



Bringing Innovation to Scale: Resilience to Climate Change

Synthesis of learning from four CARE
Community-based adaptation projects



This paper is based on the final evaluation reports of CARE's four community-based adaptation projects in Papua New Guinea, Timor-Leste, Vanuatu and Vietnam¹. CARE implemented these projects between July 2012 and June 2015 with funding from the Australian Department of Foreign Affairs and Trade (DFAT) under its Community-Based Climate Change Action Grants (CBCCAG) program.

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The views in this report are those of the author alone and do not necessarily represent those of CARE Australia, its partners or the Australian Government.

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¹ <https://www.care.org.au/wp-content/uploads/2015/08/CBA-Portfolio-Evaluation-CBA-PNG-Evaluation-Report-FINAL.pdf>; https://www.care.org.au/wp-content/uploads/2015/07/CBA-Portfolio-Evaluation_MAKAAS_Evaluation-Report_FINAL1.pdf; <https://www.oxfam.org.au/wp-content/uploads/2015/05/lessons-from-the-vanuatu-ngo-climate-change-adaptation-program-web.pdf>; <https://www.care.org.au/wp-content/uploads/2015/12/CARE-CBA-Capacity-and-Partnerships-Report-2015.pdf>

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It's going to be really hard for us in the future...we need to take a stand, work together, cooperate together and build a secure future for all of us.

Litiana (23), Youth Activist, Vanuatu

ABBREVIATIONS

CBA	Community Based Adaptation
CBCCAG	Community Based Climate Change Action Grants
CCRD	Centre for Rural Communities Research and Development
CoE	Council of Elders
CVCA	Climate Vulnerability and Capacity Analysis
DFAT	Department of Foreign Affairs and Trade
NDA	Nissan District Administration
NRM	Natural Resource Management
SEDP	Socio Economic Development Plan
SPC-GIZ	Secretariat of the South Pacific-Deutsche Gesellschaft für Internationale Zusammenarbeit
VCAN	Vanuatu Climate Action Network
WASH	Water, Sanitation and Hygiene

1 OVERVIEW

As part of CARE’s community-based adaptation (CBA) learning agenda, this report synthesises key findings, lessons and recommendations from its portfolio of CBA projects in Papua New Guinea, Timor-Leste, Vanuatu and Vietnam. Through the review and analysis of different approaches and models, this paper considers where and how approaches have been effective; how these are linked to project impacts; and provides examples of good practice, lessons learned, and recommendations to inform future programming by CARE, its partners and other agencies. The CARE International Community Based Adaptation (CBA) Framework provides the framework for analysis and report structure.



(Top left) A villager in front of her home-based garden, Vanuatu (C. Sterrett/Climate Concern); (Top right) An evaluation participant assesses livelihoods as part of the evaluation (P. Bolte/Banyaneer); (Bottom left) A young girl uses a newly installed water tap to wash her hands, Timor-Leste (T. Greenwood/WaterAid); (Bottom right) In celebration of World Food Day, women showcase the food they have produced in their kitchen gardens, Papua New Guinea (A. Dekrout/CARE).

2 BACKGROUND

From mid-2012 to mid-2015 CARE Australia implemented four CBA projects across four countries – Papua New Guinea, Timor-Leste, Vanuatu and Vietnam. Funded as part of the Australian Government’s Community Based Climate Change Action Grants (CBCCAG) program, these projects have worked towards the overall program goal of ‘increasing the resilience of communities in developing countries to the unavoidable impacts of climate change’.¹

Table 1: Community-Based Adaptation Project Overview

	Papua New Guinea	Timor-Leste	Vanuatu	Vietnam
Project title	Community-Based Adaptation (CBA) to Climate Change in Nissan District	Climate Change in a Secure Environment (<i>Mudansa Klimatica iha Ambiente Seguru</i>)	Vanuatu NGO Climate Change Adaptation Program (<i>Yumi stap redi long klaemet jenis</i>)	Integrated Community-Based Adaptation in the Mekong
Locations	Nissan District, Papua New Guinea	Liquiça District, Timor-Leste	Futuna Island, Tafea Province, Vanuatu	An Giang and Soc Trang Provinces, Vietnam
Timeframe	July 2012-April 2015	July 2012-March 2015	July 2012-December 2014	July 2012-December 2015
Budget	\$2 million	\$2.1 million	\$0.3 million ²	\$2.6 million
Partners	National Agricultural Research Institute, Nissan District Administration (NDA)	WaterAid Australia	Consortium of Oxfam, Save the Children, Vanuatu Red Cross Society, ² Vanuatu Rural Development Training Centres Association, and the Secretariat of the South Pacific/ Deutsche Gesellschaft für Internationale Zusammenarbeit (SPC-GIZ)	An Giang and Soc Trang Women’s Union, Centre for Rural Communities Research and Development (CCRD)

² CARE project component

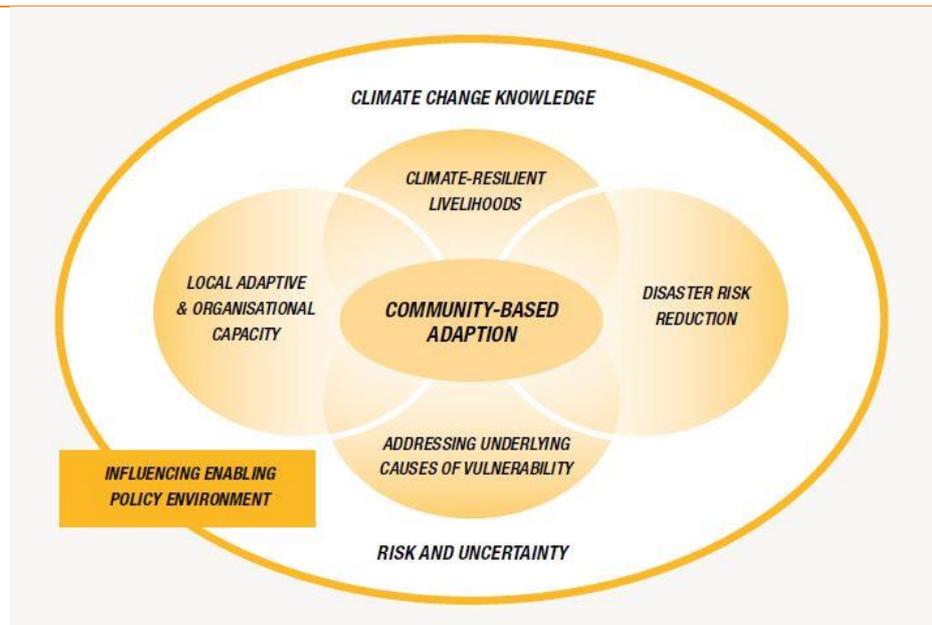
	Papua New Guinea	Timor-Leste	Vanuatu	Vietnam
Project overview	The project supported villagers on the remote islands of Nissan and Pinepal to increase their resilience to climate change. It achieved this through food and nutrition security, sustainable livelihoods, disaster risk reduction (DRR), capacity strengthening of communities and local government, and improved planning and policy development.	The project supported villagers on Liquiça district to adapt to climate change. It achieved this by promoting of climate-resilient livelihoods, enhancing access to safe drinking water and improved sanitation, reducing the risk from erosion and landslides, and enabling broader village plans for climate change adaptation.	The CARE component of the program supported villagers on the island of Futuna to increase their understanding of climate change, its potential impacts and actions required to increase resilience. It achieved this through sustainable livelihoods, DRR, capacity strengthening, and improved development planning and policy at local, provincial and national levels.	The project supported villagers in their adaptation efforts in two different geographical settings - riverine and coastal. It achieved this through sustainable livelihoods, DRR, capacity strengthening of communities and civil society, and adaptive planning.

