

WHERE THE RAIN FALLS PHASE III (2017 – 2019)

FINAL EVALUATION REPORT

Prepared by: Samantha Boardley, Independent Evaluator and Climate Change Advisor

Prepared for: CARE France

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ACRONYMS

CAP	Community Adaptation (or Action) Plan
CBA	Community-based Adaptation
CBAF	Community-based Adaptation Facilitator
CBAWG	Community-based Adaptation Working Group
CCRP	Climate Change and Resilience Platform (an initiative of CARE International)
CG	Chattisgarh State, India
IGA(s)	Income generating activity(ies)
KEQ	key evaluation question
MH	Maharashtra State, India
PGIS	Participatory Geographic Information System
PSP	Participatory Scenario Planning
RTF	Raks Thai Foundation
SAO	Sub-district Administrative Organization
SHG	Self-Help Group
SuPER	<u>s</u> ustainable, <u>p</u> roductive, <u>e</u> quitable and <u>r</u> esilient (agriculture)
VDC	Village Development Committee
WEE	Women's economic empowerment
WtRF	Where the Rain Falls

1 PROJECT BACKGROUND AND CONTEXT

In 2009, the Where the Rain Falls (WtRF) initiative started as a three-year research project investigating the impact of rainfall variability on food and livelihood security, and migration. Led by CARE France together with the United Nations University Institute for Environment and Human Security, the central focus of the original research was to “*explore the circumstances under which households in eight case study sites...use migration as a risk management strategy when faced with rainfall variability and food and livelihood insecurity.*”¹ This research culminated in a global policy report (2012) and the development of more action-oriented

community-based adaptation (CBA) pilot projects in each India, Thailand and Bangladesh². The first phase of CBA pilot projects (2012-2014) focused on sustainable agricultural practices and efficient water management with the ultimate objective of “*increasing the resilience to climate change of vulnerable and marginalized community groups, especially women and girls from ethnic minorities.*”³ A second phase (2014 – 2016), and later a third phase (2017 – 2019), aimed to scale results, impacts and lessons learned to date for broader support for, and uptake of, CBA methods and approaches. Two separate, country-level evaluations were conducted for Phase II activities in 2017.^{4,5}

WtRF Phase III Global Objective:

To enhance the resilience of marginalized populations from Northern Thailand and Central India to climate risks and climate change and build their adaptive capacities.

Specific Objectives:

1. To support people and communities to move towards more climate-resilient livelihoods and forward looking development planning.
2. To contribute to the integration of climate risks & climate change in policies & practices of the authorities and CSOs.

¹ Warner, K., Afifi, T., Henry, K., Rawe, T., Smith, C. and A. De Sherbinin. 2012. Where the Rain Falls: Climate Change, Food and Livelihood Security, and Migration: An 8-Country Study to Understand Rainfall, Food Security and Human Mobility. Global Policy Report. November 2012.

² Funded independently from Thailand and India by a different donor. As such an

³ CARE. Where the Rain Falls 2014 – 2016 Results and Outcomes.

⁴ For Thailand, see: CCREST, 2017. Where the Rain Falls Thailand: Phase 3 Project Evaluation Report. Report prepared for CARE France, August 2017.

⁵ For India, see: Kantar Public, 2017. End-line Study of Where the Rain Falls (WtRF) Project of CARE India in Jashpur District of Chattisgarh. Draft Final Report prepared for CARE India, February 2017.



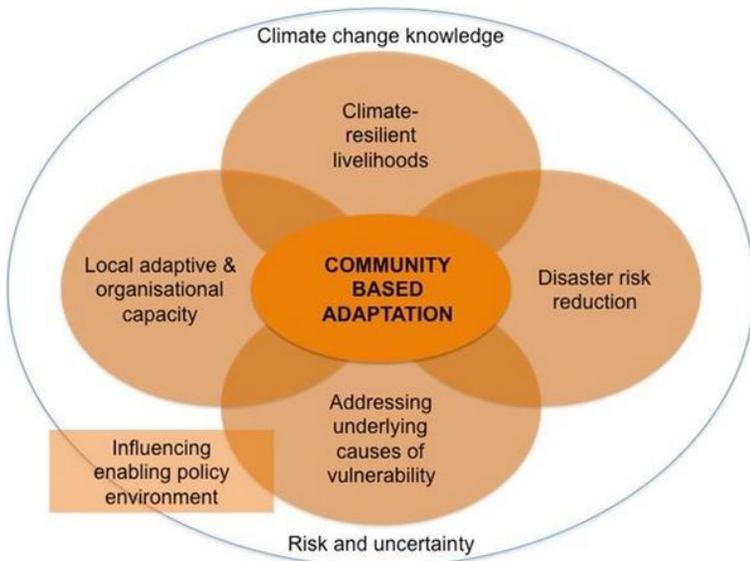


FIGURE 1. CARE'S COMMUNITY-BASED ADAPTATION (CBA) FRAMEWORK

At the time the WtRF initiative was originally conceived, CARE was in the early stages of developing what have now become some of their showcase tools and frameworks around climate vulnerability, adaptive capacity, CBA and resilience. For example, CARE's Climate Vulnerability and Capacity Analysis (CVCA) Handbook was first published in 2009⁶. Included in this Handbook was the organizations' first iterations of the CBA Framework – depicted first in table format as compared to the diagram it is recognized by today (Figure 1). Both tools were further refined and elaborated under CARE's [Adaptation Learning Program for Africa \(ALP, 2010 – 2017\)](#), informing the development of new

and supporting tools including participatory scenario planning (PSP)⁷ and community adaptation action planning (CAAP)⁸. In part from the learnings afforded through ALP, CARE initiated its [Climate Change and Resilience Platform \(CCRP\)](#) in 2016 to coordinate the integration of climate change and resilience concepts across all of CARE's cross-disciplinary work, an effort which has since produced further refined frameworks and tools including CARE's theoretical framework for increasing resilience (Figure 2) and CARE's internal self-assessment tool, the [Resilience Marker](#). It is against this backdrop of internal innovation and progress that the WtRF initiative was simultaneously rolling out.

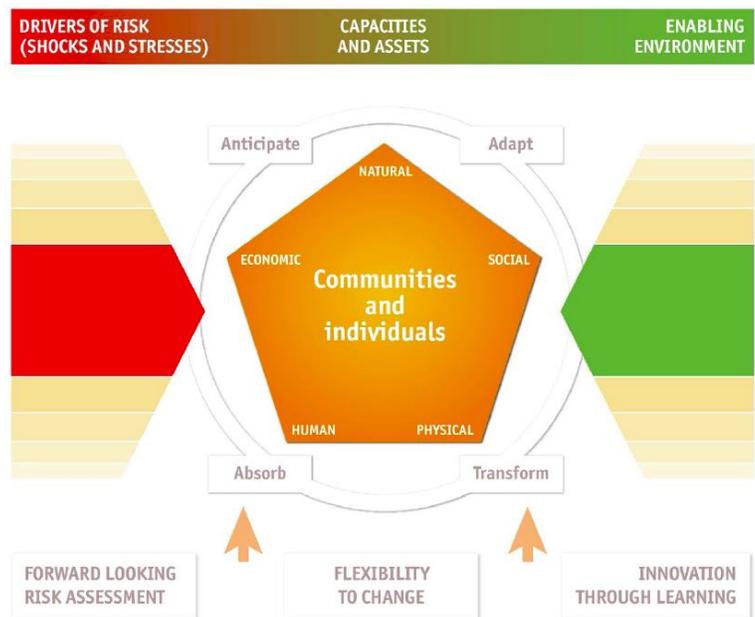


FIGURE 2. CARE'S THEORETICAL FRAMEWORK FOR INCREASING RESILIENCE (SOURCE: CARE INTERNATIONAL, 2016)

⁶ CARE International, 2009. Climate Vulnerability and Capacity Analysis Handbook. First edition, May 2009. Prepared by A. Dazé, K. Ambrose and C. Ehrhart.

⁷ See CARE International, 2018. Practical Guide to Participatory Scenario Planning. June 2018. Available online: <https://careclimatechange.org/practical-guide-to-participatory-scenario-planning-seasonal-climate-information-for-resilient-decision-making/>.

⁸ See CARE International, 2015. Practitioner Brief 1: Adaptation Planning with Communities. July 2015. Available online: <https://careclimatechange.org/adaptation-planning-with-communities-practitioner-brief-1/>

2 EVALUATION BACKGROUND

In October 2019, CARE France engaged an International Consultant to lead WtRF' first multi-county evaluation. Two national consultant teams were subsequently selected under separate contract to support national evaluation activities in each India and Thailand. In-country data collection activities took place from 11 – 15th November (India) and 18 – 22nd November (Thailand). This section outlines the evaluations' objectives, intended audience, and scope.

2.1 Evaluation Objectives

As per the Terms of Reference (TORs) for this evaluation (see Annex IV) the main objectives of the evaluation are two-fold:

- (i) to assess the **degree of achievement** of the WtRF global and specific objectives in India and Thailand respectively; and
- (ii) to extract common and/or comparable **lessons learned** about factors contributing to and hindering achievements (e.g. barriers and enablers)

While this evaluation fulfills accountability requirements for donor funds, its primary purpose is to reflect, analyze, aggregate and learn how to successfully strengthen the climate resilience of poor and vulnerable smallholder farmers. As such this evaluation report explores the context and mechanisms surrounding project activities and how they contribute (or not) towards strengthening community and household resilience to climate variability and extremes.

2.2 Target Audience

Serving evaluation objectives of both accountability and learning, this evaluation report targets primarily donor audiences (AXA) and project implementation teams (CARE France, CARE India and Raks Thai Foundation Thailand). Learnings and insights from this report will also be of interest to CARE International's CCRP – a group aimed at supporting and strengthening CARE's global capacity to build resilience, climate and other, of poor and vulnerable groups around the world.

2.3 Scope

This evaluation covers activities completed under the current phase of the WtRF project, from January 2017 to December 2019. For the purposes of this report, this phase is most commonly referred to as Phase III.

The total budget provided for this consultancy (including the engagement of two national consultancy teams to support data collection, analysis and translation) was approximately € 32,000.00 EUR or 3.4% of the projects' overall budget for Phase III activities.

3 APPROACH AND METHODOLOGY

This evaluation was completed in three phases: (i) planning and inception (including the recruitment of national consultants); (ii) data collection; and (iii) data analysis and report writing. While the evaluation was led by an international consultant, the data collection phase was strongly supported by national consultants in both India and Thailand responsible for the majority of community-level data collection. Data collection followed a conventional mixed methods approach including primarily qualitative tools

(document review, focus group discussions (FGD), direct observation and community site visits, as well as group and individual key informant interviews (KIIs)). In India, a quantitative household survey was also developed and completed in line with 2017 baseline data available for both Chhattisgarh and Maharashtra. An exhaustive map of baseline data availability (Annex II) was completed to ensure changes between 2017 baseline and 2019 endline datasets could be adequately measured, and was used to scope household questionnaires.

3.1 Key Evaluation Questions, Matrix and Outcomes of Interest

While the five OECD DAC⁹ provide the most commonly known and widely used evaluation framework in international development – particularly amongst more conventional bilateral or multilateral donors – there has been growing skepticism in recent years of their current relevance and utility.¹⁰ Furthermore, some criteria may be considered premature (impact) or resource intensive (efficiency) to evaluate particularly when time or budget is limited. Given the dual interest of CARE France in meeting both accountability requirements as well as learning objectives, and the more flexible nature of a private sector donor such as Axa, early discussions with CARE France suggested a more focused approach – particularly on the **effectiveness** and the **sustainability** of WtRF Phase III project interventions – might be of more interest and use. As a result, the following three key evaluation questions (KEQs) were agreed to be of primary interest to project implementation teams (e.g. CARE France, Raks Thai Foundation and CARE India) and were used to guide evaluation design:

1. Did WtRF's CBA models and approaches increase adaptive capacity, resilience and gender equality for marginalized populations in Northern Thailand and Central India? How, and in what ways?
2. To what extent have WtRF promoted CBA models and approaches been effectively scaled: (i) to other districts (India) / communities (Thailand); and (ii) by government and/or other civil society organizations (CSOs)? What have been the enablers/barriers to their adoption?
3. How likely are WtRF Phase III (2017 – 2019) accomplishments to continue once the project ends?

Using the above evaluation questions, key outcomes of interest and a detailed evaluation matrix were developed. Key outcomes of interest were identified primarily based on country log frames and proposal / project planning documents. These outcomes were used to 'unpack' definitions of 'adaptive capacity' and 'resilience' – terms that are considered multi-dimensional, location-based and context specific¹¹. The final and common outcomes of interest targeted by project teams in both India and Thailand provide a more refined understanding of how project terms understood 'resilience' are summarized in Table 1. Key evaluation questions and outcomes of interest were used to elaborate the evaluation matrix (Annex I) which was subsequently used to scope the remainder of the evaluation including data collection tools, targeted stakeholders and analysis methods.

⁹ Impact, effectiveness, efficiency, relevance and sustainability.

¹⁰ ODI, 2018. Time to Update the DAC Evaluation Criteria? <https://www.odi.org/blogs/10594-2018-time-update-dac-evaluation-criteria>.

¹¹ Yohe, G. and R.S. Tol, 2002. Indicators for social and economic coping capacity – moving toward a working definition of adaptive capacity. *Global Environmental Change*. 12(1):25-40.

TABLE 1. MULTI-COUNTRY OUTCOMES OF INTEREST – ‘UNPACKING’ CONCEPTS OF ‘RESILIENCE’ AND ‘ADAPTIVE CAPACITY’

No.	Outcome
1	Agricultural methods and productivity
2	Household income and expenditures (including livelihood sources)
3	Water availability and reliability (for agricultural and domestic purposes)
4	Land security and forest rights (<i>Thailand only</i>)
5	Women’s mobility, voice and agency (e.g. particularly re: decision-making at community-level)
6	Local development planning structures and decision-making processes (gender-sensitive and informed by climate data)

3.2 Sampling Framework

Sampling design is a critical consideration in ensuring evaluation findings are representative, replicable, and provide an honest reflection of project results. The sampling criteria developed and applied for purposes of this evaluation are summarized in Table 2, with the final sampling framework outlined in Table 3. In sum, almost 30% of targeted communities in both India and Thailand were sampled (15 of 50 in India, and 6 of 21 in Thailand). In India, 106 households were sampled as part of quantitative data collection, achieving a confidence level of 95% with a margin of error of 10% (Table 4).

TABLE 2. SAMPLE SELECTION CRITERIA

No.	Criterion	Rationale
1	Project area	To the extent possible, an equal number of communities from all targeted blocks (India) and districts (Thailand) were sampled.
2	Type of intervention	Country Offices were asked to ensure that the final list of sampled communities included a good cross-section of CBA models and approaches attempted.
3	Community size (no. of HHs) & remoteness	To the extent possible, sampling design included communities of various size and distance from major towns and roads as both typically influence access to markets, government services and other key inputs of adaptive capacity.
4	Distance and other travel logistics	Time for field data collection in November was limited. Country Offices were asked to develop a field schedule that was feasible and realistic given communities’ location relative to one another, and the necessary resources required to adequately sample (e.g. transportation, accommodation, distance between houses, etc).
5	Duration of communities’ involvement in WtRF activities (<i>Thailand only</i> ¹²)	The scaling model applied in Thailand included the formation of a group of experienced CBA Facilitators (CBAFs) at district (Kallayaniwattana) or sub-district (Mae Suek and Tha Pha sub-districts in Mae Chaem district) levels to facilitate, coach and mentor new Phase III communities in their CBA planning efforts. In order to assess the effectiveness of this model, and how well ‘new’ project communities learned from the experience of ‘old’ project communities, a representative number of ‘old’ (involved since Phase 1 or 2) and ‘new’ (involved only in Phase 3, or since 2017) communities were sampled.

¹² In India, all communities in pathalgaon and Bagicha blocks (Jashpur District, Chattisgarh State) had been involved since 2013 (Phase I) while all communities in Jamod Jalgaon block (Buldhana District, Maharashtra State) have only been involved in the project since 2017, or Phase III.

TABLE 3. SAMPLED COMMUNITIES AS PART OF THE WTRF PHASE 3 EVALUATION

Country	District	Block (India only)	Sub-district (Thailand only)	No. Community	Involved in WtRF since...	Relative size of community	No. of HHs – SAMPLED (India only)		
India	Jashpur	Pathalgaon		1	Kharkata	2013	Large	8	
				2	Silipakhana	2013	Small	8	
				3	Batura Bahar	2013	Large	8	
				4	Kudekela	2013	Medium	10	
				5	Patrapalli*	2013	X-Large	8	
				Bagicha	6	Jabla	2013	X-Large	9
					7	Simardih	2013	Large	6
					8	Majhagaon*	2013	Medium	6
				9	Pandaripani	2013	X-Large	6	
				10	Kuhapani*	2013	Small	6	
	Buldhana	Jamod Jalgaon		11	Bandapipal	2017	Large	6	
				12	Garpath	2017	X-Large	7	
				13	Hanvatkhed	2017	X-Large	4	
				14	Charban	2017	X-Large	7	
				15	Rajura*	2017	Medium	7	
Thailand**	Mae Chaem		Tha Pha	1	Mae Kong Ngon	2017	Small		
				2	Sam Sob Bon	2012	Medium		
				3	Na Klang Nuea	2017	Small		
	Kalayaniwattana		Chaem Luang	4	Kiew Pong	2017	Large		
				5	Huay Baba	2017	Medium		
				6	Mae La Oob	2012	Medium		

* Indicates villages where only HH survey was completed. No qualitative data collection (e.g. focus group discussions or key informant interviews) were completed for these villages

** In Thailand, no HH surveys were completed. Main evaluation activities undertaken in all communities included a FGD with members of the CBAWG, and time permitting, KIIs and site visits (e.g. women's businesses, pilot farms, check dams).

