- Identify CCAT and confer how these technologies can benefit vulnerable women, poor and disadvantaged people at the local level; and
- Knowing about the challenges and potential opportunities on using innovative adaptation technologies for women and disadvantaged sub-populations.

Methods:

To understand the technology needs and identify the gaps, in adaptation technologies for the water and agriculture sectors, the research team applied the following techniques and steps:

- a) Secondary data collection from website, relevant reports & journals, and analysis to develop an inventory of technologies in selected two districts;
- b) Consultations with climate change experts, agricultural scientists, researchers and development professionals;
- c) Organized consultations via workshops at the district level and Upazila levels; and conducted Key Informant Interviews (KII) with the Sub Assistant Agriculture Officer (SAAO) and NGO representatives.

Outcome:

The Inventory Report reveals that the current technology matrix differs across the regions, sectors and communities. The successful application of the CCAT largely depends on social conditions (level of poverty, awareness, skill & capacity of using the required technologies and motivation of the poor and women), availability and affordability of the poor and women. The support of the government, NGOs, private sector & market systems, and the actors for use of appropriate technologies in agriculture, water, sanitation, health and livelihoods are critical for transformative changes. It is emphasized that the CCAT must reduce climate risk, build resilience in the social, human systems and ecosystems as well as lessen the burden of the poor women in the long run and thus contribute to gender equality.

The key challenges of pro-poor and gender-responsive technology generation, dissemination, and transfer are:

- Identification and development of climate resilient and women friendly technologies;
- Innovation by blending local knowledge and IK with external technological knowledge;
- Capacity building and enabling environment; and Collaboration, engagement of actors, and supports to the vulnerable communities.

Further, a combination of hardware, software, and org-ware is needed for the development and successful application of new and effective adaptation technologies. The stand-alone technology such as an infrastructure or equipment is not sufficient for effective adaptation. The key focuses and challenges of the long term and gender responsive adaptation technology development & transfer are:

- j Identification and development of climate resilient technologies
- j Innovation by blending of local knowledge and IK with external technical knowledge
- j Providing appropriate information about CCAT, EWS and services to women & poor
- j Capacity building of the poor, women, and enabling environment; and
- j Collaboration & engagement of actors for greater supports to the poor women & most vulnerable communities.