The overarching framework used to strengthen resilience in each of these projects has been through the interrelated strategies of CARE's CBA framework. The framework describes a range of *enabling factors* (see diagram 1) that need to be in place for effective community-based adaptation to occur.³ In a context of increased unpredictability from climate change and disasters, by working with communities, partners, government and other stakeholders to strengthen people's capacity to absorb shocks, manage, growing risk, and address underlying causes of vulnerability, CARE is able to support communities to become resilient; to transform their lives, and move out of poverty.⁴

Diagram 1: CARE's Community-Based Adaptation Framework⁵

Promotion of climate-resilient livelihoods strategies such as diversification of land use and incomes;

Disaster risk reduction strategies to reduce impacts of increasing climate-related natural disasters on vulnerable households;



Strengthening capacity in a) community adaptive capacity such as in access to climate information and managing risk and uncertainty and b) local civil society and governmental institutions to better support communities in adaptation efforts;

Local and national level empowerment, advocacy and social mobilisation to: **a) address the underlying causes of vulnerability** such as poor governance, gender-based inequality over resource use, or limited access to basic services, and **b) influence the policy and enabling environment.**

In addition, the CBA framework emphasises the use of climate information, and the uncertainties of climate risk, in guiding project/community decision-making as *the* critical distinguishing features of adaptation work.

3 SYNTHESIS OF FINDINGS

This section provides a synthesis of findings from each of the four project evaluations organised according to the key themes of each evaluation: relevance, efficiency, effectiveness, impact and sustainability.

RELEVANCE

Overall, the interventions of the CBA projects were highly relevant.

In Papua New Guinea, the interventions were highly relevant as they supported livelihoods that were more resilient to climate variability and change, building on existing coping mechanisms. The broad uptake of climate-resilient practices confirms this. The project also responded to beneficiary needs for improved knowledge and skills related to disaster risk reduction, with many people affected by disasters in the last five years suffering economic losses as a result.

In Vietnam, the project was highly relevant because it responded to beneficiary needs to adapt to climate-related hazards such as storms, floods and droughts. In this context, the multi-stakeholder, multi-level planning process supported greater bottom-up governance and responsiveness, something needed by communities.

In Timor-Leste, the project was aligned with government policy, it contributed to successful community-based adaptation in areas prioritised by beneficiaries, but also interventions that addressed broader concerns in food security, livelihoods and governance. The use of farmer groups was also highly relevant at a district level, with government institutions finding that they provided greater outreach for their own work.

In Vanuatu, the project addressed specific community needs (including the needs of women and youth), leading to benefits in food and nutrition, community capacity and cohesion, water security and disaster preparedness. The project was also considered relevant by consortium, partner and government agencies due to increases in collaboration, policy development and implementation of actions that build resilience to both disasters and climate change.

“The program is more relevant now than when we started. Now people are talking about what needs to be done and we are at a tipping point for well planned, scientific and gender balance community based adaptation.” *Consortium partner staff member, Vanuatu CBA project*

EFFICIENCY

Overall, the interventions of the CBA projects were efficient.

“Project implementation on remote islands in the South Pacific...tends to be more expensive than in most other regions. Against these odds, CARE ensured the efficient use of funds.” *Findings from the evaluation of CARE’s CBA project in Papua New Guinea*

In Papua New Guinea, despite high implementation costs (due to remoteness of project location and resulting transportation, communication and material costs), CARE undertook efforts to maximise efficient use of resources. This included shared office structures and project coverage of Nissan district’s entire population. Most significantly, the ‘core group’ approach⁶ was found to be an effective, but also an efficient and cost-saving model: the only alternative - setting up a project office on Nissan Island - would likely have incurred significantly higher costs.

In Timor-Leste, the project successfully built on existing expertise, networks and structures established by CARE and WaterAid through earlier projects, which enabled a swift roll-out across the 33 target villages. Furthermore, the group-based implementation approach facilitated close working relationships between project staff and the immediate target group increasing efficiencies.

In Vanuatu, the project was able to undertake all its key activities within budget. This included material inputs in water, sanitation and hygiene (WASH), natural resource management (NRM), infrastructure, and agriculture; as well as awareness raising/knowledge building, research and policy, training and capacity support, liaison and representation, and monitoring and evaluation components. The program’s partnership models (consortium approach, building on existing programs and coordinating technical support), have all contributed to increasing the efficiency of the program.

EFFECTIVENESS

Table 2: Direct Project Beneficiaries

# Direct Beneficiaries	Papua New Guinea	Timor-Leste	Vanuatu	Vietnam
Female	183	2,125	2,394	4,929
Male	202	1,932	2,670	3,137
Total	385	4,057	5,064	8,066

In total, the four projects provided direct support to 17,572 people (55% female, 45% male).

Overall, the interventions of the CBA projects were effective, particularly those related to the awareness raising and knowledge, community planning, and to a large extent, climate-resilient livelihoods.

In Papua New Guinea, the project was based on a highly effective design and implementation approach. The 'core groups' were trained well and spread the gained knowledge of climate-resilient practices throughout the islands. This resulted in good adoption of climate-resilient livelihood practices by community members: three-quarters of households now apply home-gardening, and also plant a greater variety of crops and vegetable types, resulting in more diversified livelihoods. In terms of DRR, while the project was successful in increasing awareness, the small scale nature of DRR measures developed by community members and the increase in droughts and cyclones during the implementation period, meant that the DRR benefits of the project were minimal.