TABLE 4. NUMBER OF HOUSEHOLD QUESTIONNAIRES ADMINISTERED AND COMPLETED AS PART OF THE WTRF PHASE 3 EVALUATION IN INDIA (CHATTISGARH AND MAHARASHTRA STATE)

Block	No. of HHs	% of Total HHs	No. of HH Size	Sample Community Size ¹³	Sample No. of HHs per community
Pathalgaon (CG)	1745	38.2	36.3	5	7 – 8
Bagichha (CG)	1310	28.7	27.3	5	5 – 6
Jamod Jalgaon (MH)	1511	33.1	31.4	5	6 – 7
TOTALS	4566	100.0	95	15	

¹³ Assumes 2-3 enumeration teams

3.3 Challenges and Limitations

The following challenges and limitations are noted which may or may not influence the overall findings of the evaluation:

- **Lack of a common framework, or conceptual model, defining ‘resilience’ and/or ‘adaptive capacity’.** While high level project goals and objectives aimed to improve the ‘resilience’ and ‘adaptive capacity’ of targeted populations, no evidence of any project-level discussion, distillation or definition of these terms was found. While some interesting attempts were made throughout the life of the project¹⁴, these efforts would appear to have been led by external consultants and the process or results of such efforts not integrated into the projects’ broader implementation approach.
- **Lack of aggregate, multi-country level analysis or documentation:** In the absence of any prior attempt to consolidate and aggregate country-level results and learnings, no model or example of the type of desired analysis, synthesis or learnings existed. This challenge was compounded by staff changes at CARE France at the same time that this evaluation was getting underway. As such the structure of this evaluation has been developed primarily based on the author’s expert judgement, experience leading other multi-country evaluations of resilience and adaptive capacity for CARE, and knowledgeable opinion of what might be of interest to the targeted audiences of this report. Some gaps for some readers whose interest in this evaluation was not clear at the outset are likely to inevitably remain.
- **Methodological differences in India and Thailand:** while the original design of the evaluation sought comparability of data from India and Thailand by applying a consistent, mixed methods approach to both countries, the proposed household survey was only completed in India. Reasons as to why a quantitative household survey could not be undertaken in Thailand include:
 - i. **Time of crop year** – given the evaluation’s schedule, data collection was limited to November and overlapped the rice harvest season. As rice is the primary source of food security for all households in the region, November represents a critical time of year for farmers, particularly for maize farmers in Mae Chaem who suffered significant financial losses earlier in the season due to a new pest outbreak. It was suggested that farmers would have very limited time to participate in any data collection activities.
 - ii. **Geography** – at project sites in India, farm plots are located at or nearby to farmers households. This is not the case in the mountainous project area of Thailand where farm plots are often far from residential areas. As a result, the logistics of coordinating a survey team to locate WtRF beneficiary farmers during such a busy time of year (see above) when their farm plots were not anywhere near their houses, became overly complex in the short amount of time available to plan this evaluation.
 - iii. **Data culture** – questions related to amount of land cultivated, irrigated versus unirrigated, crop productivity, household income, and other, would appear to be common place in India. This would appear to be a result of both a relatively data intensive culture as well as a number of subsidies and social safety schemes available to the rural poor in India. Personal and household-level information is readily provided by the poor and

¹⁴ In India, an Adaptive Capacity Index (ACI) was developed for purposes of baseline and endline evaluations although not consistently applied, and in Thailand, ACCRA’s Local Adaptive Capacity Framework was used to frame the Phase II Evaluation (2014 – 2016).

vulnerable¹⁵ when applying for government assistance. In Thailand however, there exists fewer such government supports. Furthermore, the ‘marginalized’ nature of the targeted impact population in Thailand means that the likelihood of sharing sensitive household or economic data with government, or in this case outsiders, is less likely.

- **Limited baseline data available to assess change over time (2017 – 2019):** In India, raw baseline data was only available for Chhattisgarh. In Thailand, the consultancy and budget for the Phase III baseline had been combined with the consultancy and budget for the Phase II endline. A review of the data and methods used for this combined consultancy indicated that the priority was clearly on the evaluation component and baseline data was of limited utility. The end result is that the degree of change attributable to project interventions between 2017 and 2019 is not always clear. The author of this report has made considerable efforts to clearly identify where this is the case.
- **Isolation for Phase III results only:** In some sampled communities WtRF project activities have been ongoing since Phase I, or 2012/13. Isolation for end-phase results as part of a multi-phased initiative is a common challenge in evaluation. Efforts were made to isolate for results from Phase III activities only (e.g. the focus on scaling and weather and climate information services, for example). However the reader is advised that results from Jashpur district in particular – where all endline sampled communities have been actively targeted by the project since 2013 – are more indicative of the full seven years of intervention.
- **Language:** One of the many functions of an evaluation is to recount the ‘story’ of a project – what happened? What did not happen? For whom? And why / why not? Distilling this truth from project stakeholders can be one of the greatest challenges of evaluation and often requires a number of different lines of inquiry. The complexity of this challenge is doubly compounded when dependent on translation, particularly if the translator is unfamiliar with these lines of inquiry. Despite a number of measures put in place, the result is that some of the ‘story’ of the WtRF project in India and Thailand has invariably been ‘lost in translation’.

4 FINDINGS FROM INDIA

Initially designed to “*increase the resilience of 3000 [Adivasi] tribal women and their households, in 40 villages of the Jashpur district of Chhattisgarh (India), to shocks and stresses around water and improve their access, control and management of natural resources*”¹⁶, WtRF activities have been ongoing in India since the projects’ earliest research phase (2009-10). Between 2011 and 2016, CARE India tested and piloted a number of CBA measures together with targeted communities, ultimately resulting in what was considered a comprehensive CBA package. Entering into its third and final phase in 2017, objectives for Phase III of WtRF in India included both the deepening and the scale-out of CBA. While deepening efforts targeted the original 40 villages of Jashpur district (Chhattisgarh State), scale-out efforts targeted 10 villages in the chronically drought hit district of Buldhana (Maharashtra State), over 1,000 kilometers away. With the support of another local implementing partner for Buldhana District (Mahatma Phule Samaj Seva Mandal, or MPSSM), the focus of scale-out efforts in Maharashtra included:

- (i) climate literacy and awareness raising;

¹⁵ Known as “BPL”, or below-poverty-level.

¹⁶ CARE India, 2017. Where the Rain Falls Phase III Project Proposal – Zoom on India Project.

- (ii) community adaptation planning and the development of CAPs;
- (iii) 5% model¹⁷;
- (iv) rehabilitation of community water structures;
- (v) gender dialogues (for promoting gender equity in access to resources, services and opportunities);
- (vi) formation and/or strengthening of community-based women's collectives (Self-Help Groups, or SHGs) and governance structures (Village Development Committees, or VDCs).

CBA deepening activities proposed for the original 40 villages of Jashpur District, Chattisgarh State included:

- (i) women's literacy and leadership development;
- (ii) participatory scenario planning (PSP);
- (iii) household water audit and management;
- (iv) livelihood diversification (e.g., backyard poultry, goat rearing, piggery, lac cultivation, vegetable and fruit processing);
- (v) ag-met planning and advisory specifically aimed at enabling women access timely weather forecast: the climate information system will be further decentralized and mobile based, local forecasts facilitated;
- (vi) entitlement tracking and coverage; and
- (vii) integrating indigenous knowledge, seeds, practices, and technologies into modern CBA practices.

Finally, in addition to scale-out and deepening objectives, an additional foci of Phase III activities in India was on "*informing, influencing, and supporting community institutions and key development actors to adopt ... CBA measures and technologies*".¹⁸

This section highlights detailed evaluation findings from WtRF activities in India. Evaluation findings have been informed by both quantitative and qualitative data and have been organized by key outcomes of interest for resilience building (Section 3.1). Quantitative data includes results from 106 household surveys (31 in MH and 75 in CG) while qualitative data includes results from FGDs with SHGs and VDCs, KIIs, and direct observation. The reader is advised that due to the nature of the baseline data available, and the methodological challenges associated with limiting participants' recall inputs to the 2017-2019 period specifically, outcomes from Chhattisgarh State are more strongly indicative of eight years of CBA programming (2011 – 2019). Where results in CG are most strongly attributable to Phase III activities is in Section 4.5 on climate informed agricultural and development planning, given the centrality of PSP and CAPs to Phase III specifically.

While results from Maharashtra are indicative of Phase III activities only, they are limited to insights on the effectiveness of scale-out activities given a number of start-up delays which resulted in only 18 months of active project implementation. As is discussed later in this report, changes in adaptive capacity and building the climate resilience of poor and vulnerable smallholder farmers takes time. Changes must be observed over longer than one full cropping calendar in order to identify meaningful

¹⁷ The 5% model is a water storage model unique to India whereby farmers are advised to use 5% of their total cultivated land area to capture and store rainwater. While 5% is only meant as a guideline, the idea more generally is to encourage farmers to dig earthen ponds of any size and capacity for usage in the dry season.

¹⁸ Ibid.

trends and backcast contributing factors and generative mechanisms. As such, results from Maharashtra are discussed only in terms of the insights and lessons learned they provide with respect to effective CBA scale-out.

4.1 Agricultural Methods and Productivity

Given the importance of agriculture to rural livelihoods in India and the sector’s vulnerability to climate risk, WtRF activities in Chattisgarh placed considerable priority on improving climate smart agricultural methods in order to improve productivity outcomes under future scenarios of climate risk¹⁹. While the number and type of improved agricultural methods promoted through the project were diverse, those most adopted by beneficiary farmers in Jashpur district included mostly organic production methods (e.g. production and use of organic fertilizer/vermicompost, seed, and biopesticide), mixed agriculture, SRI and crop rotation (Figure 1). In part related to improved agricultural practices, 60.0% of survey respondents in Chhatisgarh felt that their farms’ agricultural productivity had increased since their involvement in the project (2013).

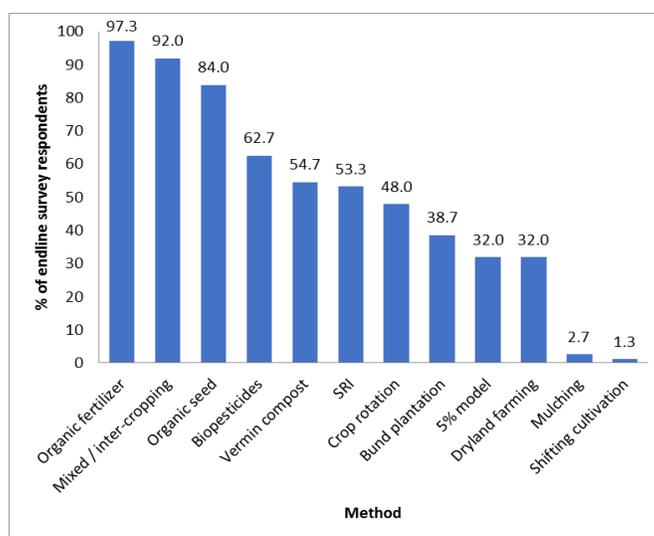


FIGURE 1. ORGANIC PRACTICES, MIXED AGRICULTURE AND SRI SOME OF THE MOST ADOPTED CLIMATE RESILIENT AGRICULTURAL PRACTICES IN JASHPUR DISTRICT, CHHATISGARH STATE

Reasons for the preferred uptake of some methods over others related primarily to cost benefit considerations with adopted methods having either little or no cost associated with them (e.g. inter-cropping, SRI) or resulting in reduced household expenditures (e.g. production and use of organic fertilizer, biopesticide and vermicompost in place of chemical alternatives). While those who were provided a 5% water storage model as part of project activities in Jashpur cited increased water availability for irrigation and some fisheries activities, no farmers had yet to install their own 5% model. Reasons cited were largely due to the financial costs associated with labour to dig the pond, as well as opportunity costs associated with ‘losing’ 5% of the already very small area of productive land owned by most smallholders. In general, risk thresholds for poor rural farmers are exceptionally low due to the already abundant risk inherent in rainfed agriculture. This was evident in Jashpur where farmers were unwilling to sacrifice even a small portion of productive land for water storage, despite the understood importance of both to agricultural activities.

¹⁹ No climate smart agricultural programming was planned for scale-out activities in Maharashtra State.

In Maharashtra, no climate smart agricultural programming was planned for scale-out under WtRF Phase III²⁰. While some 5% models were constructed in Buldhana, these models proved unsuccessful due to regional soil profiles which were considerably more stony and loose, resulting in poor water retention capacity. Anecdotal evidence suggests that other rainwater harvesting structures and renovation of wells proved helpful in terms of fulfilling the water needs of households and farm animals, however household survey data did not confirm increased water availability as a result of these structures.

4.2 Household Income and Expenditures

Annual household income in WtRF-targeted areas of Jashpur district (CG) increased more than fourfold (423.7%) between 2017 and 2019. Income from agriculture increased 33.3%, from a median income of 15,000.00 INR in 2017 to 20,000.00 INR in 2019. While not all of this increase can be directly attributed to project interventions, commonly cited reasons for this increase included improved agricultural methods with SRI, vermicomposting, biopesticides and intercropping explicitly mentioned as contributing to higher yields and subsequent additional income. Other reasons included good weather and timely rainfall throughout the 2019 growing seasons, or the acquisition of more land by some farmers.

Other increases in household income were associated with increased contributions from farm wage labour, animal husbandry and small business activities. While the number of people engaging in farm wage labour increased 21.7% between 2017 and 2019, the average income earned from these activities increased fourfold, from 1,890.00 INR per year to 8,660.00 INR per year. This could in-part be a result of an increase in the number of respondents accessing the MNREGA job card scheme (from 56.0% in 2017 to 73.3% of respondents in 2019), another improvement due at least in-part to the projects' emphasis on improving access to government services. Livestock and animal husbandry activities in Jashpur have increased almost three fold (288.2%) while the median income from this activity increased 42.9% (from 3,500.00 in 2017 to 5,000.00 INR in 2019).

Perhaps of most commendable performance of the project is the additional income being earned by women through small businesses. In 2017, only 1.6% of SHG households in Jashpur engaged in any sort of small business venture, earning a median of 1,000.00 INR per year. In 2019, 24.0% of respondents were engaging in small business activities, contributing a median income of 25,000 INR to the household. New business ventures entered by SHG respondents included rice milling and paddy thrashing (with initial capital investments supported by the project²¹), goateries, shopkeeping and one tent business.

In addition to reported improvements in household income, respondents were also citing significant reductions in farm expenditures. Examples included the production and use of organic fertilizer and biopesticides (in place of chemical alternatives), the use of organic/own seeds and new seed treatment methods (in place of purchasing pre-treated seeds), the application of line sowing techniques (in place of broadcasting methods which require more seed inputs), and the adoption of dryland agriculture for

²⁰ Likely because project beneficiaries from all 10 WtRF villages in Jalgaon Jamod block (Maharashtra) are also participating in CARE India's "Climate Change Adaptation of Women Smallholder and Cotton Producers", or CCACP, project. For more information, see <https://www.careindia.org/project/climate-change-adaptation-women-smallholders-cotton-producers-vidarbha-region-india-ccacp/>.

²¹ For example, 20,000 INR was provided to SHGs in Kodekela (Jashpur) to start a rice mill.



kitchen gardens (enabling households to grow their own vegetables in place of purchasing). Labour costs were reportedly also lower as a result of the adoption of less labour intensive methods (SRI) as well as the formation and strengthening of SHGs that began trading labour amongst their membership. Heeding weather advisories was also helping to reduce agricultural input losses as farmers reported not applying fertilizers, pesticides or herbicides if there was a chance of rain as it would get washed away.

4.3 Water Availability and Reliability

While there is evidence of improvements in water availability and reliability over the course of Phase III activities in CG, conflicting evidence exists regarding the degree of this improvement. In 2017 (baseline), water scarcity was reported by 77.5% of sampled households in Jashpur district²². In 2019 (endline), 38.2% of respondents were reporting an increasing trend in water availability (as compared to past years), while 42.6% were reporting no change. However, when asked how many days households went without water in 2019, an overwhelming 66.7% of respondents from Chhattisgarh were without water from their primary source for over 30 days (Figure 2)²³. In sum, while some evidence exists in favour of improved water availability in Jashpur, water scarcity is still a significant challenge for the area.

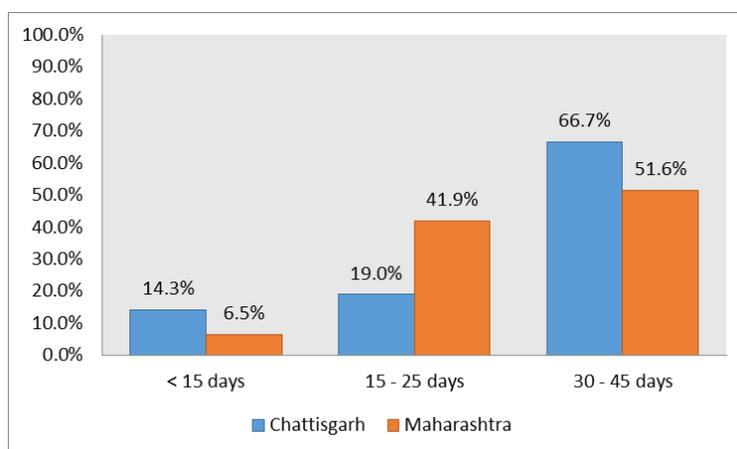


FIGURE 2. NUMBER OF DAYS WITHOUT WATER REPORTED BY WTRF BENEFICIARY FARMERS IN CHHATTISGARH AND MAHARASHTRA STATES

In Maharashtra, results regarding water availability were inconclusive given recent flooding events which significantly skewed survey data towards dramatic increases in water availability. During the dry season months of April, May and June however, 51.6% of respondents in Maharashtra reported going 30 – 45 days without water from their primary source while 41.9% reported going 15 – 25 days without water.

In sum, despite incremental improvements in targeted areas of CG and MH states, water availability and reliability is still of significant concern in these regions. This is the reality of rainfed agriculture in parts of the world subject to severe and increasing rainfall variability year-on-year. It is perhaps beyond the limits of CBA and incremental change processes alone to improve these conditions at household

²² Although no definition or measure of “water scarcity” was provided and as such results may have been reported inconsistently across respondents.

