

# ANNEX 10: PROJECT BROCHURE

International Institute of Rural Reconstruction;

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# Scaling Out Community-Based Adaptation (CBA) via Climate Smart Villages



**Platforms to Address Food Insecurity in Myanmar**



# Introduction



***As much as 25% of Myanmar's households live below the poverty line and about 10% live below the food poverty line.***

Household income is a key factor in ensuring food security in Myanmar where 68% of household expenditures are spent on food. Myanmar is at risk from a wide range of natural hazards, including cyclones, floods, and droughts that severely affected the livelihoods of the poor and contributed to food insecurity. Poor women suffer more from hunger, food insecurity and lack of adequate health services. Climate risks and associated livelihood impacts are an additional burden to local communities.

The manifestations of climate change differ across different agro ecosystems. Therefore, it is crucial that adaptation measures recognize the value of targeted, location-specific and, community-based strategies and processes. These process-oriented approaches (community-based adaptation or CBA) which feature carefully associated technological, social and institutional elements have been tested in the Philippines with support from the Climate Change, Agriculture, and Food Security (CCAFS) for the past three years and are currently being mainstreamed via national government processes. An International Development Research Center (IDRC) supported school nutrition project has also been scaled-up in the Philippines. It is generating valuable lessons for mainstreaming climate smart and nutrition sensitive activities. These practices provide opportunities to leverage the nutrition contribution of agriculture. This needs special attention when implementing community-based adaptation processes in Myanmar.

# Scaling-Up Community- Based Adaptation in Agriculture



***With the effects of climate change being location specific, community-based and needs driven approaches that feature community participation and engagement are needed in arriving at scalable models.***

Large-scale development initiatives should consider local priorities and integrate lessons from successful adaptation efforts, relying on lessons derived from site-specific research located in areas where out-scaling is envisaged. This is particularly important in a country like Myanmar with its diversity of ethnic groups, climate zones and agroecosystems. There is increasing mention in the literature about the important contribution of community-based and led initiatives in effective adaptation efforts of smallholder farmers. (Heltberg, Siegel, & Jorgensen, 2009; Kansime, 2012; Reid et al., 2009).

Communities need to be prepared to address both current and future risks. Capacities to cope with this change need to be enhanced. Participatory action research undertaken on a certain level of scale is essential if this objective is to be achieved.

There is a complementary need to ensure that CBA processes in the field of agriculture create co-benefits that will address what is referred to as the current "development deficit". (Parry et al., 2009) CBA processes should contribute in sustaining ecosystems, creating stable incomes, achieving sustainable food systems that nourishes people and strengthening local institutions of governance.

CBA is understood by IIRR and its partners as a process of resilience building. It relies on



identifying vulnerabilities and mapping of Climate Smart Agriculture (CSA) options (both processes and technologies) and associated participatory action research aimed at deriving a portfolio of scalable technological options and social learning processes that address climate and livelihood risks and local needs. Such portfolio usually address multiple household needs of livelihood, nutrition and income needs. Adaptation is not

accomplished in a single intervention. Rather it is a continuum, requiring an overarching approach that range from those that address the underlying drivers of vulnerability to those designed exclusively to respond to climate change impacts (ODI, 2010). With a portfolio approach, both diversification and intensification objectives can be achieved, especially for small holder and those with marginal landholdings.

## Community-Based Adaptation in Climate Smart Villages



***In its CCAFS supported work in the Philippines, IIRR has learned the importance of establishing a proof of concept site where scale is demonstrated and an evidence base is established for purposes of supporting wider uptake of the approach.***

Climate Smart Villages or CSVs) are platforms where discovery, learning and sharing happens. CSVs serve as basis for field level advocacy for promoting CBA processes. CSVs are intentionally designed to be low cost and to typically feature local teams and local institutions in order to enhance their role as “lighthouses” which support wider uptake.



Climate Smart Villages (CSVs) are platforms (venue and location) for climate change adaptation wherein location-specific strategies for addressing climate risks and challenges are tested, developed and subsequently scaled up. This is done by establishing the necessary evidence base through participatory and collaborative approaches and associated action research. The process involves not only farming communities but also the local governments, and local research community. The CSV is a

demonstration of how (process) to assist local communities adapt to climate change (referred as community-based adaptation or CBA). CSVs recognize that individual action is not enough to cope with climate change. They provide the platform for multi-stakeholder participation and collaborative work in targeted, clearly delineated geographic areas ("small landscapes"). CSV in Myanmar will pay special attention to leveraging the nutrition contributions of CSA.