In Vietnam, the project has been successful in strengthening the capacity of partners and in creating a comprehensive planning platform whereby community members are able to input into local planning and development processes. As a result, this led to the creation of village adaptation plans in all 33 target villages and their integration into Socio-Economic Development Plans (SEDP) of the associated five communes. The role and capacity of the Women's Union (the project's key partner) has also been strengthened. The dedication of partners to community-based adaptation, better inter-agency collaboration, stronger vertical links and responsiveness is also apparent. However, several design issues and structural challenges led to below-target outcomes. Time and resources did not fully match the scale and scope of the project that had initially been conceptualised for a five-year implementation frame. And while some challenges were identified and rectified, others persisted, in particular, insufficient capacity to coach partner staff and a lack of time for village-based implementation. The project did, however, conduct excellent research of options for climate-resilient livelihoods. And while only some of them could be applied in the local context, they are a valuable resource for similar projects elsewhere.

In Timor-Leste, overall, across the twenty *barrios* (sub-villages) that were supported, water access, management practices and sanitation improved substantially. The applied approach of community-led total sanitation was found to be particularly effective, resulting in many *barrios* being declared as open-defecation-free. The project distributed new varieties of seeds, introduced and promoted conservation farming techniques. As a result, farmer group members had better yields and reduced post-harvest losses. They also diversified crops and adopted conservation farming practices. Overall, the share of those with access to climate information more than doubled. However, while the level of understanding of climate change impact and options for adaptation increased substantially, this increased awareness has yet to translate into broader adaptation planning as envisaged. Also, while the project directly benefitted around 4,057 people across 33 *aldeias* (small settlements) across six villages, more than a third of these belonged to either a water management groups or farmer group, with support not really extending beyond group members.

In Vanuatu, the project increased communities' knowledge of climate change and its potential impacts, as well as their access to information on climate change. This has helped them: prepare for and mitigate the impacts of cyclones, droughts and floods; know what to plan and when; manage pests; diversify and plant more disaster resilient crops; preserve food; improve their standard of living through better food and nutrition. Communities now have better decision-making processes which include Provincial Area Council and established climate change and disaster risk reduction committees, and links with relevant government departments. Working together, consortium program agencies are increasingly sharing information and resources with each other and with the broader Vanuatu Climate Action Network (VCAN), and by drawing on the collective experience and specialist skills of individual agencies, consortium partners and the wider network have greater capacity in climate change adaptation programming. Increased collaboration has enabled individual agencies to have a broader policy influence, in particular though emphasising the importance of gender and equity as foundation blocks of sustainable development, and the effectiveness of focusing on capabilities rather than technological fixes for development issues.

"Because of the program we are no longer dependent on buying vegetables; now we grow our own food."

Male beneficiary, Futuna Island, Vanuatu CBA project

IMPACT

Overall, the interventions of the CBA projects have had positive impact on beneficiaries, the wider community, partners, government and other stakeholders across a range of areas.

In Papua New Guinea, the project has had positive impact across three main areas: food security; community capacity; and gender equality. Overall, the project has increased both the coping range and the adaptive capacity of communities. There is evidence that food security has improved due to the project, with the number of food insecure months reducing from seven (2011) to four (2014). The project has also led to stronger community capacity. Collective action has increased and 'core groups' have become a new organisational entity within the villages. Their strong engagement had spin-off effects on other community groups - particularly those with a strong overlap (women's groups and church groups). Furthermore, it has had a positive impact on gender equitable decision-making, with women gaining influence both at the household and community level.

In Vietnam, while the late launch of village based adaptation has delayed impacts, the strong investments in capacity-building of local partners makes it reasonable to assume that the project's impact will only emerge fully in years to come. The fact that the CBA approach has already been replicated in five communes is a strong indication towards that trend. Positive trends are observed in terms of disaster preparedness, access to finance, community cohesion, and village-government, and have been partially attributed to project. However, the negative effects of climate change and local degradation to date overshadow most project-related gains in the areas of crop cultivation, animal production, food security, water and health. In terms of more gender-equitable decision-making, there are mixed results, with the survey indicating no significant change whilst

qualitative data generated through workshops indicate a greater role of women in community-level decision-making.

In Timor-Leste, the project generated positive impacts in terms of livelihoods, water, sanitation and community capacity. Combined with raised awareness of climate change risks and knowledge of climate-resilient practices, these results led to an overall increase

“While Timor-Leste remains at a precarious state in terms of food security, the support provided under the previous project, and [this] project, as well as favourable weather conditions, have rendered supported aldeias food-secure.”
Findings from the evaluation of CARE’s CBA project in Timor-Leste

of adaptive capacity, particularly amongst members of farmer groups and water management groups. In terms of livelihoods, villagers see themselves better off overall, as well as better adapted and prepared for climate risks. Concerning community capacity, the project led to enhanced collective action and better links to the government. In terms of gender, however, decision-making patterns were not changed despite objectives towards more gender-equitable patterns.

In Vanuatu, the project has been a significant driver of not only increasing knowledge of climate change, but making this knowledge widely available. Using knowledge and skills gained, community members

have taken actions to adapt to climate change through climate-resilient livelihoods, disaster risk reduction and better water management practices. The project has also been effective in supporting community members establish and improve links with government structures, although many challenges remain in making links strong enough to be sustainable without the support of the program. The project has also increased the participation of vulnerable groups in community activities and decision making/governance structures established or strengthened capacity needed to manage community involvement and increase community ownership. Working together, CARE and consortium partner agencies and the broader VCAN network have increased consultation on and coordination, with incoming climate change initiatives, policies and strategies in Vanuatu and internationally.

SUSTAINABILITY

Overall, the interventions of the CBA projects have used strategies to increase community ownership, government and partner support, as well as increase capacities of communities and governments to sustain project gains. However the short time frame of projects (three years) and their ambition, particularly in term of climate-resilient livelihoods, means that ongoing support in some cases may be required.

In Papua New Guinea, the project cultivated a strong sense of ownership amongst core groups in particular, and communities more broadly. Given the continuous role ‘core groups’ will play, the capacity to sustain climate-resilient crops and techniques is high. The planned integration of the ‘core groups’ into formal governance structure will further reinforce their sustainability. At the same time, the weak state of district-level governance bears implications for developing adaptive capacity further. More capacity-building of formal and information local governance structures is therefore required.