²³ No baseline data available on number of days without water.

and community scale through small scale rainwater capture systems. What is needed rather are more systematic and transformative improvements, innovations that can withstand seasonal and temporal variability. The challenge however is that such “transformation” requires: (i) time; (ii) the ability to take and absorb risks (which most poor smallholder farmers cannot do and most donors are not interested in); and, arguably, (iii) higher capital investments in hard assets (e.g. irrigation systems, solar pumps, greenhouses, food processing facilities, etc).²⁴

4.4 Women’s Mobility, Voice and Agency

The overwhelming narrative from women and women’s groups involved in WtRF – across CG and MH – is one of increased mobility, respect and independence. Where it was cited that previously women did not meet, nor participate in local decision-making processes, nor rarely leave the house, women are reporting progress in all three areas (Box 1). On average, 77% of female respondents reported a moderate to significant increase in their involvement in community-level planning and decision making since before the project through structures such as Gram Sabha and Panchayat meetings (85% in CG and 61% in MH). Furthermore, while 84% of female respondents reported a moderate to significant increase in confidence to raise an issue at a public forum (88% in CG and 77% in MH), 91% were also confident that the issue would be addressed (98% in CG and 74% in MH). This indicates that women are not only raising their voices more, however they are also being heard. While 2017 data from CG suggested that women were already actively engaged and participating in Gram Sabha (70.7% of female respondents participated while 73.3% of those participating also actively raised issues for resolution)²⁵, results from Maharashtra are particularly impressive in this regard as qualitative data from the baseline report suggested that “*Gram Sabha Meetings [were] not held regularly in the village. The villagers were not acquainted or aware with the power of Gram Sabha*”.²⁶

4.5 Climate Informed Agricultural and Development Planning

Two distinct features of Phase III activities in India as compared to earlier phases of WtRF included a focus on improved (i) access,

BOX 1. IN THEIR OWN WORDS

“Pehle samooh mein bhi ikkate hote te toh purush log haemin mana karte the. Abhi bahut der tak meeting mein baitne se bhi kuch nahi bolte”

Earlier even if we women were in a group, our husbands would not allow that. Now even if we get late during meetings, they don’t say anything.

~ FGD Kodekela, Jashpur District

Men of our house have also started giving us more respect as now if we need some money urgently for farming or if some family member falls ill, we use the money that we have saved in the group. We now don’t need to borrow from outside.

~ FGD Batura Bahar Village, Jashpur District

“Pehle hum angoota lagate the. Abhi hum naam likhna seekh gaye hain”

Earlier we used to give our thumb impression. Now we have learnt to write our names.

~ FGD Pandri Pani Village, Jashpur

Now we have savings which we didn’t have earlier. We lend among ourselves and we also lend it to outsiders. So, our family has started taking us seriously.

~ FGD Silipakahana Village, Jashpur

“Abhi hamare aadmi bartan bhi dho dete hain, jadoo bhi laga dete hain”

Now the men also wash utensils and sweep the floors.

~ FGD Jabla Village, Bagicha

²⁴ Boardley, S. and D. Pallen. 2018.

²⁵ In 2017 in CG project beneficiaries would have already been working with the WtRF project for 4 years, since 2013.

²⁶ XIDAS, 2017. Baseline Study Report Where the Rain Falls Project III (WtRF) Buldhana, Maharashtra. Report prepared for CARE India by Xavier Institute Of Development Action and Studies (XIDAS), December 2017.

understanding and use of climate and weather information; and (ii) climate resilient development planning through strengthening of local decision-making and planning institutions and processes.

Evidence of improved access, understanding and use of medium range weather forecasts²⁷ for purposes of agricultural planning and decision-making is strong. In CG, 80.0% of survey respondents reported a moderate to significant increase in their access to, and understanding of, climate and weather information. Members of SHGs and VDCs reported receiving medium range weather forecasts primarily via SMS, Whatsapp, and word-of-mouth (from family, other SHG members, CARE India or implementation staff). While some women reported that they were illiterate or that it was their husbands' who received this information directly, the implication of this imbalance was not clear as both men and women equally reported accessing and using meteorological and agro-advisory information.

Under Phase III activities in Chhattisgarh, CARE India introduced a popular CARE tool known as Participatory Scenario Planning, or PSP. Developed under CARE International's Adaptation Learning Programme (ALP) for Africa between 2010 – 2017, PSP is a "*multi-stakeholder approach designed to enable access to, and understanding and collective interpretation of, seasonal climate forecasts and associated uncertainty into locally relevant information that is useful for decision making and planning.*"²⁸ While still a relatively new tool particularly outside of Africa, the ultimate objective of PSP is to facilitate a regular, multi-stakeholder, two-way forum whereby seasonal climate forecasts and associated uncertainties are **co-developed** and **collectively interpreted** between climate information providers (e.g. meteorologists, traditional/local forecasters), users (e.g. communities, farmers) and intermediaries (those who can help link users to service providers – e.g. agricultural extension departments, research organizations and universities, NGOs, CBOs, media outlets, etc). Box 2 presents the core objectives and guiding principles of PSP as originally intended.

²⁷ In India, medium range (5-day) weather forecasts have been produced by the national meteorological agency (Indian Meteorological Department, or IMD) at district-level since 2003. These forecasts include information on predicted rainfall, min/max temperatures, cloud cover, min/max humidity, wind speed and wind direction. This information is disseminated twice weekly to various audiences including agricultural divisions (e.g. Agriculture Departments and Colleges, and KVK) who subsequently develop agro-advisories – also disseminated twice weekly. See Annex III for an example from Korea district in Chhattisgarh State.

²⁸ CARE International, 2017. Practical guide to PSP: Participatory Scenario Planning using seasonal forecasts. Available online: <https://careclimatechange.org/wp-content/uploads/2019/06/Practical-guide-to-PSP-web-1.pdf> (accessed 17th December 2019).

Box 2. Participatory Scenario Planning (PSP) Objectives:

1. Continuous access to and collective interpretation of seasonal climate forecasts and associated uncertainty
2. Two-way climate communication that respects, reviews and combines knowledge from local actors, including different communities, and sectoral service providers
3. To develop climate-informed plans, strategies and actions to enhance climate resilience in all livelihoods, sectors, and development processes
4. Iterative learning and dialogue to continuously co-develop climate information services that are responsive to users' changing decision-making contexts
5. Creating links between actors and advising on their collaboration and coordination to deliver user-based climate services

PSP Principles:

Principle 1: Involve all relevant stakeholders, recognising their roles and utilising their specific knowledge and capacities to enable a participatory process that is responsive to user needs.

Principle 2: Conduct PSP workshops as soon as seasonal forecasts are available from national meteorological services.

Principle 3: Multi-stakeholder interaction, dialogue and co-production of information with scientists, communities and other stakeholders is vital for designing and developing relevant and user-based climate information services.

Principle 4: Communication, understanding and interpreting climate probabilities and uncertainty is essential for flexibility in decision making on adaptation and resilience.

Principle 5: Apply user experiences and results from previous seasons for reflection and iterative learning and to inform discussions during PSP workshops, development of advisories and plans for the coming season.

Principle 6: Advisories should be presented as options, rather than instructions, to encourage actors to make their own decisions and take actions relevant to their local contexts.

Principle 7: Communication of advisories should be inclusive, reaching all genders and groups, local governments, organisations, private sector and other users within the chosen geographical level. Timely communication of advisories is critical to empower stakeholders to take appropriate action.

Under WtRF Phase III, PSPs in Chhattisgarh²⁹ would appear to have been an output-oriented activity with limited evidence of co-generation, collective interpretation, iterative learning or broader institutional interest or uptake. The process would appear to have been led by CARE India and the result a set of prescriptive and identical wall murals painted in WtRF villages of Jashpur (Figure 3). While wall murals were cited by FGD participants as useful in providing general agricultural advice based on five generic rainfall scenarios – e.g. average, less than average, above average, flood and drought, there was no evidence of any deeper internalization of the PSP process, its utility, effectiveness or sustainability amongst key PSP actors. While the PSP wall mural had been washed off in one village visited following recent Diwali celebrations, key informants from the India Meteorological Department and block-level agricultural extension services were either unaware of PSP or their knowledge was limited to only the information presented on the wall murals themselves. This suggests either their role in PSP development, or their understanding of its dynamic, continuous, interactive and iterative purpose, was limited. Either way, the likelihood of sustainability of both the wall murals and the PSP process itself would appear limited.

²⁹ PSPs were not conducted in Maharashtra.

Similar to the PSP tool, the impetus for Community Action Plans (CAPs) as a catalyst for good CBA also emerged from ALP.³⁰ Under ALP, the purpose of CAPs (also known as Community Adaptation Action Plans, or CAAPs) was not only to ensure development plans, priorities and activities were resilient in the face of increasing climate risk and uncertainty, but more generally, also to introduce and sensitize communities to the relevant policy tools available to them to resource, finance, and advocate for their own local (climate resilient) development priorities. Importantly then was the placement of CAPs within broader bottom-up, participatory, community-based planning processes. For many countries, where decentralization processes are either new or still evolving, community-based planning is still a rather foreign concept despite being at the heart of decentralization. In ALP countries, CAP planning processes and CAPs themselves were viewed as helpful tools by both communities and local level governments as CAPs serve to streamline their own consultation and medium to long-term development planning processes.

While CAPs were completed for all 50 Phase III communities, evidence of their deeper integration within broader development planning processes and budgets is limited. In particular, CAPs were developed to accommodate project timelines (e.g. 18 months in Maharashtra and 3 years in Chhattisgarh) as opposed to broader district-level development planning timelines (often every 5 years). As such, CAP priorities identified resembled more project-based work planning activities such as “*training on climate change during group meetings*” and “*showing documentaries on agriculture, forestry and nutrition elements*”³¹. In Maharashtra, where CAPs did appear to include broader development priorities (e.g. roads, digging of wells), the integration of these plans and priorities within broader development planning structures (beyond project structures) was not clear. While some beneficiaries were able to report that a CAP had been completed, few were able to discuss the details of the plans, particularly in Maharashtra State. In sum, while some VDC members cited using CAPs as a means to request budgets and advocate for local development priorities, and some were even successful in their requests, the integration of CAPs within higher planning and decision-making structures (e.g. at Ward or Block-level for example) was not clear. Without this integration, the incentive for sustainability of the CAP planning process is unlikely.



FIGURE 3. A PSP WALL MURAL FROM KHARKATA VILLAGE, PATHALGAON BLOCK IN JASHPUR DISTRICT. THIS MURAL PRESENTS 5 SEASONAL SCENARIOS WITH CORRESPONDING AGRICULTURAL ADVISORIES AND PRECAUTIONARY MEASURES.

³⁰ CARE, 2015. Adaptation Planning with Communities: Practitioner Brief 1. Available online: <https://www.weadapt.org/knowledge-base/adaptation-learning-programme/adaptation-planning-with-communities> (accessed 17th December 2019).
³¹ CAP, Majhagaon village, Bagicha block, Jashpur district, Chhattisgarh State.

4.6 Summary and Recommendations

Overall, findings from Jashpur district (CG) suggest improvements in most key CBA and resilience building outcome areas while findings from Buldhana district (MH) present valuable insights about scaling CBA. Given the long tenure of project-related activities in the project villages of Chhattisgarh state (since 2013), outcomes reported in Jashpur district are understandably stronger than in Buldhana where scale-out activities were limited in scope and have only been ongoing for 18 months (since May 2018).

In Chhattisgarh, as compared to before their involvement in the WtRF project (2013), project respondents perceived a moderate to significant improvement in agricultural productivity (60.0% of respondents), food availability (74.7% of respondents), water availability and reliability (58.7% of respondents), access to savings and credit (84.0% of respondents) and their ability to recover from extreme climate events such as drought and flood (72.0% of respondents) (Figure 4). Qualitative data suggests that the combination of reduced household expenditures described in Section 4.2 and improved access to group savings through SHG membership contributed strongly to respondents feeling they could better cope and recover from future extreme weather events. Survey data however indicates that household losses, resulting from drought, flood, and heavy rainfall, are still of paramount concern with only 13.3% of respondents reporting a perceived moderate to significant reduction.

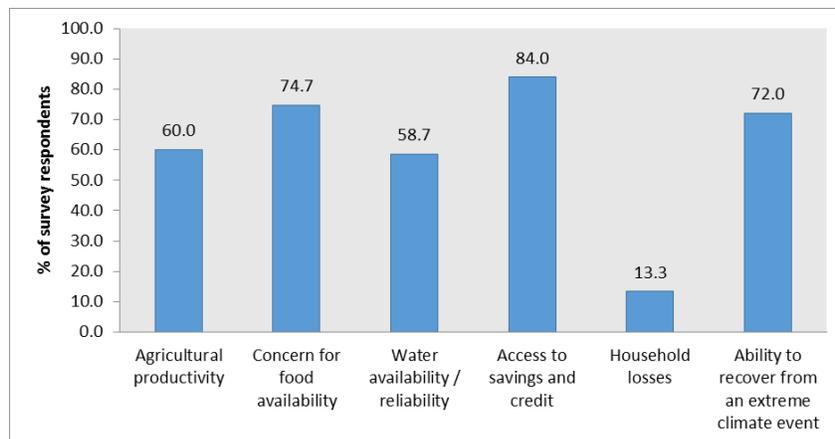


FIGURE 4. PERCENTAGE OF SURVEY RESPONDENTS IN JASHPUR DISTRICT (CG STATE) REPORTING A PERCEIVED MODERATE TO SIGNIFICANT IMPROVEMENT IN KEY OUTCOME AREAS

In Maharashtra, limited improvements in water availability and reliability as reported by household survey respondents (22.6% of respondents reported a moderate to significant improvement in this area) and FGDs, suggests that scale-out efforts to improve water resource management in targeted communities was not effective. This is a function of at least two important factors: (i) different soil profiles in MH meant that 5% models were ineffective; and (ii) other efforts targeting the improvement of community water structures were overwhelmed by the immensity of water challenges in the area. The former suggests careful consideration of local geography and hydrology in the selection of targeted communities for scale-out of natural-resource based activities. The latter suggests the limits of small-scale CBA efforts in addressing severe drivers of climate risk and vulnerability, and the need for larger-scale, systematic and transformative innovations when it comes to water security.

Where scale-out efforts in Maharashtra were most successful was in strengthening resilience to climate risk through improvements in access to savings and credit. An overwhelming 92.3% of survey

respondents in MH reported a moderate to significant improvement in access to savings and credit. This result was despite only 18 months of project activities. This result is also in line with findings from other CBA evaluations regarding the effectiveness of village savings and loans structures in improving community members access to financial and social capital. The role of social and financial capital, and their relationship to absorptive capacity and the ability to ‘bounce back better’ following a major climate event, is critical to building climate resilience and is discussed further in Section 6.

In terms of capacity, in Jashpur district, the reported improvements in beneficiaries’ knowledge, understanding and awareness of key areas, at endline as compared to before their involvement in the WtRF project, is impressive (Figure 5). Most notable improvements are in the areas of climate change and climate impacts, and climate and weather information, with 80.0% of survey respondents perceiving a moderate to significant increase in their knowledge, understanding and awareness of these topics. In MH, results suggest that scale-out activities around improving climate literacy and awareness raising were effective with 71.0% of survey respondents reporting a moderate to significant improvement in their knowledge and understanding of climate change and its impacts. This result suggests that the projects’ climate literacy module is effective and can be used as another ‘quick win’ CBA activity for scale-out to other communities.

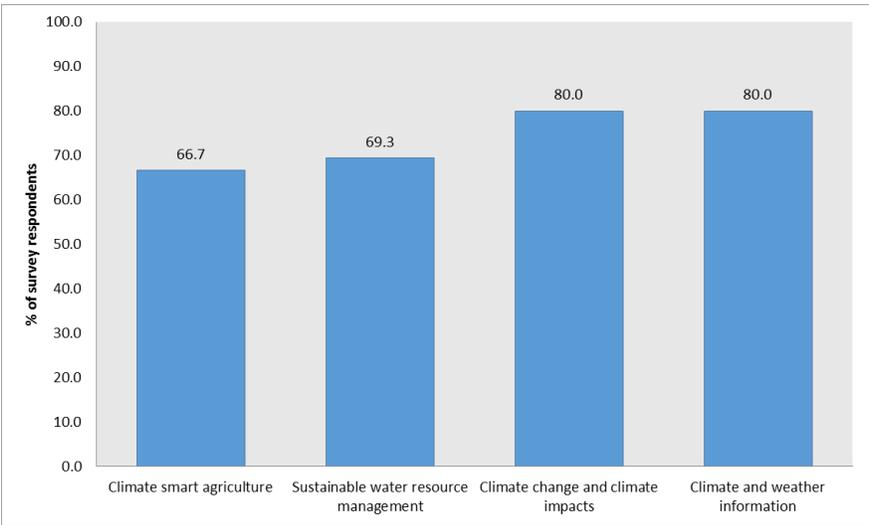


FIGURE 5. PERCENTAGE OF SURVEY RESPONDENTS IN JASHPUR DISTRICT (CG STATE) REPORTING A PERCEIVED MODERATE TO SIGNIFICANT IMPROVEMENT IN THEIR UNDERSTANDING, KNOWLEDGE AND AWARENESS OF KEY THEMATIC AREAS

In sum, based on the evaluations’ findings from India elaborated herein, the following lessons learned and recommendations emerge for CARE India’s future CBA work:

1. Unsurprisingly, effective and sustainable adoption of SuPER agricultural methods appears to be primarily a function of cost considerations. Those methods with the highest adoption rate – namely organic methods, line sowing, SRI and mixed agriculture or inter-cropping as a risk mitigation strategy – require no upfront investment and present both opportunities for increased household income (e.g. from increased yields or number of agricultural products) and/or reduced expenditures (e.g. on chemical or synthetic inputs, for example). In order to improve the uptake and accessibility of other CBA interventions that, in the absence of project support, require investment (e.g. 5% model), the selection of such interventions should be tied to those

where government support or subsidy is available³². In this case, project investments would act as a demonstration to incentivize community members to pursue on their own initiative. Community water improvement grants offered through Thailand's national Hydro and Agro Informatics Institute (HAI) – discussed in Section 5.3 – is a good example of targeting project support towards improving communities' access to government funding opportunities (not just, government services).

