

IMPACT PATHWAY FOR SOUTH ASIA

South Asia Regional Vision (impact)

Large-scale investments in science-informed climate smart agriculture practices, institutions and policies in the region, leading to long-term food security and poverty alleviation.

Outcome 1

- **Governments, industry and farmer organizations increase their investments in improved CSA practices and technologies.**

Indicators:

- a. Evidence from climate smart villages(CSV) and other sites is available and in use (technologies and impacts)
- b. Boundary partners are investing in more CSVs
- c. Boundary partners are investing in national scale climate smart agriculture (CSA)

Boundary Partners: governments, industry, farmer organizations

Partners: CCAFS country NARS, farmer organizations, specific NGOs, Local Governments at CCAFS sites, industry partner, Future earth partners, CGIAR

Barriers: Limited understanding of trade-offs and synergies among various interventions at local scale. Limited coordination among various actors including researchers, farmers and local government; limited awareness with farmers about the opportunities. Limited risk analysis.

Major Milestone: Adaptation domains of CSA practices and technologies

Activities:

- Assess, through participatory approaches, risk management interventions in an integrated manner (climate smart villages) including community management of natural resources, crops, livestock, fish and agroforestry.
- Develop tools and case studies for defining the adaptation domains of various technological interventions for climate risk management
- Develop innovative models/guidelines for scaling up and out climate smart villages/other practices for enhanced resilience at national/sub-national/local level. Pilots that could be scaled up and out need to reach a large number of farmers
- Develop improved/innovative practices/policies/incentives for increasing resilience and adaptive capacity at local and landscape scale.

Outcome 2:

- **Boundary partners are developing better business models for public – private partnerships for climate informed agriculture risk management at different scales.**

Indicators:

- a. ICT-based climate services meeting the needs of stakeholders for risk management.
- b. Insurance products and processes developed with minimal basis risk.

Boundary partners: Insurance industry, ICT industry, banks, governments

Partners: CCAFS country NARS, ICT industry partner, insurance industry partner, finance organization partner, Local and State Governments at CCAFS sites, Future earth partners, CGIAR, Farmer organizations, meteorological services in CCAFS countries

Barriers: Weather forecasts not so reliable and not available at the desired scale (local). ICT tools and content need evolution to reach last mile (farmer) and be demand driven; Large basis risk in insurance products (climate losses not fully covered); limited density of weather stations; large transaction costs for industry; insurance not viable without government subsidy; Delayed payments and resolution of disputes around losses and damages.

Major Milestone: Improved timely availability of short term and seasonal weather forecasts that meets the information needs of end users. More climate informed policy recommendations for risk management.

Activities:

- Improve short-term and seasonal weather forecasts
- Develop ICT based schemes and pilots for communicating climate information and value-added agro-advisories to large numbers of farmers, especially women farmers, and other stakeholders.
- Improve or develop new insurance products for managing climatic risks. Community/private sector based partnership models for their dissemination and implementation
- Develop strategies for management of food systems in relation to climatic variability

Outcome 3

- **Governments and global organizations make rational decisions about mitigation based on local, regional and global evidence about mitigation potential in agriculture.**

Indicators:

- a. Number of studies dealing with mitigation and agriculture in SA cited by government documents.
- b. Scientific and region specific database on emissions from different components of food systems
- c. Reduction in emission intensity of food systems at different scales

Boundary partners: UNFCCC, IPCC, governments

Partners: CCAF country NARS, industry partners, Future earth partners, CGIAR

Barriers: Mitigation in agriculture is a low priority in SA vis-à-vis other sectors such as energy use; tools and evidences to support development of mitigation policies in agriculture sector; limited understanding of mitigation issues in agriculture among stakeholders

Major Milestone: Tradeoffs and synergies between adaptation and mitigation and food security quantified at different scales.

Activities:

- a. Assess interventions for the sustainable intensification of rice and livestock for their biophysical and economic mitigation potentials
 - Assess trade-offs and synergies of different mitigation options and their impact on food, income and the environment in sustainable intensification from farm to national level
 - Assess biophysical and economic mitigation potential of food systems and challenges and opportunities for their implementation at large scale in order to contribute to low carbon development

Outcome 4

- **National and sub-national governments develop CSA policies and programs and strengthen related institutions based on evidence from case studies, data, tools, and models.**

Indicators:

- a. Number of evidence informed policies and institutions
- b. Investments made; credit available, infrastructure developed for CSA.
- c. Area under CSA.

Boundary partners: governments at different levels

Partners: CCAFS country NARS, National and state Governments, SAARC, Future earth partners, CGIAR

Barriers: Scaling-out methodologies; reasonable evidence for policy formulation, limited understanding in stakeholders of complex issues around climate smart agriculture; regional assessments of climate change impacts, adaptation and mitigation inadequate

Major Milestone: Decision support systems, developed, evaluated and usefulness demonstrated.

Activities

- Develop tools and case studies for food security planning especially in periods of climatic stresses including NAPs, NAPAs and NAMAs
- Develop tools and case studies to inform decision making on prioritized investments in climate smart agricultural technologies and practices
- Develop policies and institutions for scaling out the models of climate smart development (the latter arising from Flagships 1 to 3)
- Update assessment of the regionally and temporally differentiated impacts of climate change scenarios on natural resources and food production
- Improve engagement and communication with stakeholders

Assumptions

Sufficient funding for research from national and international actors; mutual appreciation increases between stakeholders

Strategies

Increase communication among partners and stakeholders, capacity building of stakeholders in understanding the complex issues around CSA; develop new and effective partnerships for research for development