In Vietnam, the overall CBA planning process is highly likely to be sustained and replicated, given the strong willingness and capacity gains of local partners to pursue further planning rounds. The outlook is more mixed in terms of climate-resilient livelihoods, as one-third of those interviewed for the evaluation stopped the application of new techniques when expected benefits did not occur. Further analysis of challenges such as access to markets and gendered value chain analysis is therefore recommended. Government partners saw strong merit in the improved horizontal and vertical planning modes, and developed strategies to sustain and expand processes of community-based adaptation. This includes resourcing independent external (donor-based) support.

“The project is truly community-based not only in the sense that it is being located in the community, but also that it is owned by the community. That in itself is arguably the greatest enabler of sustainable outcomes.” *Findings from the evaluation of CARE’s CBA project in Papua New Guinea*

In Timor-Leste, most project outcomes are seen as sustainable, given the willingness and capacity of villagers to continue pursuing underpinning activities. In terms of water and sanitation outcomes, the critical mass has been attained that tends to perpetuate improved practices. The water supply system is sustainably managed; and if required, back-up can be provided if from the government and the water management association. The sustainability of farmer groups is more limited, however, as most farmers are more likely work on their own rather than through these groups, and the Ministry of Agriculture and Fisheries has limited capacity to render support to groups. That said, evidence from previous projects suggests that many Farmer’s Groups do continue in some form well beyond projects, although this does not necessarily include regular meetings and trainings.

In Vanuatu, the project has provided a solid foundation for the continuation of program gains through enhanced capacities of community members and partners, improved governance structures, connections between community and government bodies at a provincial and national level, and tools and resources to support learning and action to date. However, more work needs to be done on regular and systematic community planning processes that have technical input from government staff and feed into provincial and national development planning processes, such as Area Development Plans. Given the importance of these plans for the ongoing sustainability of program achievements this is an area which requires communities, non-governmental organisations and governments alike to work together to ensure that plans are turned into concrete actions that benefit all communities, in particular those most at-risk from climate change impacts.

4 ACHIEVEMENTS AND GOOD PRACTICE

This section provides key achievements from the CBA projects according to the strategies of the CARE CBA Framework, highlighting good practice approaches and models.

ACHIEVEMENTS RELATED TO THE COMMUNITY BASED ADAPTATION FRAMEWORK

Promotion of climate-resilient livelihood strategies

Across the CBA projects, people generated and used climate information for better planning. In Vanuatu, better access to local climate forecasts helped community members adapt their planting times and what they plant.

Households employed a variety of climate-resilient agricultural practices. In Timor-Leste, as the result of distribution of new varieties of seeds, and the introduction and promotion of conservation farming techniques, community members had better yields and reduced post-harvest losses, diversified crops and adopted conservation farming practices (in particular the uptake of integrated pest management, contour farming and crop covering). In Papua New Guinea, by first introducing rainwater harvesting systems and then promoting climate-resilient practices - such as kitchen gardens with crop coverage, mulching, and adoption of more drought-tolerant crops - CARE effectively extended the coping range of islanders.

“Planting more diverse and drought resistant vegetables improves our health as we have more to eat and a better choice.” *Female beneficiary, CBA project in Vanuatu*

Local institutions now have better access to information and local plans to support climate-resilient livelihoods. In Vietnam, the Women’s Union received information and training on climate change, and supported community members to input into local development plans.

Disaster risk reduction strategies

CBA projects have supported households to protect their key assets such as livestock, crops, water and houses. In Vietnam, construction of flood gates and green dykes, as well

“Preserving and storing food helps us better prepare for disasters.” *Female beneficiary, CBA project in Vanuatu*

as safe shelter for child care centres were built as a result of the community-based planning and thus based on the input from communities; and were therefore well received and highly relevant. As a result community members felt safer from natural hazards and disasters. The protection of food reserves and agricultural inputs, however, was not

a major focus of any of the CBA projects; neither was secure shelter. Access to early warning systems was a feature of all CBA projects, with all projects working with communities and local government to develop or improve disaster management plans. However, in a number of projects (for example, Timor-Leste and Papua New Guinea) village level planning did not necessarily translate into local level plans. In Papua New Guinea, in particular, disaster risk reduction efforts were left largely in the hands of

villages, and as a result none of the villages had an early warning and evacuation system, nor were they well trained and equipped to respond to accidents and disasters.

Strengthening local adaptive and organisational capacity

CBA projects have supported community members to have the knowledge and skills to employ various adaptation strategies. In Timor-Leste, the project distributed new varieties of seeds, introduced and promoted conservation farming techniques. As a result, farmer group members had better yields and reduced post-harvest losses. They also diversified crops and adopted conservation farming practices (in particular the uptake of integrated pest management, contour farming and crop covering).

Projects have also provided mechanisms to sharing seasonal forecast and climate monitoring information. In Vanuatu, CARE provided each village with community noticeboards to display climate information, seasonal forecasts and other information relevant to weather and climate change, and worked with the meteorological department to ensure forecasts were shared on a regular basis. As a result community members were able to plan when to plant and harvest crops and when to prepare for disasters.

“We need a vision for the island. Where do we want to be in five years from now?” Nissan District Administration Officer, CBA project in Papua New Guinea

However, only one project (Vietnam) supported communities to link with micro-finance institutions to provide savings, credit and insurance services to support adaptation.

Influencing enabling policy environment

CBA projects have influenced the enabling policy environment to different degrees. All projects have influenced the local policy environment by working directly with government and local partners by increasing their capacity on CBA and their ability to

“Vanuatu does not yet have a national approach to climate change practice, but with the development of national policies such as the Climate Change and Disaster Risk Reduction Policy and lessons learned from the NGO CBA program, we are working towards it.” National Advisory Board staff member, CBA project in Vanuatu

make the right decisions for those most affected. In Timor-Leste, women and men felt capable of implementing adaptation. However, across the majority of projects, the capacity of the local government remains severely limited at due to restricted material and financial resources. At a national level, CBA projects in Vanuatu and Timor-Leste made good progress influencing the enabling policy environment. In Vanuatu, the role of CARE and other consortium partners was important in brokering relationships between communities, government and service providers, and in influencing national level

policy, such as the national Climate Change and Disaster Risk Reduction policy. In Timor-Leste, the project steering committee was instrumental in establishing a National Working Group on Climate Change Adaptation, which has since helped mobilise the government to conduct its first National Climate Change Conference, resulting in the Dili Declaration on Climate Change Adaptation – a commitment to renew climate change adaptation efforts.