2. Improvements in the contributions of small business activities of SHG members supported through WtRF to household income are exceptional. Project support to cover capital start-up costs of women's small business activities (e.g. rice mill) would appear to be a clear and obvious 'win-win' for both donors and beneficiaries in increasing climate resilience outcomes through increased availability of economic assets.
3. Women's SHGs are central in (i) improving women's access to both financial and social capital; (ii) reducing non-climate drivers of risk and vulnerability such as gender inequality; and (iii) improving women's access to knowledge and information including weather information, agro-advisories, and seasonal forecasts. As all three achievements are critical inputs towards building adaptive capacity and increasing climate resilience (see Section 6 for a fuller discussion on this), and given the 'quick-win' associated with achieving both (i) and (ii) in MH, CBA scaling efforts would do well to continue to target and prioritize working through SHGs.
4. Scaling CBA activities that had been refined by years of implementation in Jashpur to an entirely different State was ambitious. Given distance from Jashpur district, a new implementing partner had to be identified and on-boarded resulting in start-up delays. Geographic differences in soil profiles between the two districts means that agricultural products grown and economic drivers and incentives around these products (e.g. rice versus cotton) are quite different. While scaling efforts in MH provide some important lessons learned (see Recommendation 3 above), an (unsuccessful) proposal to secure additional funds for Phase III had suggested scale-out efforts in neighbouring districts of Jashpur (e.g. Janjgir Champa, Korba, and Sarguja districts). In hindsight, scale-out to districts with more similar geographies and economies may have proven more sustainable, or at minimum, with less start-up delay.
5. Although excellent results achieved in improving access, understanding and use of climate and weather information in CG, the use of key CARE CBA tools such as PSP and CAP were not optimized. This evaluation suggests that more direct technical support, coaching and one-on-one support services should be made available to country teams interested in applying these tools. Given staff turnover at CARE France together with their limited climate change project portfolio at the time, and with the formation of CARE's newly established Climate Change and Resilience Platform (CCRP), this support is best to be offered directly through the CCRP.
6. While rainfed agriculture is inherently risky, CBA of rural, subsistence-based agricultural systems has its limits in delivering transformative change. Despite incremental improvements in water availability and reliability under the project over several years, water insecurity remains a significant threat. While small-scale improvements at household and community scale must continue, transformative change must be systemic and must target the broader decision-making structures and processes of the enabling environment. Given the scale and complexity of climate change as a driver of significant risk for rural livelihoods in India, advocacy, evidence-

³² In India, a number of different agricultural supports and subsidies exist from government.

based policy influence, research and partnership should be central pillars of all CBA initiatives moving forward.

7. Finally, the elaboration of a robust, transparent and consistent adaptive capacity index (ACI) appears to have been a missed opportunity for CARE India's contribution to the broader CBA landscape (see Section 3.3 for more on CARE India's attempts to detail an ACI). As compared to other countries, the ability and willingness of households to share sometimes sensitive household data and information, combined with the proliferation of research companies and data collection / survey services in India, the ground would appear fertile to test and pilot a demo ACI or some equivalent thereof. The challenge however, as inherently understood by the adaptation and resilience communities and as observed under WtRF, is in the methodological design and development of the index itself. For this, it is recommended that an international expert panel be convened – perhaps through joint leadership of the CCRP³³ and CARE India.

5 FINDINGS FROM THAILAND

Smallholder agriculture in northern Thailand has been undergoing rapid land use intensification and diversification since the 1980's. Historically in Chiang Mai province, paddy rice accounted for 77% of cultivated land use while permanent crops (e.g. fruit trees) accounted for just 9%³⁴. Today, while paddy rice has dropped to near 34% of cultivated land use, permanent crops have increased to 44% in the same period³⁵. Diversity of crops grown, including vegetable and permanent crops, has also increased significantly in this time³⁶. This diversity was apparent at both farmer and community level in the project area with each farm adopting its own cropping pattern, growing a variety of crops for both household consumption and income. In general however, rice remains the primary food source for all households while maize and beans are the primary income crops in Mae Chaem and Kalayaniwattana respectively³⁷.

WtRF Phase III activities targeted 21 communities in two districts (Mae Chaem and Kalayaniwattana districts) of Chiang Mai province, northern Thailand (Table 5). Of the 21 communities targeted, 11 had participated in earlier phases of WtRF whereas 10 'new' communities were selected for scale-out activities. Similar to earlier WtRF phases, the project targeted marginalized ethnic forest hill tribe communities, namely Karen speaking. The priority for Phase III was two-fold: (i) to consolidate learning from earlier phases; and (ii) to replicate the approaches to neighbouring communities (e.g. scale-out). The scale-out model developed by the project followed a 'peer-to-peer' learning approach and involved the formation of a group of established community based adaptation facilitators (CBAFs) at either sub-district (Tha Pha and Mae Suek sub-districts in Mae Chaem district) or district-level (Kalayaniwattana District³⁸). As a group, CBAFs were responsible for facilitating CBA planning and other activities with 'new' Phase III communities and had been selected for their experience supporting their own

³³ KIIs with CCRP staff as part of this evaluations suggests that the elaboration of robust resilience metrics is of current and ongoing interest to the organization.

³⁴ Jiang et al., 2007.

³⁵ Ibid.

³⁶ Ibid.

³⁷ In Tha Pha subdistrict Mae Chaem however, it is noted that other income crops include red onion, pumpkin, cabbage and peanut.

³⁸ CBAFs convened at district level in Kalayaniwattana due to the small size of the district.

communities in such endeavours as part of previous WtRF phases. The implementation model for Phase III activities is conceptualized in Figure 6.

TABLE 5. WTRF TARGETED COMMUNITIES (COMMUNITIES IN GREY SHADING REPRESENT 'NEW' COMMUNITIES TARGETED UNDER PHASE III ONLY, N = 10)

District	Sub-District	No.	Community	Phase I (2012 – 14)	Phase II (2014 – 16)	Phase III (2017 – 19)
Mae Chaem	Mae Suek	1	Huay Bong		X	X
		2	Huay Pak Kood			X
		3	Sob Mae Sa Tob			X
		4	Na Klang Nua			X
	Tha Pha	5	Sam Sob Bon	X	X	X
		6	Yang San		X	X
		7	Sam Sob Lang		X	X
		8	Ban Klang		X	X
		9	Pha Kaw		X	X
		10	Mae Kong Ngon			X
		11	Na Ruan-PaNad			X
Kalayaniwattana	Chaem Luang	12	Mae La Oob	X	X	X
		13	Chaem Luang		X	X
		14	Kiew Pong			X
		15	Huay Ba Ba			X
	Ban Chaan	16	Na Kled Hoi			X
		17	Chaem Noi	X	X	X
		18	Huay Kroke		X	X
		19	San Muang		X	X
		20	Ban Chaan			X
		21	Pong Khaw			X

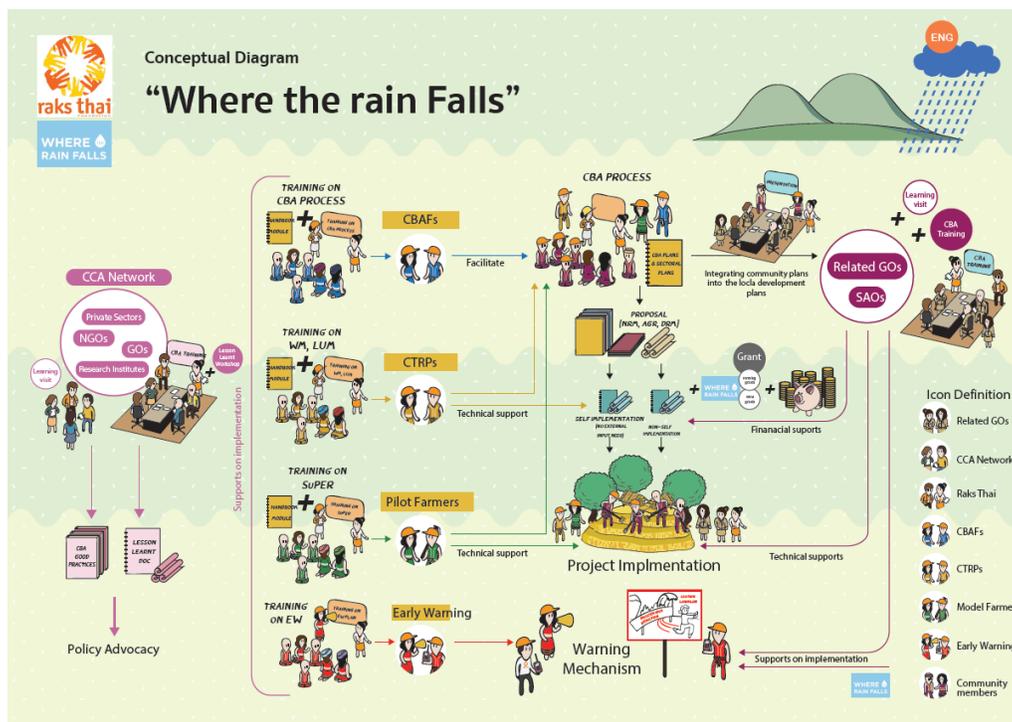


FIGURE 6. CONCEPTUAL FRAMEWORK FOR WtRF PHASE III IN THAILAND (SOURCE: WtRF PHASE III THAILAND SEMI-ANNUAL REPORT #1, JULY – DECEMBER 2017)

This section highlights detailed evaluation findings from WtRF activities in Thailand. As for India, evaluation findings have been organized by predetermined key outcome areas, with the addition of land security and forest rights.

5.1 Agricultural Methods and Productivity

In Thailand, the implementation model for promoting sustainable, productive, equitable and resilient (SuPER) agriculture was primarily through support to pilot farmers. As part of WtRF activities, beneficiary communities were provided grants to identify and support on average 4-5 pilot farmers. Activities to be piloted were selected according to the agricultural priorities of each community³⁹, and most prominently included organic and mixed agricultural methods, agroforestry, and integrated farming⁴⁰. Most of these methods are currently being applied to higher-value crops (e.g. fruit trees, coffee, rattan and bamboo). Table 6 below provides a summary of the projects’ pilot farmer sub-grant investments⁴¹.

³⁹ WtRF Phase III Thailand – Semi Annual Report, July – December 2017.

⁴⁰ In Thailand, integrated farming is about optimizing farmland planning and management systems. This includes using a systems-based approach to productivity and risk management by practicing diverse activities across a single farm. Activities may include any combination of rice (upland or paddy), cash crops, off-season crops, animal husbandry (e.g. chickens, pigs, cattle), permanent crops (e.g. fruit trees) and water resource management uses (e.g. earthen ponds).

⁴¹ Table modified from WtRF Phase 3 Thailand Semi-Annual Narrative Report #4, July – December 2018, p. 11

TABLE 6. WTRF PILOT FARMER SUB-GRANT INVESTMENTS FOR SUPER AGRICULTURE (COMMUNITIES IN GREY SHADING REPRESENT 'NEW' COMMUNITIES TARGETED UNDER PHASE III ONLY, N = 10)

District	No.	Village	Total no. of pilot farmers	WATER SYSTEM					OTHER INPUTS		
				Ponds	Additional installed water holding capacity (m ³)	Water pipe (m)	Check dams	Plant nursery	Organic fertilizer (knowledge & materials)	Fish	Henhouse w/ chicken breeder
Kallaya	1	Chaem Noi	19		12				1		
	2	Mae La Oob	5					1	1	1	
	3	Chaem Luang	7	1	8					2	
	4	Huay Kroke-	6						1		
	5	San Muang									
	6	Huay Ba Ba	5	1	24	1500	1		1		
	7	Pong Kao	5	1	8				1	2	
	8	Kiew Pong	5		8				1	500	
	9	Baan Chan	5		8				1		
	10	Na Kled Hoi	5		8				1		
Mae Chaem	11	Sam Sob Bon	5					1			
	12	Sam Sob Lang	5					1	1		
	13	Ban Klang	3					1	1		
	14	Pha Kao	1								
	15	Yangsang	5		18	300		1			
	16	Huay Bong	5		18			1	1	1	
	17	Mae Kong Ngon	4		18			1	1		
	18	Na Ruen	3		18			1	1	1	
	19	Huay Pak Kood	5		18			1	1	1	
	20	Na Klang Nue	5		18			1	1	1	
	21	Sob Mae Satob	4		18			1	1	1	
Total			107	3	202	1800	1	11	16	500	11

Long lag times associated with agroforestry activities (4-5 years) and mixed agriculture (3-7 years from grafted seedling or seed respectively) meant that Phase III pilot farmers had yet to record any economic gains from their pilot farm activities. As such it is too early to assess the effectiveness of Phase III pilot farms on improving farm or community-level agricultural methods and productivity in the target area. However, evidence from pilot farmers in Chaem Noi who have been supported by the WtRF project since 2012, suggests that agroforestry models there have been highly successful and are contributing to improved productivity and reduced climate vulnerability in the area. While 12 pilot farmers have been supported by the project to improve farm design (through the adoption of “multistorey forests”, upland earthen ponds for irrigation and fisheries activities, and riparian zone management), these activities have been adopted in whole by an additional 27 non-targeted farmers, and in part by

numerous others (e.g. earthen ponds and riparian zone management only)⁴². In addition to the success stories from Chaem Noi, key informant interviews with Phase III pilot farmers suggested they were optimistic both in their ability to capitalize and earn from these activities in future, and to share their knowledge and experience as a model for other interested farmers. Direct observation of pilot farming activities suggests that RTF and communities did well to select highly disciplined and well respected farmers with good likelihood of success to serve in these critical roles in future.

While it is too early to assess the effectiveness of the projects' Phase III pilot farmers model, two key barriers to broader community uptake were observed. The first was the high input costs of fruit tree saplings noted by even pilot farmers who were grateful for project support in helping to meet these costs. While pilot farmers are typically strong, disciplined farmers selected for their ability to absorb risk and their likelihood to succeed in piloting efforts, they are often not the poorest nor most vulnerable. The high input costs associated with some mixed agriculture and agroforestry activities may prove cost prohibitive for uptake by broader community participants. In Bangladesh, as part of the WtRF implementation arrangements, efforts to reduce or minimize this risk included the adoption of a systematic farmer-to-farmer extension model that included primary, secondary and tertiary beneficiary farmers. In this model, primary farmers acted as demonstration farmers receiving both inputs/materials and training. These farmers were subsequently responsible for transferring new knowledge and skills (no inputs) to secondary farmers and secondary farmers to tertiary farmers. Results from the endline evaluation of Phase III activities in Bangladesh suggested that the farmer-to-farmer extension approach contributed significantly to the diffusion of adaptive capacities and scale-out of SuPER methods through a more rigorous and structured demonstration effect⁴³. Currently in Thailand, replication of piloted methods or agricultural approaches would appear unlikely amongst the poorest and most vulnerable due to the limited investment potential and risk tolerance of these groups.

The second barrier is the lack of market for higher value agricultural products. While there is a large market demand for these products in larger cities, supporting mechanisms required to access these markets (e.g. post-harvest storage, transportation, financial support and other) are limited in the area. In the case of organic produce, a shorter shelf life for many crops means that organic produce does not travel well. This necessitates either timely transportation from 'farm-to-table' in larger cities (and the necessary logistics management support structures in place) or the proximity of a local market for such goods – neither of which currently exists in the target area. While a market for coffee was evident, one pilot farmer in Sam Sob Bon suggested that the market was not strong enough to incentivise him to harvest his albeit limited coffee yields. As the coffee harvest takes place at the same time as the rice harvest, and rice is the primary

"We have coffee but we don't have time to harvest it...this village is very busy. [We] often work day and night because of the cash crop and debt cycle. ..Women here do not even have time for textile weaving."

Paisarn Ramampai, pilot farmer, Sam Sob Bon Village
(Mae Chaem)

⁴² Agroforestry for Watershed Restoration / Protection. Presentation by RTF to 8th ASEAN Working Group on Social Forestry (AWG-SF) Conference. Da Nang, Vietnam. 26th June 2018.

⁴³ Samsuzzaman, S., Ahmed, M., Mustari, J. and S. Hossain. 2019. Where the Rain Falls (WtRF) Phase III Final Evaluation Report. Bangladesh. June 2019. Available online: <http://careevaluations.org/evaluation/where-the-rain-falls-wtrf-phase-iii-final-evaluation-report-2/> (accessed 15th January 2020).

source of food security, and in some ways cultural identity for the Karen people, the ability to divert time away from the rice harvest was a risk even pilot farmers could ill afford. Furthermore, the costs associated with post-harvest processing, storage and transportation were too high relative to the pilot farmers' currently small yield to warrant the harvest and post-harvest efforts necessary. Notably, in 2018, Sam Sob Bon became home to a sub-district wide coffee project centre set up to provide a place for coffee growers to: (i) produce inputs (e.g. seedlings, compost and bio-pesticides), (ii) process coffee berries, and (iii) meet, collaborate and collectively plan activities⁴⁴. While still very early in its implementation, RTF did well to support the coffee project's proposal in an effort to strengthen local market mechanisms for coffee.

5.2 Household Income and Expenditures

Evidence for project contributions in reducing household expenditures is good but at times conflicting. Respondents in Mae Kong Ngon village (Mae Chaem) reported reductions in household expenditures related to the purchase of both food and water as a result of kitchen gardens and improved water systems respectively. While one women's collective reported reduced expenditures as a result of training in the production of liquid soap (Kiew Pong), another collective suggested that this activity had ceased as a result of the lack of availability of key materials (Huay Baba). Given recent and rapid increases in cost of living in Thailand, annual agricultural losses associated with climate variability, pests and disease, and in Mae Chaem, the cash crop debt cycle prominently stated by many, it is likely that project-related reductions in household expenditures represent only a small savings to beneficiary households.

Despite such financial hardships, interestingly, some of the project activities targeting household level income and expenditures over the long term are demonstrating outcomes in other areas recognized as contributing to increasing resilience. For example, while evidence of kitchen gardens and household financial trees (used as part of the gender dialogue events, see Section 5.4) in reducing household expenditures was heard, kitchen gardens were also noted to contribute to the diversity and nutritional value of foods being consumed at household level. An increasing awareness of the hazards of chemical agriculture and benefits of both growing and consuming organic foods was also noted as a number of respondents commented on their growing interest and ability to eat organic. Similarly, liquid soap making activities in some communities are reportedly contributing to improved health and hygiene outcomes. The combined result would appear to be overall improvements to community and household-level food security, health and hygiene.

As discussed in Section 5.1, the potential for additional income to be earned by Phase III pilot farming activities holds promise however is as yet unclear. While this is primarily a result of the recent initiation of these activities and long lag times associated with the selected activities, market barriers and limited access to appropriate markets are consistently cited throughout project documentation as a significant challenge. While a number of measures to strengthen market mechanisms in the target area were noted⁴⁵, these would appear to have been implemented on an ad hoc, reactionary basis, rather than in any sort of structured or systematic manner. The lack of a comprehensive market analysis or business

⁴⁴ This project is funded through the Thai Niyom Policy in the amount of 300,000 THB. Source: WtRF Phase III Thailand Semi-Annual Narrative Report, July – December 2018.

