

## **Concept Note**

In pursuit of addressing the complex challenges that the Global South faces in agriculture, the Development and Knowledge Sharing Initiative (DAKSHIN) is dedicated to promoting sustainable and resilient farming practices. Building on the success of its inaugural workshop on January 17, 2024, and a subsequent workshop on August 30, 2024, focusing on digital technologies in agriculture, this is the third workshop on agriculture organized by DAKSHIN. This event aims to foster cooperation and facilitate knowledge exchange among Global South countries to promote sustainable and equitable agricultural systems.

The Global South faces significant challenges in agricultural productivity, exacerbated by disruptions in global supply chains, escalating debt burdens, and food security crises intensified by the COVID-19 pandemic and geopolitical uncertainties. Agriculture in the tropics and sub-tropics in the countries of Global South struggles with poor natural resource management (NRM) practices, abiotic stress and the harsh realities of climate change, which threaten both productivity and ecosystem health. In response, sustainable agriculture offers long-term solutions by prioritizing the protection of natural resources, improving soil fertility, and promoting biodiversity. Agro-ecological approaches, which fuse ecological principles with traditional knowledge and modern agricultural practices, are particularly well-suited to the Global South. These approaches not only adapt to the Global South's unique environmental conditions but also enhance resilience to climate change and abiotic stress, supporting smallholder farmers by providing affordable, context-specific solutions. The workshop will emphasize agro-ecological principles, natural resource management, and holistic strategies that ensure agricultural sustainability. These approaches involve integrating biodiversity and ecological processes to maintain soil fertility, efficiently manage water and natural resources, implement precise agronomic practices, reduce greenhouse gas

emissions, and enhance both the quality and quantity of yields. Participants will explore ecosystem-based solutions that highlight the value of traditional knowledge and community engagement, while integrating modern agronomic and technological practices to build resilient, self-sustaining farming systems. Insights gathered from extensive discussions with think tanks across the Global South reveal a shared commitment to sustainable and agro-ecological methods, which balance productivity with ecosystem preservation and climate resilience. Several organizations have expressed a strong interest in collaborating on these sustainable practices simultaneously leveraging technological solutions to more integrated and adaptive strategies. The workshop will delve into the intricacies of sustainable agro-ecological models, focusing on their capacity to sustain agriculture in diverse environmental and socio-economic contexts. Themes will include ecosystem-based approaches, the role of traditional knowledge, integration of agronomic and technological practices and strategies for enhancing soil health&biodiversity. The discussions will aim to engage stakeholders, think tanks, and agencies to co-create a comprehensive strategy that advances agroecological transitions across the Global South.

## **Objectives of the Workshop:**

- Showcase innovative sustainable farming practices and best practices.
- Facilitate knowledge exchange and collaboration on agro-ecological approaches.
- Identify actionable policy recommendations for fostering just agricultural transitions.
- Promote natural resource conservation and ecosystem-based farming.
- Foster partnerships to implement climate-resilient and abiotic stress adaptive agricultural practices.
- Enhance environmental and social resilience through agro-ecological approaches.

## **Key Questions to Explore:**

- How can traditional ecological knowledge be integrated into modern agricultural practices to address abiotic stress and enhance resilience?
- What strategies can enhance soil fertility, water management, and biodiversity while increasing productivity?
- How do agro-ecological transitions address the needs of smallholder farmers in diverse agroclimatic zones?
- What policy frameworks are essential for supporting sustainable agricultural practices, agroecological and just transitions in the agricultural sector?
- How can international cooperation and knowledge-sharing drive the adoption of sustainable farming systems in the Global South?