Addressing the underlying causes of vulnerability

CBA projects, have supported women and marginalised groups to have better access information, knowledge and skills. In Vanuatu, the project made a deliberate effort to reach the most vulnerable (including people with disabilities) through awareness raising activities, training and gardening activities. As a result, women now have a role and the skills for gardening, which includes traditional and new varieties of fruits and vegetables. Women feel more empowered through the ability to grow, select and cook the produce they choose for family meals instead of being dependent on men who previously controlled choice and timing of household foods.

“Increased knowledge helps us know what to do now and in the future.” *Female beneficiary, CBA project in Vanuatu*

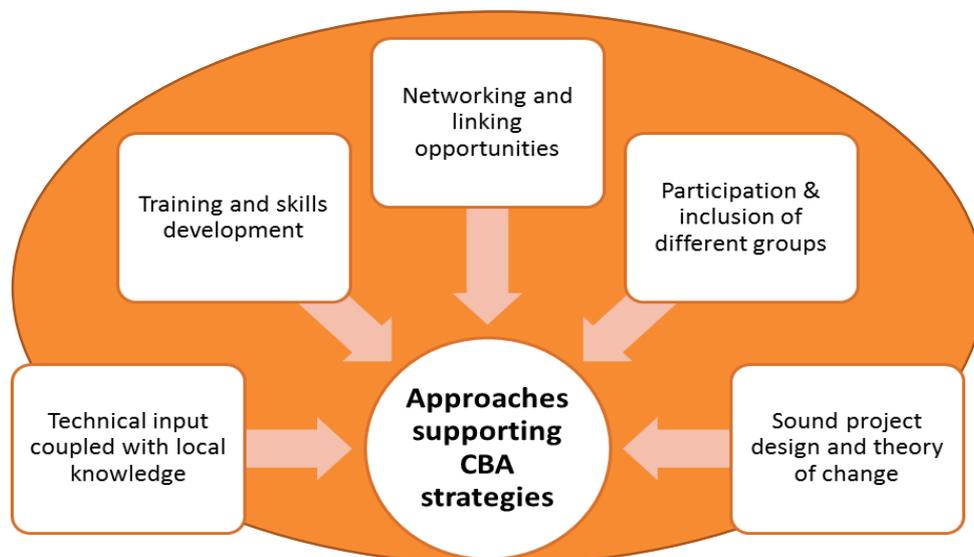
All projects also worked to increase access to critical livelihood resources for women and marginalised groups. In Papua New Guinea, both the kitchen gardens and the distribution of fuel-efficient cooking stoves were used as approaches to reduce women’s burden from collecting firewood and food from the forest. As a result of the distribution of fuel-efficient stoves, women’s workload has reduced, helping them have a greater community role.

Furthermore, all projects worked separately with women and men, and together to address challenges identified by different groups. In Timor-Leste and Vietnam, CARE used Climate Vulnerability and Capacity Analysis (CVCA), gender and power analysis to refine the relevance of its activities to its target groups, which resulted in interventions that were highly relevant.

GOOD PRACTICE

There was no one approach that was sufficient to build community resilience across the projects. Supporting community based adaptation in all four projects required a combination of approaches that were complementary and effective, built on a foundation of participation where communities were at its heart. The following approaches were used to good effect across the CBA projects to build community resilience:

Diagram 2: Approaches supporting CBA strategies



Sound project design and theory of change

In order to deliver on the strategies of the CARE CBA framework, CBA projects needed to be based on sound project design and theory of change. In Timor-Leste, the project did this through the inclusion of outcomes objectives and indicators that cover all aspects of the CBA framework. Outcome one and two and objective one related to the promotion of climate-resilient livelihood strategies and DRR, while outcome three and objective two were concerned with strengthening local and organisational capacity, the underlying causes of vulnerability (gender inequality) and influencing the enabling policy environment at a local level. The theory of change clearly linked project activities to immediate outcomes, intermediate outcomes, objective and overall impact.

The project's monitoring and evaluation framework included a variety of process and output indicators and means of verification. It also included a 'location of change' so that it is clear who the activities are designed to benefit.

Participation and inclusion of different groups

CBA was a product of active and participation and inclusion of different groups, in particular those most vulnerable to the impacts of climate change. Participation and social inclusion were key strengths of CARE's programming approach, as evidenced in the Vietnam CBA project. In Vietnam, the project worked extensively to facilitate adaptive planning using a multi-stakeholder, multi-level planning process to create greater bottom-up governance and accountability. As a result, the project was able to create a comprehensive planning platform, the creation of village adaptation plans in all 33 target villages, and their integration into SEDPs of the associated five communes. In terms of impact, it also facilitated a change of mindset towards more collaborative and inclusive planning.

Networking and linking opportunities

Being able to network and link with others increases access to information, skills and opportunities for collaboration, which together support effective CBA. In Vanuatu, the Vanuatu Climate Action Network (VCAN), which was set up under the consortium project in Vanuatu, has been able to bring together and link up over 20 civil society organisations. Working under the umbrella of VCAN, organisations have been able to come together and learn about each other's work, network, share learning and create new knowledge. These activities, along with joint planning and development of consistent tools and approaches for monitoring and evaluation, has helped strengthen partnerships and increased awareness of the strengths and resources held by each agency. As a result, there is now increased consultation on, and coordination with, incoming climate change initiatives in Vanuatu; and internationally, civil society, through VCAN, has collaborated with government to represent Vanuatu in the international climate change negotiations, further cementing the good relationships. Without the existence of VCAN and its reputation as an effective civil society body by government, these opportunities may not have arisen.

VCAN is a good practice example of the advantages of networking, linking and ultimately, collective action. In the process it has become a key consultative body and stakeholder in climate debate and policy development in Vanuatu.⁷

In Timor-Leste, the project was instrumental in developing the Climate Change Working Group which has been taken on by the Government of Timor-Leste. It liaised closely with complementary stakeholders including the Seeds of Life Program (DFAT), Rural Development Project (GIZ *Instituto Camoes*), Agro-biodiversity project (ADB), UNDP, Oxfam and the National Directorate of International Environmental Affairs and Climate Change. This included sharing knowledge on seedling nurseries, bioengineering and UNDP has since worked with CARE on community planning.