⁴⁵ These include efforts to adopt and promote a Participatory Guarantee System (PGS) for organic produce as well as efforts to develop a sub-district wide coffee centre in Sam Sob Bon (Tha Pha sub-district, Mae Chaem)

plan for new agricultural products is a notable gap. This echoes evaluation findings and recommendations from earlier phases in Thailand⁴⁶ suggesting that Phase III activities were insufficient in this area.

Finally, the impacts of intensive cash crop activities and the associated debt load of households in target communities (particularly those in Mae Chaem district) emerged as a reoccurring theme from both FGDs and KIIs. This was particularly the case in Mae Chaem district where the majority of households would appear to be reliant on cash crops as their primary source of income. The reality is that the challenges faced by households so dependent on cash crops are unlikely to be resolved by incremental improvements in other, less significant, sources of income or expenditure. What is needed are transformative ideas, interventions and innovations that can upend traditional rural economies of the region. And while such an ask far exceeds the scope of the WtRF project itself, the learnings regarding scale and complexity of strengthening resilience of cash crop economies to climate risks must not be overlooked.

5.3 Water Availability and Reliability

Since WtRFs' first CBA implementation phase in Thailand, the primary focus has been on improving communities' understanding and availability of local water resources as a means to improve adaptive capacity. Using participatory approaches, RTF worked closely with community leadership to identify and map community water resources, discuss management challenges, and develop a water resource management plan. Following approval of the plan by community members themselves, RTF staff helped to link community plans to government agencies with funds available for community water improvement projects.

Evidence from Kalayaniwattana district demonstrates impressive results from this planning and project development process. On average, 'new' Phase III communities in Kalaya were able to mobilize 600 THB for every 100 THB invested by the project. While 'new' Phase III communities in Mae Chaem district have not been as successful as yet, evidence again from Kalaya suggests that building community's capacity to plan, develop and finance their own water development priorities takes time. In Kalaya, four out of five 'old' communities that received project funds in 2016 were only beginning to successfully leverage external finances beginning in 2018. Although reasons cited for the inferior performance of Mae Chaem district communities' in leveraging external finances were attributed to both lack of time and capacity, the short implementation period available for Phase III activities may also be considered a limiting factor.

⁴⁶ The final evaluation report for the 2014 – 2016 phase in Thailand suggested that the project should “*work more closely with producers' cooperatives and traders' associations in the region to ascertain local and regional demand for these products and to devise plans for enabling efficient market access.*” See: CCREST, 2017. Where the Rain Falls Phase III Thailand – Project Evaluation Report. August 2017.

TABLE 7. TOTAL SECURED FINANCES FOR PHASE III WATER IMPROVEMENT PROJECTS

District	Sub-district	Community ⁴⁷	WtRF Phase III Funding (2018)	External Funding ⁴⁸	Leverage Ratio (WtRF: External Funds)	TOTAL Water Improvement Funds Secured
Kalaya-niwattana	Chaem Luang	Kiew Pong	53,340.00	363,615.00	6.82	416,955.00
		Huay Baba	54,825.00	413,437.00	7.54	468,262.00
		Na Kled Hoi	53,000.00	421,970.00	7.96	474,970.00
	Ban Chaan	Ban Chaan	54,000.00	347,800.00	6.44	401,800.00
		Pong Khaw	53,467.00	95,400.00	1.78	148,867.00
Mae Chaem	Mae Suek	Huay Pak Kood	53,140.00	0	N/A	53,140.00
		Sob Mae Sa Tob	53,200.00	0	N/A	53,200.00
		Na Klang Nua	53,200.00	0	N/A	53,200.00
		Mae Kong Ngon	53,140.00	0	N/A	53,140.00
		Na Ruan – PaNad	53,200.00	0	N/A	53,200.00

As a result of community's improved water management systems, beneficiaries were reporting "sufficient water availability for household consumption" and that "water availability had been greatly improved...through provision of water tanks and piped household water connections". Some communities suggested that they were now cultivating kitchen gardens where they could not before due to limited water availability. Kitchen gardens were noted to contribute to improved food and nutritional security, as well as household finances as a result of reduced food-related expenditures.

Despite evidence for improved water availability for household consumption in project-targeted communities, the lack of a systems-based approach to implementation of a water resource management project in a mountainous watershed is considered a significant gap. Providing the headwaters for all major river systems around the world, mountains have been described as the "water towers" of the world, playing a critical role in the hydrologic cycle and resulting water supply for downstream agriculture, energy and industry activities⁴⁹. The Chao Phraya river basin – where all WtRF activities are currently ongoing – is no exception and would appear to have a long history of conflict between highlanders and lowlanders, government and non-Thai ethnic groups⁵⁰. Given concerns raised by at least one downstream WtRF community regarding water availability, the potential for water improvement projects to unintentionally but adversely affect downstream communities must be considered. As upstream communities were not targeted by the project, nor did they fall within the same targeted sub-district, how the project considered broader scale and basin-level flow considerations (e.g. for upstream/downstream multi-use considerations including ecological flow requirements) is not clear. Although community water management plans were presented to the appropriate Watershed Units (under the National Parks Department), these units were unavailable for comment as part of this evaluation in order to better understand their role in cross-jurisdictional water resource governance. As a result it is difficult to assess whether or not this gap was an implementation

⁴⁷ New communities that have only been involved with WtRF project since 2017.

⁴⁸ Sources include both national (Hydro and Agro Informatics Institute, HAI) and provincial government grants.

⁴⁹ Liniger, H. and R. Weingartner. Mountains and freshwater supply. Available online: <http://www.fao.org/3/w9300e/w9300e08.htm>

⁵⁰ Molle, F. 2007. Scales and power in river basin management: the Chao Phraya River in Thailand. The Geographical Journal, 173(4):358-373. December 2007.

oversight (RTF) or rather a function of weak institutions and entitlements (National Park's Watershed Units cross-jurisdictional management across SAOs).

5.4 Women's Mobility, Voice and Agency

Gender dynamics in WtRF communities represent a complex mix of power relations, culture, custom, history and religion. Since Phase I, the project's targeted impact population was "*the most poor and vulnerable male and female smallholder farmers*".⁵¹ Under Phase III however, the project adopted an explicit focus on "*gender equity and women's empowerment*", promising a "*gender mainstreaming approach through ... gender equality and equity, as well as inclusion, and empowerment of 'hill tribe' women towards climate change adaptation*".⁵² Despite this important emphasis as part of project planning documentation, evidence of the project's actual influence on women's mobility, voice and agency is weak.

Phase III activities that targeted gender equity and women's empowerment objectives were minimal. RTF staff suggested that their simultaneous implementation of another project⁵³ strictly focused on women's economic empowerment (WEE) in the same region meant that WtRF gender-related objectives were deferred to this project where more resources could likely leverage stronger results. Under WtRF Phase III, activities targeting gender equality were limited to (i) ensuring women's participation in key project-related activities and trainings; (ii) gender dialogue events and (iii) small grants for women's collectives.

Recruitment and retention of women into technical and leadership roles can be challenging even in advanced economies. In Thailand, expectations regarding women's domestic responsibilities and the need to remain close to home, combined with their limited mobility⁵⁴, proved to be significant barriers to female recruitment into key technical and decision-making roles (e.g. as Field Officers, Community-based Technical Resource Persons, Community-based Adaptation Facilitators). Project monitoring data suggests that on average, 26% of CBAWG members were female and ranged from 0% representation (in 3 communities) to over 40% representation (in four communities). While almost all sub-districts had at least one CBAF (with the exception of Chaem Luang sub-district in Kalaya), the number of female model farmers and CTRPs were only 2 (of 21, or 9.5% of total number of model farmers) and 1 (of 22, or 4.5% of total number of CTRPs) respectively. While the limited number of women in these roles may have limited gender equality results, worse, they may have inadvertently reinforced inequalities by continuing to place men in the driving seat of local development.

Where the project would appear to have had slightly more success was in the recruitment of female participants as part of some major, project-sponsored events, workshops and field visits. This includes 38% female participation at the presentation of CAPs to SAO and other government agencies, 39% female participation as part of a field visit with policy makers and media, and 34% representation at an advocacy and policy dialogue event. Despite these numbers, it is noted that female participation would

⁵¹ Phase I Project Proposal – Thailand, 2012 – 2014.

⁵² Phase III Project Proposal – Thailand, 2017 – 2019.

⁵³ The "*Income diversification and networking opportunities for women farmers in Thailand*" project, funded by Chanel Foundation, was active between 2014 – 2018 and targeted women's groups in 10 WtRF villages in Chiang Mai province. For more information, see: <http://www.fondationchanel.org/en/projet/income-diversification-and-networking-opportunities-for-women-farmers-in-thailand-3/?category=43&pays=th>.

⁵⁴ In targeted villages it was suggested that few rural women could drive or did not feel comfortable travelling outside their community.

appear to be strategic, primarily targeting higher profile events with government, media and other external audiences, and that participation alone does not necessitate gender equality outcomes.

While some evidence from gender dialogue activities suggests an increased understanding in the respective day-to-day activities of each women and men, both women and men suggested these dialogue events “*did not provide any changes*”. Interestingly women also suggested that “*females do not want men to help with the household chores*”. While such statements must be respected for the rich cultural history and context within which they originate, conflicting sentiments arose from other women’s collectives that alluded to an increasing burden of female-centered income generation activities (IGA). For example, while women agreed that weaving and other IGAs could contribute additional household income, they had no time for these activities and suggested that “*women have to work harder to earn extra income*”, weaving only after farming activities have been completed for the day. As IGAs serve to reduce household-level economic risks associated with farming by diversifying income streams away from natural-resource based activities, shared domestic chores and responsibilities may help to alleviate some of the additional burden felt by women engaging in IGAs.

Small grants provided to the women’s collectives of WtRF targeted communities – the equivalent of 10,000 THB (~ 300 EUR) – ranged from investment contributions into collectively-owned grocers and dress shops, to training and capacity building in pig rearing and fashion design, to material inputs such as the purchase of cotton thread and dyes for traditional weaving activities. While evidence of the success of a number of these business ventures is strong – particularly in Mae La Oob and Na Klang – attribution of this success is primarily associated with the other project.

In sum, with limited tangible results to speak of in this area, RTF is strongly urged to revisit its own policy / advocacy paper on CBA, gender and ethnicity⁵⁵ and identify tangible actions to improve its gender-aware, gender-sensitive, and gender-responsive programming.

5.5 Climate Informed Agricultural and Development Planning

In Thailand the community-based adaptation planning process can be characterized by three related processes and outputs:

- (i) A community-based water resource management plan (and supporting process, discussed in Section 5.3)
- (ii) A community-based land-use management plan (and supporting process, discussed in Section 5.1); and
- (iii) A community master plan (and supporting process, discussed below).

This section discusses the community master plan and its supporting process as the other plans and their supporting processes have been discussed elsewhere in this report.

In Thailand, by law, all communities must have a community master plan⁵⁶. In theory, these plans are then meant to inform sub-district and district level development plans. As is common in countries undergoing partially completed processes of decentralization, communities are either (i) unaware of the tools available to them by which they can inform higher-level development planning and budgeting; (ii)

⁵⁵ Unavailable in English at the time of writing.

⁵⁶ KII District Chief, Mae Chaem District, 20th November 2019.

lack the knowledge, capacity or resources to develop a plan; or (iii) lack the time, interest and incentive to develop a plan. The experience in Thailand suggests that while district and sub-district level authorities saw great potential in CAPs as a tool to more effectively and efficiently streamline their development planning responsibilities, communities lacked the time, interest and incentive to develop these plans, despite the provision of knowledge, capacity and resources through the WtRF project.

In Mae Chaem⁵⁷, district and sub-district level government officials and staff confirmed that the CBA planning process and CVCA tool introduced by RTF provided an improvement to the way community-level information had been collected and aggregated as part of development planning processes in the past. So much so was this the case that Mae Suk sub-district self-financed a training of their own staff in CBA planning led by RTF. This provides good evidence for the likelihood of sustainability of the CBA planning process as introduced by the project at least at the sub-district and district level.

At community level however, evidence for the effectiveness and sustainability of CAP plans is inconclusive. In general, CBAWGs and CBAFs were supportive of the CAP planning process and the use of tools such as the CVCA to “*help villagers to recognize their own resources and understand [their] vulnerability*”.⁵⁸ However, as several informants noted, communities are busy, they are not used to community planning processes, and they do not fully understand (or buy into) the purpose, objective or utility of these plans. This is likely compounded by the fact that most indigenous cultures rely on oral transmission of knowledge and information, as well as the fact that these groups have been historically marginalized from most government services in the past. Although a detailed review of CAPs was not completed⁵⁹, anecdotal evidence from RTF staff suggests that it is not the physical plan that is important but rather the process by which the plan was developed and the main high-level direction proposed for each sector. It was suggested by RTF staff that community leaders will retain this knowledge and use it to inform future actions and sectoral plans however for obvious reasons this could not be substantiated.

Other challenges associated with the CAP master planning process included (i) the common reality that “*villagers can identify problems but not solutions*”⁶⁰; (ii) the time required for planning activities from households and communities that are already very busy⁶¹; and (iii) the peer-to-peer scale-out model which meant that villagers were supporting other villagers in the development of CBA master plans. While targeting capacity building efforts more towards SAO staff and planning departments such that they facilitate CBA planning with communities could have helped to mitigate all three challenges, the need to ensure ‘quick wins’ for participating communities to help secure and incentivize participation is also critical⁶².

If done correctly, using the CVCA process, CAPs should be at least somewhat climate informed if tools such as hazard maps and crop calendars and timelines were effectively applied. When it comes to climate informed agricultural decision-making project activities are again unclear. While PSPs were not

⁵⁷ Despite efforts, no government officials or staff were met as part of evaluation activities in Kalayaniwattana.

⁵⁸ KII pilot farmer and CBAF, Sam Sob Bon village, Mae Chaem District, 19th November 2019.

⁵⁹ CAPs are not available in English and were not received in time for detailed analysis by the national consultant.

⁶⁰ KII pilot farmer and CBAF, Sam Sob Bon village, Mae Chaem District, 19th November 2019.

⁶¹ It was said that one of the original Phase III communities requested to drop-out of the project citing excessive time requirements necessary to participate in planning activities before any tangible project benefits could be unlocked (e.g. infrastructure, other physical assets, or access to services, etc).

⁶² In India, ‘quick wins’ were associated with the immediate formation, strengthening and capitalization of SHGs

prioritized, nor was improving communities' access to climate and weather information. The latter was suggested to be a function of the clear and evident reliance of targeted communities on traditional indicators, which contrary to other literature, appear to still be reliable and accurate in the region. As such, evidence for the effectiveness and sustainability of climate informed agricultural and development planning activities in northern Thailand is inconclusive.

5.6 Land Security and Forest Rights

Land security is a highly sensitive issue in the project area. WtRF villages are located in Doi Inthanon National Park and surrounding protected areas and subsequently fall under the jurisdiction of National Parks and the Royal Forest Department (RFD). With no recognition of heritage land or community rights when park land was first delineated, villagers are prohibited from owning land title, as well as using forest resources.

From the beginning of WtRF activities in Thailand, land security has consistently been highlighted by communities as a prerequisite for reducing vulnerability to climate extremes and building adaptive capacity⁶³. Given a clear demand, combined with RTFs long and tenured history working with hill tribe populations in Northern Thailand on the issue, improved land security and entitlements were priority objectives for the WtRF initiative in Thailand. RTFs approach to securing land rights is described in Box 3.

BOX 3. RAKS THAI FOUNDATIONS' APPROACH TO COMMUNITY-BASED LAND USE MANAGEMENT FOR SECURING LAND RIGHTS AND ENTITLEMENTS

The project will combine traditional knowledge and technology using participatory GIS mapping system (PGIS). The whole process will be done with the active involvement of the "CBAWG" members and the respective communities. The involved "CBAWG" members will be trained up on how to use GPS tagging using geographical coordinates etc. Neighbouring communities will be associated to avoid any conflict. Once all coordinates have been collected, the data will be inserted in interactive map (with the support of GISTNorth). The created maps are then shared with the local authorities for advocacy purposes and recognition of land delineation .

~ From WtRF Phase III Proposal – Thailand, p. 20.

Evidence of the projects' role in developing a heightened sense of land security and entitlement, and subsequently improving access to government services, is strong. Using the community-based land use management approach outlined in Box 3, many farmers reported successfully applying for new or updated land certificates (Figure 8). Land certificates are issued based on customary rules of community land use and are signed by the village headman (a representative of the Interior Department), the community spiritual leader, community committees, and the individual farmer. Certificates are used to delineate, and officially recognize, the area used by farmers for cultivation and conservation and subsequently reassure farmers of their continued use of the demarcated lands. The village headman of Kiew Pong recounted a story of how his land certificate was used as evidence that ultimately led to his acquittal after being arrested by the Royal Forest Department for deforestation activities. A number of other farmers suggested they felt more confident and less "scared" of government as a result of having a land certificate recognized by at least one government authority.

⁶³ WtRF Phase III Proposal – Thailand, 2017.



FIGURE 8. SAMPLE LAND CERTIFICATE

In addition to being used as a conflict resolution tool, land certificates are also being used to register or update land areas and locations with the District Agricultural Extension Office. Registration with this Office qualifies farmers for eligible disaster recovery funds when crop losses occur due to extreme weather events, crop disease outbreaks or pest infestations. Despite payouts being described as insufficient and variable year on year⁶⁴, there is clear evidence of an increasing number of farmers in the project area using land certificates to access this service.

Despite the above noted improvements in farmers sense of land security and entitlement, recent changes to the National Parks Act introduce cause for concern and risk compromising project gains. On May 29th 2019, amendments to the National Parks Act of 1961 were published and due to come into effect November 25th, 2019. Revisions include new penalties, increases in existing penalties, and new or stronger prohibitions on the following relevant activities (amongst others):

- Collecting, extracting, endangering, or causing deterioration to wood, soil, rock, gravel, sand, minerals, petroleum, or other natural resources, or taking any other action that affects the ecology, biodiversity, or natural resources and environment;
- Luring or taking wildlife out of the area, or causing any danger to wildlife;
- Changing, closing, or obstructing a waterway, or causing the water in a river, creek, swamp, marsh, or ocean to overflow, dry up, or become putrid or toxic;
- Entering into and carrying out any activity for the purpose of obtaining benefits;

Perhaps of greatest concern to project gains is that the new National Parks Act will not recognize land certificates signed by local government but rather only those signed by Royal Forest⁶⁵. Additional discussions with RTF suggest that land certificates supported by the project will be used to register with National Parks and RFD for indigenous land rights under the new act. However, the observation that few villagers engaged as part of this evaluation were aware of the new National Parks Act suggests that either RTF was also unaware of these pending changes, or that no measures were taken to sensitize or mobilize villagers in preparation and/or response to the new legislation. At the time of writing the fallout from such legislative changes are as yet unclear and so too is the reality of planned registration and advocacy efforts.