## Building on a rich tradition of resilience building practices in small holder agriculture in Myanmar

The Myanmar context offers a number of opportunities on which we build resilience building practices of small holder agriculture. Nutrition-sensitive climate smart agriculture practices provide opportunities (fruits, vegetables, small livestock and legumes) for leveraging the nutrition contribution of agriculture.

Legumes provide this special opportunity through farms in the rain-fed uplands, drylands and mountains of Myanmar. There already is a rich tradition in Myanmar of intercropping and dry season cropping of legumes (post rice) in some parts of the Delta but more so in the uplands and, in the central dry zone. These nutrition-



friendly practices of legume intercropping/crop rotation (which can rarely be seen in other parts of Southeast Asia) can be further intensified and enriched. Dryland horticulture and homestead gardens are promising major new areas for leveraging nutrition contributions in Myanmar.

The CSVs which implement CBA processes can serve as a valuable platform for conserving agro biodiversity in schools and through designated custodian farmers. Genetic diversity is the basis for better resilience in a changing and less favorable climate. Climate smart (stress tolerant) crops already exist in Myanmar and they need to be conserved because of their relevance to both breeders and farmers. Improved agronomic CSA practices can enhance the productivity of local crops and landraces.



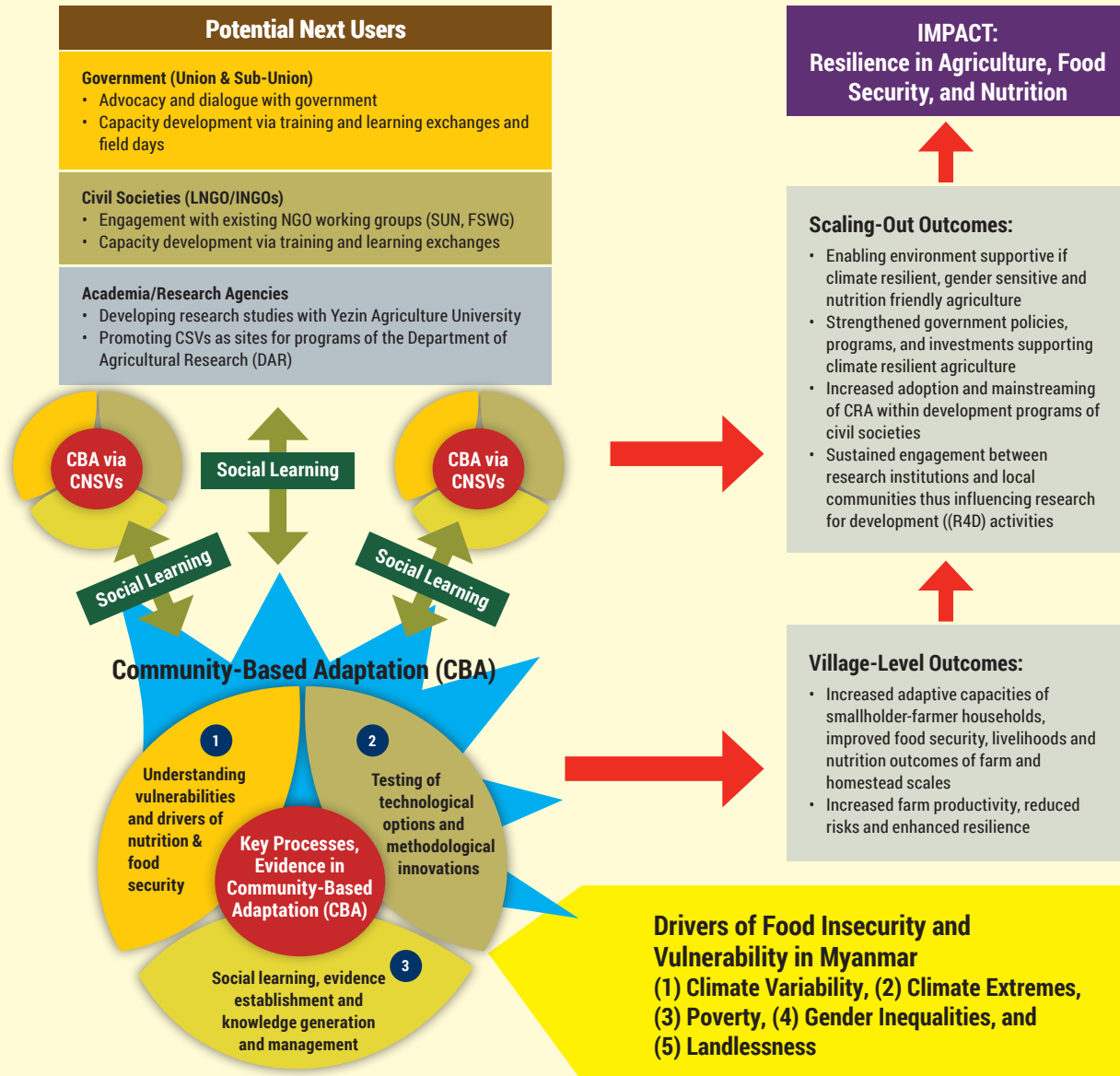
**This research will use the network of four CSVs as a platform to bring together stakeholders from government, local NGOs and international NGOs to share good practices and lessons in developing portfolios of CSA options and associated social learning mechanisms for scaling out community-based adaptation (CBA).**