Training and skills development

The implementation of effective CBA requires that communities understand climate change risk and are able to act and adapt. In Papua New Guinea, the use of ‘core groups’ whereby the project trained and promoted community volunteers - in the fundamental aspects of climate change, adaptation, conservation farming techniques, nutrition, as well as key gender equality issues and basic principles of disaster risk reduction - to drive forward on-the-ground implementation of the project, rather than deploying community facilitators to each community, was a tremendous success. Equipped with the relevant knowledge and skills, ‘core groups’ were able to pass on the new knowledge and skills to fellow villagers and lead by example. Key outcomes of this model include:

- **Self-development of village disaster risk management plans.** All villages now have plans with core group members and village leaders largely devising them on their own (following training of core group members). Using the knowledge they gained through training coupled with their own experience of natural hazards, climate variability and change, village plans were developed. Measures included: the cutting of high breadfruit trees to reduce injury; construction of walls in some villages to prevent wild pigs from accessing and destroying vegetables (some of which were used for food supplies during times of crisis); the banning of tree-cutting in coastal areas (to reduce salt spray entering gardens); and the introduction of fuel-efficient cooking stoves to reduce firewood collection. However, none of the plans and activities included more systematic preparedness and risk reduction measures.
- **Effective implementation of climate-resilient livelihoods.** The islanders took up the promoted agricultural techniques on a broad scale – with small area soil management being the most popular. While not an explicit target of the project, the islanders also diversified crop types. They also added livelihood strategies to become more climate-resilient. Due to the promotion of the project by core groups, three out of four households on the islands now practice home gardening – a tremendous success. The core group model was also an efficient and cost-saving measure: the only alternative – setting up a project office on Nissan Island – would have likely incurred significantly higher costs. The strong sense of ownership and flexibility of CARE to incorporate villagers’ ideas and address their concerns formed a solid basis to sustain project outcomes.
- **Enhanced communication with governance structures.** The use of core groups led to enhanced communication with the Nissan District Administration (NDA) and the Council of Elders (CoE). The merit of the model was also recognised by the NDA and CoE, which plan to make them part of the formal governance structure through the formation of a core group association.
- **Increased mechanisms for exchange of experiences to support continuous learning and engagement.** With their level of engagement and dedication, core groups represent an effective mechanism for exchange of experiences: from focus

group discussions and interviews, it emerged that group members advise each other on experiences and any progress made with climate-resilient practices. The strong sense of ownership provides a solid foundation to sustain mutual learning.

Technical input coupled with local knowledge

Working in a partnership with organisations that were able to provide technical information, in particular information related to climate change science, was an important element of CBA. However, technical input by itself was not enough. Given the community-based essence of CBA, local knowledge was of equal importance. In Vanuatu, the project worked with consortium partners and different government agencies to broker links between government staff and communities, and to bring together technical knowledge and local level expertise. In terms of the consortium, CARE was able to access training for local staff on gender, child protection, monitoring and evaluation, photography and videography to support the implementation of the project. The use of participatory assessment tools such as the CVCA was also central to the process of bringing together technical inputs with local knowledge, and resulted in planning processes that were reflective of climate science, local knowledge and a desire to use both to increase adaptive actions.

In addition, a range of tools and resources were developed. These resources reflected both technical input and local knowledge and included: a series of guidelines and manuals for climate change adaptation, including components on income generation and livelihoods; a recipe book developed by CARE, WanSmolBag and communities with nutrition guidance and recipes for new vegetables introduced as part of the project; and a handbook developed by CARE and the Department of Agriculture and Rural Development giving practical advice on the new agricultural techniques introduced as part of the project.

5 KEY LESSONS

This section provides key lessons emerging from the CBA projects as a whole.

- **Delivering on all strategies of the CBA Framework** (promotion of climate-resilient livelihoods; disaster risk reduction; local capacity development; advocacy and social mobilisation) at all levels, **is crucial for building adaptive capacity effectively and sustainably**. This is because the multi-faceted nature of CBA requires a multi-faceted approach.
- **The development, application and sharing of effective participatory approaches and tools is essential** in building the capacity of local actors and promote the continuation of adaptation activities and processes after the lifetime of the project.
- **Community involvement equals greater uptake and sustainability of CBA**. By encouraging communities to take the lead in the promotion of climate-resilient livelihood strategies, project impacts are more likely to spread beyond beneficiaries to other community members and communities.
- **Given the range of issues facing communities (of which climate change is but one), projects that balance assessment and planning activities with those that provide immediate benefits to communities are more likely to encourage community participation**. This means that while the assessment and planning process (through climate vulnerability and capacity analysis, gender analysis, etc.) are important processes to follow to generate local information on climate effects and impacts, capacity and vulnerability; projects should balance these activities with more practical activities that apply knowledge of CBA through DRR, climate-resilient livelihoods and the application of skills learned.
- **Capacity development on climate change and resilience issues at the community level (and within NGOs and other stakeholders) needs to be ongoing** and develop as new information, research and learning occurs. This is important if projects are to be flexible and responsive to changing environments and needs.
- **Working with existing civil society networks supports national level advocacy on local level issues**. For example, gender sensitive adaptation planning, local level financing, or context-specific topics, such as land rights for women or other marginalised groups.
- **Investment in relationship building and coordination within partnership approaches leads to positive outcomes**. Across the projects, advances have been made in facilitating links between government, NGOs, local communities and donors, through networking, collaboration, and community empowerment and this has increased positive outcomes for communities involved in the program and more broadly. However, maintaining and improving links between different levels of government and communities remains one of the biggest challenges of the different projects.
- **Working in a consortium can be an effective and efficient approach to programming**. Consortium arrangements, if planned for and managed well – can allow for more efficient sharing of resources and expertise and greater impact through joint activities. Working in a consortium can also enhance coordination when agency roles and responsibilities are well defined, and lessons more easily shared.

Consortium partnerships do however require time in essential relationship management and coordination meetings, which needs to be accounted for in project planning.

- **Facilitating stronger links between community level planning process and local government helps support longer term sustainability.** Strengthening existing governance structures to support longer term planning ensures that project gains are more likely to continue once the project has finished.
- **Time, effort and resources needed for community-based activities** such as DRR, climate-resilient livelihoods, training and workshops **can make it difficult for project staff to spend time on higher level policy dialogue.** In many cases, without dedicated staff responsible for policy and advocacy objectives and outcomes, these are neglected due to the amount of time needed to implements activities and outputs.
- **Project delays and staff turnover are inevitable and project design and implementation plans should reflect these.** Despite projects identifying risks and assumptions as part of the design process, projects remain highly ambitious in terms of outcomes and the time in which they have to achieve them. In the majority of cases, this has led to projects requiring no-costs extensions to achieve their objectives.