While it is recognized that a single project can have little effect on the machinery of massive legislative changes, a recommendation from the Phase II evaluation in 2017 to work more closely with National Parks staff and Royal Forest Department could have helped in one of several ways: (i) to strengthen villagers relationship with these authorities in advance of rather significant legislative amendments, or

⁶⁴ Payouts of 1500 THB / rai one year fell to only 500 THB / rai the following year for the same crop.

⁶⁵ Villagers face greater threat under new national parks law, Bangkok Post, 7th June 2019. Available online: <https://www.bangkokpost.com/thailand/general/1691204/villagers-face-greater-threat-under-new-national-parks-law>, accessed 03rd December 2019.

at minimum (ii) to alert project implementers and beneficiaries earlier of pending changes thus allowing more time to plan and mobilize an advocacy, or other, response.

5.7 Summary and Recommendations

Findings from Thailand suggest that efforts to build resilience and adaptive capacity through targeted activities to improve water resource management, and land security were well received by communities. WtRF beneficiaries reported a high degree of satisfaction with project efforts and activities (direct or indirect) citing improvements in knowledge, understanding and awareness (of community resources and risks mostly); water availability and reliability; reduced household expenditures, and sentiments of land security. Furthermore, and beyond project-related objectives, project successes were supported by strong evidence suggesting that RTF has a formidable and well respected reputation with WtRF villages – many of which RTF has been working with on and off for over 20 years. A number of farmers, including next generation farmers, made historical references to agroforestry and community-based natural resources management initiatives undertaken together with RTF (then known as CARE Thailand), as far back as the late 1990's. Field Officers in Mae Chaem and Kalayani show exceptional versatility and commitment not only towards WtRF project beneficiaries but towards the empowerment and elevation of the Karen people and region more generally. Without this long and tenured relationship between villages, RTF and Field Officers, the successes of the WtRF project over the years may not have been possible.

Despite the evident challenges presented for Field Officers' workload, the RTF approach to project implementation attempted to maximize reach and potential for scale while leveraging other projects and financing opportunities available to them. Self-described as an "area-based organization", the RTF working model would appear to combine resources from multiple projects and financing opportunities to achieve greater impact. The project did well to facilitate linkages between communities and existing government funding programs (e.g water improvement grants through the Hydro and Agro Informatics Institute, for example). The project also did well to leverage the labour of community members and community-based organizations in the implementation of improved water management projects including in the construction of check dams. The commitment exemplified by community members to solve their own resource management solutions suggests that project objectives to improve communities sense of ownership over their resources were successful. Furthermore, as part of scaling efforts, WtRF Phase III events and workshops were opened for broader district or sub-district level participation, ensuring direct benefits for interested but non-targeted communities. All of these efforts may be considered to contribute towards the strengthening of the broader CBA enabling environment. However, whether these efforts were motivated by such - sustainability and systems strengthening - or rather the notably small budget allocation for WtRF project activities in Thailand⁶⁶, remains unclear.

The complexity of building the climate resilience of marginalized forest communities of northern Thailand is significant. Not least of which are the immense challenges associated with strict protectionist forest laws. Elsewhere in East Asia, the adaptive capacity of forest communities has been strongly characterized by (i) the role of traditional ecological knowledge (TEK) systems; (ii) the integration of such systems with Western scientific systems, and (iii) flexible and decentralized forest

⁶⁶ 59% of WtRF Phase III funding for Thailand was approved for human resources and operational costs (7,059,427.00 THB / 210,300.00 EUR), while 41% was set aside for project activities (5,002,693.00 THB / 150,00.00 EUR).

management institutions⁶⁷. While TEK systems are robust and strong amongst targeted communities, studies suggest that the capacity for (ii) and (iii) in Thailand are weak given that the more traditional institutions responsible for community forest management in countries such as Korea, China and Japan are technically prohibited by Thai law since all forests are ultimately owned by the State⁶⁸. This has knock-on effects with the opportunity for combining indigenous with scientific knowledge of community forest management, given that technically traditional forest governance structures are not recognized⁶⁹. Efforts to engage or consult National Parks and RFD are sensitive given a long, tense, history between these parties and others directly involved in project activities (e.g. District Office, communities, RTF and other NGO partners, etc.) Such tension as relates to forest resources and land ownership has significant implications for building adaptive capacity and increasing resilience of local populations here.

Despite these complexities, the following lessons learned and recommendations emerge for RTFs future CBA work, and target improvements in areas more within RTFs direct influence of control:

1. **Target SAO planning departments, and those government organizations responsible for community planning, in capacity building efforts around CBA master planning:** given the oral-based traditions of most indigenous groups, combined with the very busy and hard-working way of life observed at community-level in northern Thailand, capacity building efforts in the design and development of climate resilient community development master plans may be better targeted towards government agencies whose mandate it is to support and consult communities as part of broader development planning activities. This is where interest and uptake of CBA plans was most prevalent. Ensuring community planning processes were facilitated by an external government representative could better ensure communities interest and incentive to participate while also securing longer-term sustainability of the CBA planning process.
2. Given the mountainous environment characteristic of northern Thailand, **use topography and (sub-)watershed considerations as community selection criteria for improved water resource management efforts:** While the WtRF project targeted more vulnerable lowland communities, a mix of both upland and lowland communities would help increase knowledge, understanding and awareness of the others' CBWM challenges and constraints. The increased exposure of these communities with one another is likely to reduce tension and conflict, and provide a platform to share and resolve disputes in a productive manner. Furthermore, ecological and environmental flow requirements (for fish and fish habitat) can be better integrated by ensuring a systems based approach to WRM. The absence of a cross-jurisdictional water resource management mechanism – with the exception of the National Parks' Watershed Units – is noted.
3. Also related to the mountainous geography of the area, **consider the use of a more structured, systematic farmer-to-farmer extension model to enhance likelihood of success of the pilot farmer model:** Open farms and demonstration plots work best when strategically and centrally located in areas with high traffic and high visibility. Given the mountainous terrain and distances between residential areas and farm land areas in the targeted area, such areas are not easily identified. In turn, pilot and open farms in northern

⁶⁷ Lee, E. and M.E. Krasny, 2017.

⁶⁸ Ibid.

⁶⁹ Salam et al., 2006.

Thailand could rather adopt a more structured and systematic training and capacity building model whereby primary pilot farmers are responsible for coaching and mentoring pre-selected secondary farmers, and secondary farmers for coaching and mentoring pre-selected tertiary farmers. This approach was received with notable success as part of WtRF Phase III activities in Bangladesh.

4. **CBA projects must target ‘quick win’ activities that, ideally, build household or community financial capital in a short period of time from project start-up.** The importance of financial capital to building resilience and adaptive capacity is well known. Several recent evaluations of adaptive capacity have suggested that a minimum household income must first exist in order for beneficiaries to be take on risk, innovate, and practice flexible-forward thinking decision-making. While the VSLA-based model from India would not have provided the scale of financing required to alleviate financial hardships of households in Thailand, an equivalent focus on building household or community-level financial capital in Northern Thailand needs to be identified. Recommendations from the Phase II evaluation (2014 – 2016) suggested improving access to agricultural lending co-ops or banks, or improved market access for secondary or high value crops already being grown in the area. Regardless the activity, ensuring ‘quick wins’ for participating communities will secure their interest and incentivize their active engagement in CBA planning processes.
5. **Seek more targeted, one-on-on support from the CARE helpdesks and support services that offer global, technical, support to country offices:** While Phase III activities targeting RTFs historical strengths (e.g. natural resource management, forest conservation, PGIS) would appear to be the most successful, activities not traditionally in RTF Field Officers portfolio of experience need to be strengthened. This includes support for (i) CAP planning processes as a means to secure climate resilient development objectives for local communities; and (ii) setting ambitious gender equality and women’s empowerment objectives. Requests can be made to CARE International’s newly established CCRP, and CARE UK’s women’s economic empowerment team, respectively.
6. **Strengthen project and organizational monitoring and information management systems:** Limited project monitoring and documentation proved a significant challenge for this evaluation. RTF is strongly advised to enhance their M&E capacity, preferably by (i) ensuring organizational M&E teams or staff are available and sufficiently resourced to support individual projects on a regular and ongoing basis; or at minimum, (ii) hiring M&E consultants/advisors on a project-by-project basis (less ideal), but still with sufficient resources to provide regular and ongoing support.

6 MULTI-COUNTRY ANALYSIS AND DISCUSSION

At the end of the day, the WtRF initiative is about increasing the climate resilience of poor and marginalized people of central India and northern Thailand. In the absence of a common project-level definition, framework or model by which the concept of resilience was understood, this section applies CARE's own Increasing Resilience Framework⁷⁰ to both analyze and characterize changes in resilience attributable to the WtRF initiative. Although relatively new⁷¹, and the retrospective application of the framework as an evaluation and learning tool (as opposed to a planning or monitoring tool first) not ideal, the framework explains three key elements that CARE has identified as essential to increasing resilience of any target population. This section takes a deeper look at how the WtRF activities have addressed each of these three critical areas and where programming could have been stronger in order to optimize resilience building results. The three areas of focus include:

1. Increased capacities and assets to deal with shocks, stresses and uncertainty;
2. Reduced drivers of risk; and
3. Enabling environments.

6.1 Capacities and Assets

For over 20 years now, the sustainable livelihoods approach has been used to identify key assets, or capitals, considered essential to building sustainable livelihoods⁷². These include human, social, financial (or economic), natural and physical capitals. Given the 'staying power' of this framework amongst practitioners and academics alike, building and strengthening the asset base of households and communities is likely the element of resilience building where most development activities and projects are successful.

In this regard, WtRF Phase III is no different with evidence of sustainable results in strengthening all five asset classes to varying degrees in each country. Of common priority and success in both India and Thailand was the focus on strengthening **human** and/or **physical capital** as a means to improve the **natural capital** base. In India, while the majority of survey respondents reported a moderate to significant improvement in knowledge, understanding and awareness (human capital) of sustainable land and water resource management, translation into practice was also evident with the increased adoption of organic, climate smart, agricultural methods and rainwater capture and

If the capacities and assets to deal with various shocks, stresses and uncertainty are built and supported and if drivers of risk are reduced and if these actions are supported by an enabling environment, then resilience is increased.

CARE International, 2016. Increasing Resilience: Theoretical Guidance Document for CARE International.

⁷⁰ CARE International, 2016. Increasing Resilience: Theoretical Guidance Document for CARE International. Guidance Note produced by CARE International's Climate Change and Resilience Platform. December 2016. Available online: <https://careclimatechange.org/increasing-resilience-theoretical-guidance-document-care-international/>.

⁷¹ CARE's resilience work took off in 2016 with the creation of CARE International's Climate Change and Resilience Platform. See <https://careclimatechange.org/> for more information.

⁷² DFID, (1999). Sustainable Livelihoods Guidance Sheets. London: Department for International Development.

storage systems (e.g. 5% models). In Thailand, project activities were almost entirely centered on a capacity building approach to building human capital with a large portion of project time and resources dedicated to supporting communities to better plan and manage their natural resources. While some project activities targeted small improvements in natural and physical capital (e.g. pilot farmer grants for trialing new SuPER methods, protection of riparian buffer zones and upland forests), the expectation was that with project support for improved problem analysis and planning, communities could unlock larger, more sustainable, sources of capital (financial, physical and other) elsewhere – from government grants programs, training institutes, etc. Communities from Kalayaniwattana district were particularly successful in accessing government grants to support their water improvement needs, evidence of both the success and likely sustainability of the projects' process in building human capital.

Project insights about the role of **social capital** in unlocking other capitals as well as reducing drivers of risk are particularly discerning. While the formation and strengthening of SHGs in India unlocked vital **financial capital** through improved access to (i) savings and loans; and (ii) informal labour pools (resulting in cost savings), these groups also served to reduce gender inequality as a driver of climate risk by raising women's profile as significant contributors to household income and decision-making. In Thailand, social capital was strengthened rather through CBAWGs and the CAP planning process. Evidence from communities with a functioning CBAWG have not only successfully coordinated their own natural resource management plans to preserve and protect natural capital, but have unlocked additional financial capital both externally (through government grants) and internally (community members investing their own labour) to finance improved physical assets such as check dams, water tanks and other small infrastructure. Evidence from communities with a poorly coordinated, poorly functioning CBAWG provides good insights into the barriers and enablers to building social capital (and subsequent climate resilience). As discussed in Chapter 5, some thought provoking examples include the role of religion and household debts in affording farmers (or not) the time and space to effectively meet, discuss, plan and collaborate.

While an analysis of the projects' contribution to building "capacities" could be included in the analysis of human capital above, in CARE's increasing resilience framework "capacities" refer to a specific set of capacities that include anticipatory, adaptive, absorptive and transformative⁷³. While a full analysis of WtRF contributions to each of these "capacities" is beyond the current scope of this evaluation, WtRF project activities could be seen to have contributed to a number of these capacities to varying degrees of success.

Anticipatory capacity is the ability to foresee risks before they happen and the subsequent capacity to sufficiently prevent, prepare and/or plan for such risks. Critical to anticipatory capacity is the timely access to reliable, user-friendly climate and weather information. While meteorological and climate information services exist in both India and Thailand – and have for some time – the challenge in many countries is often in ensuring such information is timely, reliable, accurate and inclusive of different user needs (e.g. based on language and literacy needs).

In India, the packaging of weather information from the national meteorological agency together with agricultural advisories through Whatsapp and email ensures that weather information in-country is

⁷³ For more information on the 3A's + T Resilience Framework, see Bahadur, A., K. Peters, E. Wilkinson, F. Pichon, K. Gray, T. Tanner (2015) 'The 3As: tracking resilience across BRACED', BRACED Working Paper, ODI: London.

already somewhat user-friendly for literate farmers with access to a smart phone – the latter of which is a common scenario given the relatively low cost of mobile data in country. Project efforts to increase the number of farmers and households accessing this information is a good example of building anticipatory capacity, improving farmers ability to plan their agricultural activities including when and what seed varieties to plant, when to apply fertilizers or pesticides, and when to harvest. While improving the accessibility of these advisories for illiterate groups was not targeted by project activities, strengthening of SHGs indirectly proved an effective means to share advisories through the improved social cohesiveness fostered by these groups. Although this evaluation found that PSP results from India were rather prescriptive and did not achieve optimal success given CARE’s experience with PSP elsewhere, this tool was successful in familiarizing and sensitizing targeted communities to key seasonal rainfall scenarios (e.g. average, above average, below average) and their implication for agricultural decision-making. These are all tangible examples of project-attributable results to building and strengthening anticipatory capacity.

The **absorptive capacity** of a system is defined as the systems’ ability to absorb and cope with the immediate impacts of climate variability and extreme weather events.⁷⁴ In many ways, the projects’ early focus on improved water resource management was a means to improve the absorptive capacity of targeted systems in the face of both drought and flood conditions. Improved water storage structures (e.g. earthen ponds in Chattisgarh State and water holding tanks in Chiang Mai province) help to mitigate the effects of drought by securing water resource availability longer into dry periods. In Thailand, upland forest restoration activities and the establishment of riparian buffer zones serve to slow runoff, reduce erosion and improve soil infiltration thereby helping to mitigate losses from heavy rainfall and flood events. The re-establishment of rice banks in Huay Baba, Chaem Noi and San Muang communities also serves to strengthen communities ability to absorb crop losses and risks to food security brought on by disasters. Improved access to disaster relief funds initiated by land certificates in Thailand is another example of how project activities helped to build the absorptive capacity of targeted communities.

The subject of much discourse and discussion, **adaptive capacity** is best summarized as the ability of a system to adjust and learn from disturbance (climate and other). In practitioner circles it is most commonly characterized by five key inputs including: (i) asset base; (ii) institutions and entitlements; (iii) knowledge and information; (iv) innovation; and (v) flexible and forward thinking decision making and governance (Figure 9). While the first three considerations are discussed elsewhere in

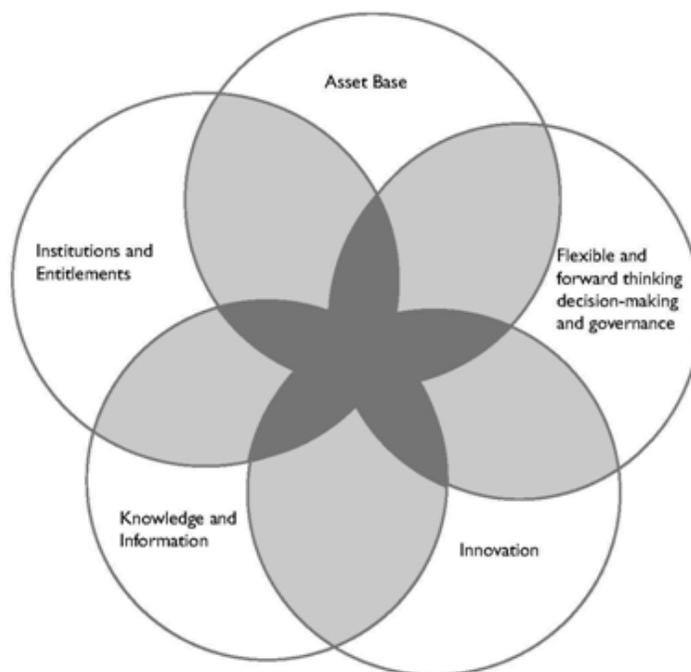


FIGURE 9. CONCEPTUALIZATION OF ADAPTIVE CAPACITY AS PER ACCRA’S LOCAL ADAPTIVE CAPACITY (LAC) FRAMEWORK

⁷⁴ Bahadur, A. et al., 2015.

this section, it is the role of the last two that eludes most CBA efforts in building adaptive capacity, WtRF being no exception. For example, the ability to innovate is a luxury afforded only by those with the resources to absorb risk. By nature, innovation involves trial and error – of new methods, approaches, technologies or tools. As agriculture is already an inherently risky livelihood, poor and vulnerable farmers have little to no ability to absorb additional risk. Discussion around the accessibility of innovations that may emerge from pilot and open farms in Thailand, to poor and vulnerable farmers, exemplifies this concern. Similarly, flexible and forward-thinking decision-making is a significant challenge in countries undergoing incomplete processes of decentralization, where decision-making authorities and budgets are yet to effectively or efficiently trickle down to local levels where institutions are best placed to be “flexible” and “forward-looking”. While flexible and forward looking decision-making is the ideal, it is unlikely to be the reality in the absence of effective decentralization reform.