**IIRR will use the unique opportunity it has as a strategic partner of CCAFS to promote lessons and outputs it has garnered in Myanmar via CCAFS platforms (e.g. annual meetings), via CCAFS website and working papers. A number of IIRR knowledge products and working papers are already on CCAFS sites. The global IDRC CIFSRF network will be explored as another equally important platform.**

**Provide practical guidance in the operationalization/ implementation of community level initiatives that support the Myanmar Climate Smart Agriculture Strategy. The Ministry of Agriculture, Livestock and Irrigation, the Department of Agricultural Research and Yezin University and the Regional Research institutions and local governments will be targeted in order to demonstrate the role that CBA and CSV can play in developing and rolling out climate adaptation practices/ approaches.**



# Research Project Framework: Scaling Out Community-Based Adaptation (CBA) via Climate Smart Village Platforms





# The Project



***IIRR and its partners will study how a network of CSVs implementing CBA processes will effectively influence potential next users including the government to replicate such processes.***

CSVs will rely on social learning processes. The CSVs will serve as platform for others to learn from – farmer to farmer, household to household and school to school learning activities. The

research will be guided by the following research questions under each research objectives.

## **Objective 1:**

**To fine-tune, refine, adapt and optimize the climate smart villages approach as a platform to support community-based adaptation processes in four different agro-ecological and diverse socio-cultural settings within Myanmar;**



## Research Questions:

- 1.1 How are the different models developed and optimized to suit the unique needs/requirements of four different agro ecological zones and their distinct socio cultural contexts?
- 1.2 What resources, community incentives and support systems are involved in the effective implementation of CBA processes for different agro-ecological zones?
- 1.3 What are the opportunities in each agro-ecological zone for leveraging nutrition and food security benefits from climate resilient agriculture programs?
- 1.4 What gender-specific strategies and options within CBA can address the differentiated needs of men and women to adapt to climate change?

## Objective 2:

**To develop and test scalable social learning processes and institutional mechanisms that facilitate or drive community-based adaptation processes resulting in multiple/co-benefits for the farm household, and**

## Research Questions:

- 2.1 What is the potential of CBA to address the shortcoming of conventional approaches that accelerated environmental degradation, missed out the poor and vulnerable, thereby contributing to social inequities?
- 2.2 Do CBA approaches that address poverty, livelihoods and climate change adaptation

help insulate local development from locally, manifested risks and vulnerabilities?

- 2.3 How can documentation of learning and evidence help in supporting scaling up CBA and CSVs?