6 RECOMMENDATIONS

This section provides recommendations to support effective and sustainable adaptation strategies for increased resilience in the projects and programs of CARE and other agencies.

REVISE THE COMMUNITY BASED ADAPTATION FRAMEWORK

Available resources and knowledge are key to the proactive and effective adaptation that can spare much of the hardship and loss associated with reactive adaptation. It is for this reason that supporting adaptive capacity and processes as envisaged by the CBA framework makes sense. Yet, the framework, and the way it has been applied some of the CBA projects, should be revised in three ways: 1) natural resource management needs to become an integral element; 2) the focus on the most vulnerable should be replaced with a more layered approach; and 3) external efforts should be based on improving existing mechanisms whenever possible.

Include natural resource management as key element of the framework

Unsustainable natural resource management contributes adversely to overall socio-economic outcomes. In many cases, there is an interplay between the effects of climate change and of local degradation. For example, deforestation leads to soil erosion, landslides and climate change itself. Supporting communities and local government to mitigate local degradation, not only helps them mitigate risk; it also has a positive impact on the climate.

Apply a layered approach to beneficiary support

Those who are conventionally seen as the most vulnerable may not be the same as those who are most vulnerable to climate change, and projects need to take this into account. For example, working with the landless may not be the most efficient use of resources in a project working on climate-resilient livelihoods, as those who own land are more likely to be experiencing the acute and chronic impacts of climate change. There are of course overlaps between adaptation and poverty alleviation: households who escape poverty have greater resources to adapt.

Yet, vulnerability to climate change is not solely determined by poverty status, and as a consequence climate change adaptation projects should deploy a more nuanced and targeted approach. They need to ask three simple questions: 1) who is being affected, and in what way; 2) who has the knowledge and resources to adapt; and 3) how can the gaps in adaptive capacity be filled? The answer to these questions leads to a more nuanced or layered approach. Including less vulnerable people in projects also has an added benefit of helping support greater take-up and replication of CBA practices, as evidenced in Vietnam where 'near poor' farmers with greater knowledge and experience of different techniques, mentored the most vulnerable to increase their success.

Support and improve existing adaptive mechanisms

Neither the government nor other organisations can fully control adaptation. However, knowledge can be spread and skills built to assist proactive and sustainable ways of adaptation - thereby either preventing or reducing the hardship incurred by reactive adaptation, as well as the damages from mal-adaptation. For example, migration is one of

the common mechanisms of auto-adaptation, where all or some family members seek casual or permanent work elsewhere. While this mode of adaptation was considered by the CBA project in Vietnam, it was deemed too politically sensitive for further exploration.

STRENGTHEN ORGANISATIONAL STRUCTURE TO FACILITATE CBA

All of the CBA project were ambitious. Yet, some encountered difficulties reaching their outcomes indicating that the organisational underpinning of project must better reflect their scope. Many of the projects were envisaged as longer term projects, but then had only three years to deliver; the staffing resources were sometimes too few; and the capacity of staff and partners to take on relatively new areas of work was stretched.

Allow more time and resources for the CBA approach to succeed

The CBA approach has many merits: 1) it facilitates government responsiveness and informed decision making, as mid-level administration staff (province, district) see local conditions and concerns first-hand: 2) it encourages horizontal collaboration between departments - a sound basis for concerted adaptation efforts: 3) it has the potential to increase the leverage of donor funds, in that it triggers co-funding for planned activities; and 4) it favours sustainability as the level of engagement and built-up capacity for planning brings about an enabling environment for communities - a crucial element of community resilience and the sustainability of local level outcomes.

However, the CBA approach requires time as well as adequate resources. For example, in Vietnam, it took 18 months to translate local concerns into agreed plans. This included an initial planning round as well as an update/revision round. The project showcased two cycles of planning, and integration into SEDP and other plans, as well as replication of the process in five new communes. With fixed government schedules for SEDP revision and the time constraints amongst staff of partners (who have many other tasks and thus cannot commit 100% of their time to CBA planning), there is a speed limit. Eighteen months for training and basic planning meant that there was much less time for implementation, and a longer project time frame than three years would have been beneficial.

To ensure that future projects and programs are able to be implemented with sufficient time and resources, CARE should be proactive in developing programs that demonstrate how longer term approaches are more effective, have greater impact, and are sustainable.

Ensure technical expertise is sufficient to guide climate-resilient practices

In the majority of projects, while the overall process was guided by technical experts, the level of guidance to beneficiaries varied, and in some cases was insufficient. This was partly as a result of the sheer number of practices promoted, the level of understanding of practices by implementing partners, and the amount of time needed to support beneficiaries implement and monitor practices. As a result there were some technical gaps in support resulting in failures of certain practices (for example, fatalities of chickens or low yield in crops), and a lack of exploration of the full benefits of practices and additional activities to support uptake and replication. Throughout the project cycle, consideration should be given to the level of technical expertise needed to implement practices (and other aspects of the project), and where additional expertise is needed this should be resourced appropriately with follow up and feedback to ensure interventions are on track.

Use a consortium model to increase access wealth of knowledge and expertise available

Working in a consortium is an effective and efficient approach to programming. Consortium arrangements allow for the efficient sharing of resources and expertise, and greater impact through joint activities. Coordination is enhanced and agency roles and responsibilities become easier to define. Lessons can be shared and learned from all. They do however require time in essential relationship management and coordination meetings.

ENSURE IMPLEMENTATION MODE IS FIT FOR PURPOSE

Sequencing, targeting and the role of monitoring are critical to render community-based adaptation more effective in the future.

Start field implementation sooner to boost community engagement

In many of the CBA projects, village-level implementation (for example, climate-resilient livelihoods) was dependent on CBA planning outcomes. In principle, while it makes sense to plan before you implement, the time required for planning processes reduces the amount of time for implementation; an issue in all projects except for Timor-Leste. Therefore, while thorough planning may be required for mitigation measures or fully-fledged training initiatives, quick-win/no-regrets options, geared to mobilise and maintain community interest, should begin concurrently or shortly after the beginning of projects.

Focus on groups (instead of individuals) and use them to spread coverage

Groups are not just an important part of the 'transmission belt', through which information is carried between project management and beneficiaries. They also enable mutual support and reinforcement of newly learned practices. While implementation through groups is preferable to individual-based approaches, this advantage can be further amplified if the groups are not just targets (as in the case of Timor-Leste), but also become vehicles through which climate-resilient practices can be promoted throughout the community (as in the case of Papua New Guinea).