6.2 Drivers of Risk

Another means by which resilience can be improved is by reducing the drivers of risk – of which climate change is only one of many. Effective CBA recognizes that adaptation to climate change does not operate in a vacuum. Rather climate risks are often exacerbated by other risks including lack of control over resources, market failure, and social barriers such as gender inequality or exclusions faced by indigenous groups. Lessons from WtRF suggests that while addressing other drivers of risk can be an effective means to reduce peoples exposure, sensitivity and vulnerability to climate risk, some risks in some contexts can overwhelm, and even stagnate, adaptation efforts. For example, efforts in Thailand to facilitate access to land certificates had clear outcomes in terms of farmers heightened sense of land security and their continued use of demarcated lands. While this is a significant achievement in reducing farmers “sense” of land insecurity, new national parks legislation introduced in 2019 risks upending these gains if land certificates are not recognized by the Royal Forestry Department and National Parks. Similarly, market failures associated with cash crop economies in Mae Chaem district proved overwhelming to adaptation efforts there as the resultant debt burden of households prohibited farmers from investing time into activities with no tangible or immediate return on investment. While the challenges of cash crops to land use intensification and environmental degradation are pervasive, without market signals to incentivize sustainable or organic production methods (as was the case for cotton production in Maharashtra State, India), CBA efforts to reduce climate risk can be easily overwhelmed.

6.3 Enabling Environment

CARE’s theoretical guidance on increasing resilience recognizes that drivers of risk and the enabling environment are two ends of the same stick. Often it is improvements in the enabling environment – at local through to national and international scales – that can best reduce systemic and pervasive drivers of risk. While CBA efforts recognize the role of the enabling environment in ‘making or breaking’ project gains in building adaptive capacity, the community-based centrality of these efforts means that finding the right entry point, as well as staff time and budget to dedicate to influencing the broader enabling environment, can be difficult. The three enabling systems effectively challenged by the WtRF initiative include: (i) systems of land ownership in Thailand; (ii) systems of decision-making and social exclusions; and (iii) the nature of participation of communities in local development planning. While evidence of successfully challenging the status quo of all three systems is strongest at local levels, the project could have done more to influence change, or at minimum engage, at higher levels of governance through improved advocacy efforts.

In Thailand, although working with National Parks to challenge existing systems of land ownership in parks and protected areas was not a realistic expectation of a primarily climate change focused project, recognizing the role of land insecurity as a driver of risk (see discussion above) and a prerequisite for building adaptive capacity, the project targeted other actors more readily accessible within their sphere of influence. This included sub-district and district level offices and officials. At national-level, while the Royal Forestry Department could not participate in project activities in any official capacity, project staff noted that RFD staff were invited to participate or consult on key project-sponsored events and outputs. The project also worked closely with, and alongside, other relevant national-level actors including the Geo-Informatics and Space Technology Development Agency (GISTDA) and Hydro and Agro Informatics Institute (HAI). Secondly, while the effect on gender equality and women's empowerment outcomes is stronger in India, project implementation models in both countries successfully challenged the role of women in community decision-making by ensuring female representation as part of VDCs (India) and CBAWGs (Thailand). And thirdly, although not optimized as such under WtRF Phase III, CAP planning processes challenge the nature of community participation in local planning by developing grassroots community plans as a systematic and structured means to present and advocate for local development priorities. Particularly in countries undergoing some form of decentralization effort, sub-national levels of government are often looking for tools to improve participation and transparency in their development planning, resourcing, and decision-making. As CAPs provide such a tool they are often appreciated (although not always resourced) by higher forms of government. Recognizing that sub-national decision-making must operate within its own enabling environment, efforts in both Thailand and India could have done more to influence and inform evidence-based policy and planning at higher levels of governance. This can be done through wider levels of engagement (in climate change adaptation advocacy networks) and collaboration (e.g. experience sharing forums, policy consultation events, etc).

Recognizing that increasing resilience is a process rather than an outcome, results from the WtRF project provides some insightful lessons on the enablers and barriers to building resilience. While WtRF efforts to build the resilience of targeted populations achieved results in all three areas of increasing resilience, some of the greatest successes emerged from efforts targeting more conventional development activities - building assets and more traditional capacities (human capital), and reducing drivers of risk within the broader enabling environment (e.g. gender inequality in India and land insecurity in Thailand, for example). Efforts to build stronger anticipatory and absorptive capacities, specific to climate related shocks and stressors, could have been strengthened with activities targeting the broader enabling environment responsible for planning and resourcing adaptation priorities in country. Some examples of this are included in the recommendations section below.

7 RECOMMENDATIONS

While country-specific lessons learned and recommendations are included in Sections 4 (India) and 5 (Thailand) respectively, the following recommendations emerge from the multi-country analysis of the WtRF activities (Section 6). While project performance varied between countries with respect to the three key elements of increasing resilience, the below recommendations build upon WtRF strengths and challenges in order to target climate resilience building efforts more generally.

1. CARE documentation recognizes that increasing resilience is not an outcome that can be measured, but rather a process to be characterized. CARE documentation also recognizes that resilience must be distinct from adaptive capacity. When planning resilience building or adaptive capacity strengthening initiatives at any scale, due consideration must be given to how these terms are used, defined and conceptualized for purposes of project planning, monitoring, evaluation and learning.
2. The strength of PSP or CAP tools in building anticipatory, adaptive or absorptive capacities, or in enabling flexible and forward-looking decision-making, was not effectively unlocked in either Thailand or India. More targeted technical, or 'hand-holding', support for country teams in effectively applying these tools, is required. While CARE International's CCRP may be best positioned to provide this support, budget may have to come from either projects themselves or country office core funds. Without this direct support, it is advised that any aggregate analysis of results obtained through self-reporting tools (e.g. CARE's Resilience Marker) be interpreted with caution.
3. In order to distinguish itself from more conventional development efforts, building resilience and adaptive capacity specifically as it relates to climate risk must include efforts to build anticipatory and absorptive capacities of targeted populations. This includes improving access and understanding of weather and climate forecasts (anticipatory) as well as improving access to financial resources (e.g. collective savings and loans schemes, insurance, disaster relief funds) and social protection measures (e.g. rice banks) that can be immediately deployed or drawn upon as part of disaster response actions.
4. Concurrent with findings from other analyses of CBA, building the resilience of agricultural systems and smallholder livelihoods takes time. Given long timeframes associated with CBA planning (e.g. CVCA tools) and solutions for predominantly agriculturally-based communities (requiring at minimum one cropping calendar but sometimes up to 7 years to see results), the need for 'quick wins' targeting financial capital at an appropriate scale is critical. Mobilizing social safety nets through formation and strengthening of SHGs that quickly unlocked financial and other forms of capital in India is a good example of this.
5. CBA has its limits. Expectations of "transformation" from small-scale investments at community-level are likely unrealistic. Furthermore, some drivers of risk (particularly market or conflict related, or those related to systems of land title and rights) can easily overwhelm CBA efforts. While such risks must be clearly identified upfront (think Theory of Change), mitigation measures must move beyond the community-level and target broader enabling environments. This is likely to involve more specialized partnerships (e.g. market development and value chain analysis, or land rights and legal reform) or at minimum, stronger engagement and advocacy efforts.

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ANNEXES

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ANNEX I EVALUATION FRAMEWORK

Impact – the effect that the project has had on improving the ability of marginalized populations in Northern Thailand and Central India to adapt to climate change and climate variability, as a result of WtRF Phase III.

Key Evaluation Question 1 (CBA models and approaches): Did WtRF's CBA models and approaches increase adaptive capacity, resilience and gender equality for marginalized populations in Northern Thailand and Central India? How, and in what ways?

<i>Indicator (what will be analyzed)</i>	<i>Data Source</i>	<i>Data Collection Method</i>	<i>Targeted stakeholder(s)</i>	<i>Additional Notes:</i>
<p><u>In general:</u></p> <p>Changes in access to <u>information, services, and resources</u> (including climate and market information and services)</p> <p>Changes in <u>knowledge, attitudes, practices</u> (men's and women's) – e.g. % of target population (men/women) engaged in climate resilient livelihoods / adaptation strategies informed by CBA</p> <p>Changes in women's <u>agency, structure and relations</u> (as reported by men and women) – e.g. % of targeted women attending, participating and intervening at local planning meetings</p> <p><u>More specifically:</u></p> <p>Relative changes in conceptual components of adaptive capacity (as per ACCRA's LAC framework):</p> <p><i>Asset base</i></p> <p><i>Institutions and entitlements</i></p> <p><i>Knowledge and information (including availability, access and use of climate information)</i></p> <p><i>Innovation</i></p> <p><i>Decision-making and governance (climate informed and gender sensitive)</i></p>	<p>Community visits</p> <p>Documentation on microinsurance schemes, grain banks, agri-kiosks, other CBA models and approaches</p> <p>Monitoring reports (including midline review for Thailand)</p> <p>Workshop, event, exchange, field or training reports</p> <p>Discussion papers, policy briefs / analysis, advocacy plans / position papers</p> <p>CBA manuals (Thailand)</p> <p>Resource directories (India) - e.g. gov't programs re: NRM, water conservation practices and technologies</p>	<p>Document review, HH surveys (using a retrospective pre-test approach), FGDs, KIIs, direct field observation</p>	<p><u>Local-level:</u> Project beneficiaries (direct and indirect), local governance structures (e.g. Village Development Committees, Water User Associations, Joint Forest Management Committees, Gram Sabha in India)</p> <p><u>District and sub-district level</u> government authorities, extension staff and decision makers (e.g. from Ag, Water, Forests, Disaster Preparedness and Management, Community Development, etc)</p> <p>Other NGOs/CBOs in WtRF and non-WtRF districts, working on CBA</p> <p>National and/or decentralized units of met agencies</p> <p>Climate network members (national or regional-level)</p>	

Key Evaluation Question 2 (Scaling of CBA): To what extent have WtRF promoted CBA models and approaches been effectively scaled: (i) to other districts (India); and (ii) by government and/or other civil society organizations (CSOs)? What have been the enablers/barriers to their adoption?

Indicator (what will be analyzed)	Data Source	Data Collection Method	Targeted stakeholder(s)	Additional Notes:
Extent to which CBA approaches are integrated into local development plans and budgets (agriculture, water resource management, disaster risk reduction) <u>and/or</u> implemented at scale	Local development plans, annual Action Plans and budgets (VDC, WUA/WRMC), JFM Plans, SWUMP.	Document review, KIIs, FGDs	<u>Local-level:</u> Local governance structures (e.g. Village Development Committees, Water User Associations, Joint Forest Management Committees, Gram Sabha in India)	
Evidence of CBA approaches adopted or applied beyond WtRF communities or districts (by other government or non-government organizations)	Project documentation from other non-WtRF projects Newspaper articles, media highlights re CBA		<u>District and sub-district level</u> government authorities, extension staff and decision makers (e.g. from Ag, Water, Forests, Disaster Preparedness and Management, Community Development, etc) Other NGOs/CBOs in WtRF and non-WtRF districts, working on CBA Climate network members (national or regional-level)	

Sustainability – the prospects for continuity and long-term benefits of the project outcomes (including through ownership of project activities and results by communities, governments and other local decision-making bodies)

Key Evaluation Question 3 (Sustainability): How likely are WtRF Phase III accomplishments to continue once the project ends?

Indicator (what will be analyzed)	Data Source	Data Collection Method	Targeted stakeholder(s)	Additional Notes:
Evidence of sustainability of changes in knowledge, attitudes, practices	Local development plans, annual Action Plans and budgets (VDC, WUA/WRMC), JFM Plans, SWUMP.	Document review, HH surveys, KIIs, FGDs	<u>Local-level:</u> WtRF communities (new and old); community CBA facilitators, animators and working groups; local implementing partners, local governance structures (e.g. Village Development Committees, Water User Associations, Joint Forest Management Committees, Gram Sabha in India)	
Evidence of sustainability of changes in development policies, plans, programmes, processes, legislation, etc.	MoU's or LOA's with key development institutions and organizations	Direct field observation (e.g. quality and condition of hard assets)	<u>District and sub-district level</u> government authorities, extension staff and decision makers (e.g. from Ag, Water, Forests, Disaster Preparedness and Management, Community Development, etc)	
Evidence of other learning and training institutes, or training curriculum, promoting CBA as influenced by WtRF				

While project activities in India and Thailand were conceived and managed separately, the WtRF initiative sought to influence the following priority outcomes across both countries: (Source: Country log frames and proposal / planning documents as well as data available from Phase II endline, Phase III baseline and midterm – in the case of Thailand)

Table 1. Multi-country outcomes of interest – unpacking concepts of “resilience” and “adaptive capacity”

No.	Outcome
1	Agricultural productivity / yields
2	HH income and sources (re: livelihood diversification)
3	Food security (# of days min. quantity of cereals not consumed)
4	Water availability (for agricultural and domestic purposes)

5	Land security and forest rights
6	Women's voice (e.g. decision-making at community-level)
7	Local development planning structures and decision-making processes (gender-sensitive and informed by climate data)

ANNEX II MAP OF BASELINE DATA AVAILABILITY

		India – Chattisgarh (2017 Endline HH Questionnaire by Kantar Public)	India – Maharashtra (2017 Baseline HH Questionnaire)	Thailand (2017 Phase 3 Evaluation / Phase 4 Baseline, HH Questionnaire)
1	Agricultural productivity / yields			
1.1	<i>Total land owned</i>	Q6.1	Q6.1	
	<i>Total area of land used for agricultural purposes</i>	Q6.4	Q6.2	Q7 (not owned, used)
	<i>Total area of land owned by women in the HH</i>	Q16.2 Q16.3	N/A	
1.2	<i>Total ag land irrigated - own</i>	Q6.2	Q6.1	
	<i>Total ag land not irrigated</i>	Q6.3	Q6.1	
1.3	<i>Crop production (total land area and productivity per crop type)</i>	Q5.1	Q9.1	
2	HH income and sources (re: livelihood diversification)			
2.1	<i>Total HH income (Amnt by Source)</i>	Q27.1	Q15	Q1 (Source only)
2.2	<i>Total HH expenditure (Amnt by Source)</i>	Q27.1	Q15	
2.3	<i>No. of HH women involved in SHG</i>	Q18.1	Q20	
	<i>Type of IGA women involved in, if any (e.g. NTFP sales, handicrafts, pottery, etc)</i>	Q18.3	Q22	
3	Food security (# of days min. quantity of cereals not consumed)			
3.1	<i>Prior to 2015, did you ever worry your HH would not have enough food? (yes/no; if yes, frequency & timing)</i>	Q27.2 Q27.3 Q27.5		
3.2	<i>Since 2015, did you ever worry your HH would not have enough food? (yes/no; if yes, frequency and timing)</i>	Q27.6 Q27.7 Q27.9		
	<i>Change in amount of food eaten at each meal</i>			Q5

4	Water availability (for agricultural and domestic purposes)			
4.1	<i>Water scarcity in last 2 years (2015/16) = yes/no</i>	Q12.10		
	<i>Change in water availability and supply in last 3 years</i>			Q14 (domestic water) Q15 (ag water)
5	Land security and forest rights			
5.1	<i>Total land area owned by women (by HH)</i>	Q16.2 Q16.3		
	<i>Change in confidence levels re: land security (e.g. "keeping" the land)</i>			Q9
6	Women's voice (e.g. decision-making at community-level)			
6.1	<i>"I can take independent decisions wrt ... (spectrum of strongly agree to strongly disagree x5 categories)</i>	Q25.12	??	
7	Local development planning structures and decision-making processes (gender-sensitive and informed by climate data)			
7.1	<i>What community structures/institutions are present (active?) – yes / no</i>	Q20.1 (Gram Sabha) Q22.1 (VDC) Q23.1 (JFMC) Q10.5 (WUA)	Q24 (Gram Sabha)	
7.2	<i>In which groups have <u>you</u> participated in the last month?</i>	Q25.2		
7.3	<i>"I feel I can raise issues for discussion in a public forum" (spectrum of strongly agree to strongly disagree x5 categories)</i>	Q25.3		
7.4	<i>What government schemes are you aware of? Are you member of? (FOR INDIA ONLY)</i>	Q21.1	Q26 Q26.1	N/A
	<i>Level of involvement in community-level planning & d-m (spectrum of very involved to not at all, x5 categories)</i>			Q13

ANNEX III SAMPLE MEDIUM-RANGE WEATHER FORECAST FOR KOREA DISTRICT, CHHATISGARH STATE, INDIA



GRAMIN KRISHI MAUSAM SEWA (GKMS)
INDIRA GANDHI KRISHI VISHWA VIDYALAYA
R.M.D. College of Agriculture & Research Station,
Ambikapur (C.G.) 497 001



Bulletin no: 82
Date: 08/11/2019

E-mail: aas_ambikapur@yahoo.co.in
Ph. : (07774)-232815 (O), 232986 (FAX)

(Project Sponsored by IMD Ministry of Earth Sciences)

Medium Range Weather Forecast **For District: Korea**

Forecast received from IMD

Weather parameters	09 Nov.	10 Nov.	11 Nov.	12 Nov.	13 Nov.
Rainfall (mm)	0	0	0	0	0
Maximum Temperature (°C)	25	26	27	27	27
Minimum Temperature (°C)	14	14	15	15	15
Cloud Cover (Octa)	5	4	2	1	1
Maximum humidity (%)	90	90	88	90	90
Minimum humidity (%)	46	45	45	45	45
Wind Speed (kmph)	2	3	3	3	3
Wind Direction	SE	SE	S	SE	SE

Possibility of no rainfall during this period. Maximum temperature will remain between 25 - 27°C and the minimum around 14 - 15°C during this period. Partially to generally cloudy. Humidity during morning ranges between 88 - 90%. Humidity during afternoon ranges between 45 - 46%. Wind speed 2 - 3 kmph. Wind direction is between S to SE.