## Objective 3:

**To scale up the most successful social, technological, and methodological (climate smart, gender equitable and nutrition sensitive) agriculture innovations through sub-national governments/institutions, civil society organizations and research and teaching institutions.**

## Research Questions:

- 3.1 Does a stronger engagement with a wider group of partners provide more opportunities for scaling out community-based adaptation processes which are supportive of climate smart agriculture initiatives?
- 3.2 How has the impact of CSVs been expanded to larger scales either through local government or non-government institutions?
- 3.3 What scaling generalizations can be derived from the wide range of contexts where the CSV are being implemented (cross CSV analysis)?

CSVs will be developed by building on existing programs and infrastructures of partner organizations and local government. Selection of CSVs will be done in such manner that each distinct agro-ecosystems of Myanmar would be represented by at least one CSV. At least one (1)



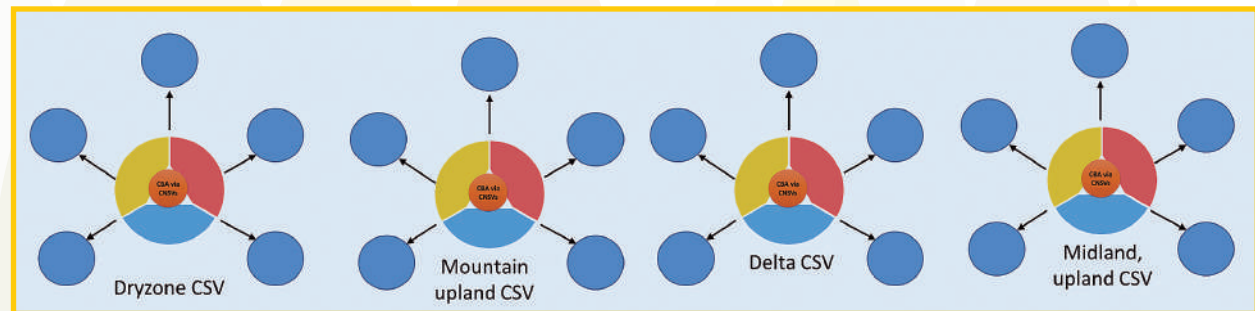
CSV will be established in the following areas:

- Mandalay Region, to represent the dryland zones (managed by Community Development Association)
- Ayeyarwaddy Region to represent the delta eco-zone (managed by Radanar Ayar)
- Chin State, to represent mountain upland agro ecozones (partner to be identified)
- Shan State, to represent midland, rolling upland ecozones (partner to be identified)

These four CSVs will serve as model villages for the other villages in the township. This project will also reach out to at least 5 more villages per agro-ecological area giving this project a total reach of 24 villages which will benefit directly from the research and knowledge and capacity development activities. See diagram (below) showing the knowledge dissemination platform at township level.



## The CSVs as Dissemination and Knowledge Management Platforms at Township Level (as envisaged towards the end of the last year of the project)





## Summary

This research aims to deepen and build upon the current knowledge-base on undertaking gender-sensitive, nutrition-friendly, community-based adaptation (CBA) and local-level scaling-out of climate smart agriculture (CSA). This will be done through the conduct of participatory action research undertaken in 4 villages in Myanmar. These villages referred to as climate smart villages (CSVs) represent 4 major agro-ecological regions of Myanmar namely; the central dry zone, mountain uplands, upland-plateau and delta. Social learning methods and participatory approaches will be used to generate knowledge on upscaling approaches. The CSVs will be established as learning platforms for scaling-out CSA and CBA within the township level. Participatory approaches for facilitating a local adaptation planning process that is guided by science-derived information will also be tested and developed. This project will generate a portfolio of CSA technologies and practices that demonstrate evidences of development outcomes



from CSA and CBA particularly in the area of livelihoods, food security and restoration of degraded environments. Knowledge products on CSA and CBA and its scaling-out will be produced and widely shared to agencies of the Myanmar governments, INGOs, CSOs, and CCAFS Networks. Cross-site comparison undertaken during the last year of the project will derive lessons for stakeholders in developing and planning local level climate resilient agriculture programs.

## References cited:

Heltberg, Siegel, & Jorgensen, 2009; Kansime, 2012; Reid et al., 2009. literature. *The important contribution of community-based and led initiatives in effective adaptation efforts of smallholder farmers.*

Parry et al., 2009





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