Use monitoring to manage progress

Monitoring project progress is of little value unless the obtained information is being used. In all projects, progress and activities were monitored and many challenges documented. However, some projects did not have a systemic response nor a continuous use of monitoring data to manage these challenges. While there is always room for improvement of monitoring systems, what is more important is the use of the systems to bring about positive changes to projects to increase their effectiveness. Future projects should thus make thorough and regular updates of risks and responses a higher priority to ensure that implementation progresses in spite of identified challenges.

Build community and organisational capacity to support sustainability

Even the most proactive community will find adaptation challenging without external resources and support. Strong links to local government and non-governmental actors are not just important for day-to-day affairs, but also crucial in times of crises. In order for communities and governments (and other stakeholders) to support adaptation in the long term, requires better capacity.

UNDERSTAND THE CONTEXT

The extent to which climate change affects (or is expected to affect) various groups and populations needs to be adequately understood when planning adaptation. This is an obvious point but sometimes gets lost in the rush to plan and implement activities across communities with diverse community members.

Understand the hazard and climate change context

An understanding of past trends, present experiences and future projections of hazard occurrence, climate variability and the range of effects of climate change on the area and population concerned should underpin any decisions or actions to build disaster and climate resilience.⁸ It should include mapping at different scales, to allow for regional and local hazards and effects of climate change. The risk analysis process itself should increase understanding among all stakeholders, both as a result of its participatory nature, and through sharing of the results.

Understand differential exposure, vulnerability and capacity

When planning CBA projects, it is important to first consider the extent to which different people are sensitive and exposed to climate risks. As these risks may not be fully recognised and understood, awareness-raising needs to accompany other activities throughout implementation. It is also important to consider differential capacity of groups and to use participatory approaches to identify, plan and act. Without careful analysis of individuals' and groups' adaptive capacities, and thoughtful planning to address disparities, CBA projects run the risk of replicating or even reinforcing these disparities – thereby leaving the most vulnerable behind. In addition, efforts to transform power structures need to be continuous and systemic in order to generate equitable outcomes.

Use appropriate messaging and strategies with communities to address resilience

The message of resilience must resonate amongst community members. Chances of success are much higher if adaptation measures also address current concerns and bring tangible benefits over the course of an intervention (facilitating uptake and sustainability). At the community level, therefore, it is useful to consider the impacts of current climate variability and extremes as an entry point to discussing (and planning for) a future in which current extremes become the 'new normal'. This approach encourages communities to still plan for short term climate-driven events (like flooding, heat waves and the El Niño Southern Oscillation), while analysing what a future where these events are stronger and more frequent would look like, and what communities can do themselves to prepare.

Community perceptions of resilience also highlight the multiple drivers and inhibitors for resilience, in particular structural issues. The impact of CBA and resilience projects will be limited without considering structural issues, which need to be addressed over longer timeframes and through linking communities and their experiences with other organisations/duty bearers at multiple levels/scales.

Furthermore, links between climate change issues identified by communities and the appropriate CBA actions chosen need to be continually reflected upon. This requires regular follow up on awareness raising within communities to 'check in' on climate change issues; to test adaptation options to see if they are working and will continue to work over time.

7 CONCLUSION

As part of CARE's community-based adaptation learning agenda, this report has synthesised key findings, lessons and recommendations from its portfolio of CBA projects in Papua New Guinea, Timor-Leste, Vanuatu and Vietnam.

Through the review and analysis of different approaches and models, this paper has considered where and how approaches have been effective; how these were linked to project impacts; and provided examples of good practice, lessons learned, and recommendations to inform future programming by CARE, its partners and other agencies. It has achieved this by using the CARE International CBA Framework as the framework for analysis and report structure.

What the report reveals is that, overall, CARE's projects have been a success. They have been relevant to community needs and priorities, highly relevant to the climate and disaster risk context; and relevant to government and implementation partners' priorities. They have been effective in raising the awareness of climate change in target communities, and increasing communities' knowledge and skills to adapt. This has been achieved through a number of intervention areas (based on the CBA Framework), including: food and nutrition security disaster risk reduction, sustainable livelihoods, capacity strengthening, and improved governance. Complementing the CBA Framework, a number of approaches have been used to support CBA and build resilience. These included: sound project design and theory of change; participation and inclusion of different groups; networking and linking opportunities; training and skills development; and technical input coupled with local knowledge. As a result, projects have provided a good foundation for the continuation of a majority of project gains, increasing their sustainability.

A number of lessons have been learned from the projects and recommendations made to improve the future work of CARE and its partners. These relate to the framework itself, participatory approaches, community involvement and sustainability, among others. Importantly, the projects, apart from yielding positive results, have provided CARE and others with lessons and recommendations to improve CBA interventions in the future through continued multi-stakeholder partnerships, participatory and inclusive approaches, and a commitment to communities as the focus of adaptation action.

Going forward, it is clear that more work needs to be done, especially given the short term nature of current projects and the long road towards resilience. This requires CARE and its partners to re-think how it funds projects, including advocacy so that funding can be more consistent and longer term, beyond the usual two to three year cycle. This requires greater commitment by all to work with communities for longer periods of time so that CBA interventions and activities are phased to ensure maximum uptake by community members; and embedded in community structures, as well different levels of government, who are the ultimate duty bearers of this important work.

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ENDNOTES

¹ This goal is the overall program goal of the Community Based Climate Change Action Grants (CBCCAG) program funded by the Australian Government.

² Supported by the French Red Cross Society and the Red Cross Climate Centre.

³ King, S. (2014) *Community-Based Adaptation in Practice: A global overview of CARE International's practice of Community-Based Adaptation (CBA) to climate change*. CARE International, p.13.

⁴ Ibid.

⁵ CARE International (n.d.) *Framework of Milestones and Indicators for Community-Based Adaptation*. CARE International.

⁶ Rather than deploying community facilitators to each community, the project promoted the formation of six 'core groups', each consisting of 20-30 volunteers from traditional village clusters. Each core group member learned about the fundamental elements of climate change and adaptation and were trained in various conservation farming techniques, nutrition, as well as key gender equality issues and basic principles of disaster risk reduction. Thus equipped, they passed on the new knowledge to fellow villagers and led by example.

⁷ Kelly, L. & Roche, C. (2014) *Partnerships for Effective Development*. Australian Council for International Development, p.23.

⁸ Turnbull, M., Sterrett, C. L. and Hilleboe, A. (2013) *Toward Resilience: A Guide to Disaster Risk Reduction and Climate Change Adaptation*. Emergency Capacity Building Project, p.12.