Agro-Advisory for the farmers **(Based on weather forecast)**

- **General:** Farmers are advised to harvest the matured crops in upland area. After harvesting, immediately plough the land to utilize residual moisture of the soil and sow different rabi crops like, gram, lentil, linseed, toria, mustard, potato, pea etc.
- **Land Preparation:** Farmers are advised to prepare their land for sowing of different rabi crops.
- **Rabi crops:** Most of the timely sown crops like mung, urd, maize, rice, groundnut, finger millet etc. are at maturity stage. Hence, farmers are advised to plough the land immediately after harvesting of different crops and sow immediate rabi crops like toria, mustard, green pea and potato and arrange seed & fertilizer for cultivation of rainfed wheat, if having assured irrigation facility.

- For rabi crops, farmers can start their field operations in fallow fields in October month. Tractor drawn rotorator or cultivator can be used and shallow ploughing should be done. In October month, horsegram, moong, urad, toria, maize, sunflower and Forage crops can be taken.
- **Lathyrus:** Use improved variety of lathyrus like Pratik, Ratan and Mahatiwda for sowing as this is the appropriate time.
- **Chickpea:** Sowing of chickpea in time will help to prevent wilt disease.
- **Vegetable:** Obtain good quality seeds of fruits and vegetable in advance from reliable source and sowing of rabi season vegetable can be started.
- **Vegetables:** Start transplanting of winter vegetables like cauliflower, cabbage, chilli, tomato, brinjal etc. With suitable seedlings and directly sow the seed of radish, turnip, spinach, carrot etc. Seeds should be treated with fungicide before sowing.
- **Orchard:** Farmers are advised to Paint stem of tree by using bordo mixer/pest, maintain cleanness in the orchard, prepare basin around the tree and apply recommended dose of manure and fertilizer.
- **Plantation of flowers:** It is right time for plantations of Chrysanthemum and Gladiolus plantations flowers plants, weed control management operation should be taken up in Rajnigandha. It is flowering time in marigold, therefore flower should be sent to market.
- **Maize:** Harvested crops must be dried in sun before storage.
- **Sowing of potato and garlic:** Present weather conditions are favourable for the sowing of potato and garlic and also for raising seedlings of Onion. Hence, farmers having proper irrigation facilities are advised for the sowing of the same. Seed treatment before planting is advised.
- **Mustard:** Farmers who wish to cultivate mustard crop, may start sowing after preparation of the field and Select the improved seed, recommended for this region like Shiwani, Varuna, Pusa Bold, BR-40 etc. 3 kg seeds are required for cultivation in one acre. Sow the seed in line at a distance of 30 cm. (Row to row) and 10 cm. (Plant to plant).
- **Horticulture:** It is right time for plantations of Chrysanthemum and Gladiolus plantations flowers plants, weed control management operation should be taken up in Rajnigandha. It is flowering time in marigold, therefore flower should be sent to market.
- **Vaccination:** In case animals are not vaccinated against FMD, Haemorrhagic Septipaeamia (HS) and Balck quarter diseases, they can be prevented by vaccination against these diseases.
- **Milch animals:** Provide concentrate feed to milch animals mixed with dry & green fodder and ensure enriched diet having protein, carbohydrate, fat, vitamins, minerals etc.
- In cattle shed, keep the floor dry and provide clean drinking water in ample amount to the animals.

- **Poultry:** Poultry farmers who are following deep litter housing method are advised to ensure turning of poultry beds upside down during rainy season. Damped type beds should not be used.

**Nodal Officer
Agro-Meteorology**

ANNEX IV: TERMS OF REFERENCE (TORS)



Terms of Reference

Where the Rain Falls project

**Multi-country Final Evaluation &
Impact Assessment Thailand**

July 2019

Deadline for submitting technical and financial proposal:
September 8th, 2019 at 12pm (noon, Paris time)

Technical and financial proposals must be sent electronically to:
Marie Leroy, CARE France at leroy@carefrance.org

Background and context

Founded in 1945, CARE is a leading humanitarian organization fighting global poverty. It aims to deliver lasting solutions to ending poverty with a particular focus on empowering girls and women. In 2018, CARE worked in 95 countries around the world, directly reaching more than 55 million people.

As part of its priority sectors of interventions, CARE strengthens poor people's resilience to climate changes, through their capacity to anticipate, absorb and adapt to shocks and manage growing risks, and transform their lives in response to new hazards and opportunities. Directly contributing to CARE's resilience building strategy, **the *Where the Rain Falls (WtRF)* project has been implemented by CARE since 2009.**

It started as a research project that was conducted in 8 countries and resulted in a [global policy report](#) advancing the understanding of the interlinkages between changing rainfall patterns, food security and human mobility. Based on the results of the study, CARE launched community-based adaptation (CBA)¹ pilot projects in India and Thailand.

The first phase of the CBA programme was implemented from 2012 to 2014 in both countries, with a focus on sustainable agricultural practices and efficient water management, followed by a second phase in 2014-2016, aimed at expanding the results and impacts achieved. At the end of Phase II, final evaluations were conducted separately in India and Thailand respectively. The current phase of the project was initiated in January 2017 and will be implemented until December 2019.

Overall, the **general objective of WtRF Phase III** is to:

Enhance the resilience of marginalized population from Northern Thailand and Central India to climate risks and climate change and build their adaptive capacities.

Specific objectives of the projects included:

SO1: To support people and communities to move towards more climate-resilient livelihoods and forward-looking development planning.

SO2: To contribute to the integration of climate risks & climate change in policies & practices of the authorities and Civil Society Organizations (CSOs).

On this common basis, WtRF India and WtRF Thailand were then designed, implemented and monitored separately by the CARE India and CARE Thailand ("Raks Thai") teams, with ongoing technical and methodological support from CARE France. Several knowledge and experience sharing events were organized during the course of the project's implementation, both virtually and in-person, allowing to capitalize on synergies between countries and share good practices.

The scope of this assignment includes **two separate studies**, which will be aiming at:

- (1) **Evaluating WtRF phase III** programme (2017-2019) in India and Thailand;
- (2) **Assessing impacts** in terms of community adaptation to climate change imputable to WtRF in Thailand.

¹ Community-based adaptation is an approach theorized and implemented by CARE for over 10 years, as an effective, practical, integrated and highly participatory approach which strengthens adaptive capacity, and supports planning and implementation of disaster-risk reduction and climate resilient development, informed by knowledge of climate information and risks.

Purpose of the studies and target audiences

The common purpose of these two studies is to:

- Help **document a summary of quantitative and qualitative results and outcomes** from WtRF Phase III for both countries;
- **Identify key lessons learnt and provide recommendations** that can both contribute to the sustainability of benefits of this project, and aid in the overall enhancement of the programming of CARE and its partners;
- **Contribute to CARE's accountability** towards AXA, as the unique donor of WtRF Phase III, as well as its partners and supporters.

The **target audiences** for these studies will include: AXA staff; CARE India, CARE France and Raks Thai staff; CARE International members and agents, with a focus on the climate change learning group; the wide network of CARE's collaborating agencies and institutions, research and training institutions, international and national NGOs, etc. and their audiences.

Approach and product

These two studies must provide **evidence-based information that is credible, reliable and useful**. The selected consultant is expected to develop a methodology based on the elements listed in these ToRs, following a **participatory and consultative approach ensuring** close engagement with CARE France, CARE India and Raks Thai team, as well as project stakeholders and beneficiaries including community members, partner organizations and government representatives.

The ultimate products should be **concise, well-structured documents** including quantitative and qualitative data, as well as clear conclusions and recommendations, as detailed in the "format" sections below.

Note: Graphic design of the documents is not required from the consultant, in order to fully dedicate the resources available for these studies to the production of relevant content. If relevant, it would be taken care of subsequently by CARE.

(1) Where the Rain Falls multi-country evaluation

While WtRF India and WtRF Thailand were conceived as separate projects, with their respective approaches, activities and indicators, there are a lot of common features which will allow to conduct parallel, comparative evaluations, topped with a multi-country comparison analysis.

Objectives and scope

The main objective of the evaluation is to:

Assess the degree of achievement of WtRF goal, outcomes and specific outputs in India and Thailand respectively, and extract common and/or compared lessons learned about factors contributing to and hindering achievements.

The evaluation will review and discuss to what extent WtRF Phase III (2017-2019) realized its expected results in the target geographies in India and Thailand, with a focus on the higher levels of the logical framework hierarchy. It will identify weaknesses and strengths in the project design and implementation strategies and will provide an analysis of how WtRF delivery mechanisms worked best, under which circumstances. Ultimately, it will document some important lessons learnt for CARE and external audiences among adaptation practitioners, come-up with recommendations to address identified gaps.

Evaluation criteria, research questions and indicators

Overall, the evaluation will refer to the following criteria when reviewing the project's achievements: **relevance, effectiveness, efficiency, impact and sustainability**. The discussion on the relative importance of the respective the criteria will be included in the report.

An assessment of project performance will be carried out, based against expectations set out in the respective Projects Logical Frameworks, which provide activity, results and outcome levels indicators for project implementation along with their corresponding means of verification. These indicators have been defined for the projects in India and Thailand respectively, some of which are similar or comparable. The evaluation team will **assess the achievements realized against each of these indicators**, compared with the status identified at baseline.

A methodology will be designed by the consultant to produce data comparable between the two countries when it comes to the following high-level indicators:

of people with improved resilience to climate change and climate variability;

% increase in their adaptive capacities

as they were not defined in similar ways in each country. A recommended approach would be to **come up with composite indicators for resilience and/or adaptive capacities** based on criteria and data relevant for both countries. Relevant reference documents for this purpose include the [CARE Resilience Framework](#), and the [ACCRA Local Adaptive Capacity Framework](#).

Format

The multi-country final evaluation will be produced into a **brief and concise report in English** of 50 pages maximum. All detailed information will be referred to annexes. It will include:

- A **2-3 pages self-contained executive summary** that provides the bare-essentials for the reader on background major conclusions, recommendations and lessons learned;
- The **main report**, including: WtRF India key findings, WtRF Thailand key findings, combined indicators and common trends, recommendations. Key findings, main conclusions and

recommendations should be substantiated with more detailed information only to the extent necessary.

Detailed findings will be referred to the annexes. Conclusions and recommendations in the main report will have references to the relevant findings in the annexes. These shall provide all information necessary to substantiate major conclusions and recommendations in the main report. The Terms of Reference, list of persons met, and list of documents used shall also be annexed.

(2) Impact Assessment for Thailand

The impact assessment for *Where the Rain Falls* Thailand will be conducted as a subsequent step after the final evaluation is realized. It will allow the evaluation team to **dig further for quantitative results and outcomes of WtRF in Thailand, focusing on specific levers of change.**

Objective and scope

The objective of the impact assessment is to:

Attribute observed changes in terms of adaptive capacities to climate change on the WtRF target groups in Thailand to the project, or at least quantify the contribution that the intervention has made to these changes.

To do so, the consultant will **review and analyse the impacts of WtRF CBA project in Thailand** in terms of adaptation to climate change, from its inception in 2012 until its conclusion in 2019, on the **target individuals** (disaggregated by gender groups), **communities and institutions**. The impact assessed can be **direct or indirect, intended or unintended, positive or negative.**

Impact areas to consider and research questions

The project team developed at 'impact mapping' of the project, which will be used to **identify specific impact areas, or change levers**, which the assessment will focus on, in discussion with the project team.

It is anticipated that particularly emphasis should be on **sustainable water management** and **sustainable land management**, sectors which received the highest level of effort and resources from the project, especially in the first two phases. Other areas of interest include **inclusive governance** (through individual and community-level decision making, and policy influencing at the local level), as well as **gender equality and women voice.**

The assessment will review the changes incurred in these specific sectors (and possibly a limited number of others, based on the methodology proposed by the consultant), and question **to what extent these are contributing to climate change resilience building among vulnerable communities in remote areas of Northern Thailand.**

The assessment will contain precise qualitative and quantitative data.

Format

The impact assessment for Thailand will be produced into:

- A concise, overall impact report of 20 pages maximum (excluding annexes), including a **2-3 pages executive summary**, summarizing the main findings and conclusions.
- A series of **self-contained learning brief** for each of the areas of changed covered.

Research methodology and suggested tasks

Although the selected consultant is expected to come up with its own creative research methodology, in consultation with the project teams, the following tasks should be conducted as a minimum, and repeated for both studies:

- **Discussion with relevant staff** from CARE France, CARE India and Raks Thai, both at headquarters and at field levels, to further understand the project's logic and the expectations on the evaluation work to be undertaken;
- **Desk study** of all WtRF documentation, including project briefs, project proposals, logical frameworks, semi-annual and annual report, publications, studies, and any other material useful for this evidence-based assessment;
- **Design of the detailed evaluation methodology**, tools, evaluation questions, activities, analysis and meta-analysis methods, list of informants and detailed timeframe in dialogue with the WtRF teams;
- **Planning, contracting and coordination of in-country collection of primary data**, in India and Thailand respectively, by local data collectors or evaluators, with the assistance of CARE India and Raks Thai team. Data collection methods will be discussed and explained, and may include interviews and focus group discussions;
- **Recollection and analysis** of field-level data;
- **Production of reports** in two successive drafts (as a minimum), with integration of feedback from CARE Team:
- **Presentation of reports and results to CARE teams** (remotely or in person depending on the location of the consultant), and to other practitioners if relevant.

Expected duration of the assignment and timeframe

Multi-country final evaluation:

Maximum of 20 working days in October-November 2019

Final evaluation report should be submitted no later than November 30th, 2019.

Impact Assessment Thailand:

Maximum of 20 working days in December-January 2019

Final impact assessment should be submitted no later than February 15th, 2019

Deliverables

- Detailed research methodology, including overall methodology proposed tasks, selected evaluation questions and indicators, analysis and meta-analysis methods, a list of informants and a detailed timeframe;
- Draft multi-country final evaluation;
- Complete final evaluation (within two weeks of receiving comments from team);
- PPT presentation of the evaluation to the CARE teams/steering committee;
- Draft impact assessment;
- Final impact assessment (within two weeks of receiving comments from team);
- PPT presentation of the impact assessment to the CARE teams/steering committee;

Roles, responsibilities and required competencies

The principal evaluation team shall be ideally comprised of 3 persons² (one international consultant, and two national assistants, one each in Thailand and India). **Surveyors may be contracted at the local level** to assist with the data collection, under the responsibility of the evaluation team.

The international consultant, who will have in-depth understanding of climate change adaptation projects including evaluation experience, **will have the overall responsibility of organizing and completing the studies and submitting the final reports**. The international consultant will sign an agreement with CARE France and will be bound by its terms and conditions set in the agreement.

He will be responsible for constituting and contracting his/her national team members, as well as the local data collectors, with guidance and insights from CARE. The team can be constituted upfront and presented as part of the technical and financial proposal submitted to CARE, or the lead consultant can apply individually and constitute the team at a later stage.

Qualifications of the International consultant

Essential skills

- At least an advanced academic degree or the equivalent, and professional background in fields related to climate change adaptation, climate resilience, and natural resource management or agriculture.
- A minimum of 10 years' experience.
- Proven experience and appreciation on the policy mainstreaming work and related policy processes.
- Substantive experience in reviewing and evaluating similar projects, preferable those involving CARE, other NGOs or major donors.
- Excellent communication skills (writing and reading) with good command in English.
- Demonstrate ability to assess complex situations, succinctly distil critical issues and draw forward looking conclusions and recommendations.
- Ability and experience to lead multi-disciplinary and national teams and deliver quality reports within the given time.
- Experience in Asian countries, with specific experience in India and Thailand.

Desirable qualifications:

- Knowledge and/or experience on gender equality and women voice issues.
- Detailed knowledge of CARE and its programming
- Command of Thai language.

Qualifications of the National team members

Essential skills

- At least an advanced academic degree or the equivalent, and professional background in fields related to climate change adaptation, climate resilience, and natural resource management or agriculture.
- A minimum of 5 years' experience in research, evaluation, or data collection and analysis.
- Proven experience and appreciation on the policy mainstreaming work and related policy

² This number could be reduced to two, should the international consultant be based in (or near) and have experience and expertise on either India or Thailand national contexts.

processes at the national level (in India or Thailand), knowledge of local dynamics, power relations, institutions and stakeholders.

- Substantive experience in reviewing and evaluating similar projects, preferable those involving CARE, other NGOs or major donors.
- Good communication skills (writing and reading) with good command in English.
- Command of national language (Thai or Hindi).

Desirable qualifications:

- Experience of knowledge of CARE and its programming, or experience with other international NGOs.
- Knowledge of the local languages (Karen).

Steering committee

A steering group will be composed for guiding the process of this evaluation work, comprising of: the international consultant, CARE France WtRF multi-country coordinator, CARE India Technical Advisor, CARE India WtRF Project Manager, Raks Thai Technical Advisor, Raks Thai WtRF Project Manager. Regular remote meetings (via Skype) will be organized to ensure alignment between the different parties.

Budget and payment modalities

The total budget available for this assignment is comprised between EUR 20,000 and 30,000. It will cover working days (for all team members including fees or stipend for surveyors), travel (international and local transport, per diem, visas and other applicable fees), as well as all applicable taxes. Costs related to the organization of workshops at the local level, translation, graphic design and printing can be borne by CARE.

The payment shall be processed to the lead international consultant as follows:

%	Milestone
10%	Upon signature of the consultancy contract
40%	Following the submission and approval of the final evaluation
50%	Following the submission and approval of the final impact assessment

Application process

A team or individual consultants are invited to submit applications together with their CV for these positions by email to Marie Leroy, Climate Advisor, CARE France (leroy@carefrance.org) **by September 8th, 2019.**

The application should contain a current and complete C.V. for each team member with indication of the e-mail and phone contact.

Recommended Presentation of Proposal

- (i) Cover letter and Professional Resume CV for each consultant;
- (ii) Technical Proposal, including the proposed evaluation methodology and work plan (2 page max.);

- (iii) Financial Proposal, detailing proposed fees for the team members for a maximum 40 working days, any travel-related costs, remuneration of local data collectors and all applicable taxes.
- (iv) Sample of executive summary of a terminal evaluation or any type of evaluation report led by the applicant.

Shortlisted candidates will be contacted for further inquiry and/or interview.

CARE applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.