Adaptation: addressing adversity

Final evaluation of the project "Integrated community-based adaptation in the Mekong Delta Region (ICAM), Vietnam

Abbreviations

AUD	Australian Dollar
CBA	Community-based adaptation
CBCCAG	Community-based Climate Change Action Grants Program
CCA	Climate change adaptation
CCRD	Centre for Rural Communities Research and Development
CFSC	Committee for Flood and Storm Control
CVCA	Climate Vulnerability and Capacity Assessment
DARD	Department of Agriculture and Rural Development
DFAT	Department of Foreign Affairs and Trade (Australia)
DPI	Department of Planning and Investment
DoNRE	Department of Natural Resources and the Environment
DRR	Disaster risk reduction
ICAM	Integrated Community-Based Adaptation in the Mekong Delta
IPM	Integrated pest management
LECZ	Low elevation coastal zone
NGO	Non-Governmental Organisation
PAOT	Participatory Action-Oriented Training
PMB	Project Management Board
PMERL	Participatory Monitoring, Evaluation, Reflection, and Learning
PPS	Probability Proportional to Size
PSC	Project Steering Committee
SEDP	Socio-Economic Development Plan
ToR	Terms of reference
VND	Vietnam Dong
VNRC	Vietnam Red Cross
VWU	Vietnam Women's Union

Adaptation: addressing adversity.
Final evaluation of the project "Integrated community-based adaptation in the Mekong Delta region (ICAM)", Vietnam

This report presents the results of an evaluation of the project "Integrated Community-based Adaptation to Climate Change in the Mekong Delta (ICAM)". CARE implemented this project 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.

The evaluation was carried out by Banyaneer and included visits to eight villages on An Giang and Soc Trang provinces.

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Executive summary

The project 'Integrated Community-based Adaptation in the Mekong Delta Region (ICAM) was launched in mid-2012 to increase community adaptive capacity and resilience to existing hazards and the impacts of climate change. Three years on, this evaluation finds that the project led to the commitment of government agencies and mass organizations to community-based adaptation, to better inter-agency collaboration and to stronger vertical links and responsiveness.

The evaluation also recognizes that adaptation processes take time for their impact to emerge more fully. The ICAM project contributed to improvements in disaster preparedness, access to finance, and linkages to the government. In terms of advancing climate-resilient livelihoods, it identified and documented several options. The project experience provides a rich set of lessons towards further advancing and enhancing community-based adaptation.

The report begins with an overview of the project as well as the evaluation objectives and design (section A). Tasked to provide both accountability in terms of relevance, effectiveness, efficiency, impact and sustainability as well as to contribute to evidence-based learning, the evaluation was based on a mixed-method approach. Tools included a survey amongst 504 households as well as a range of qualitative tools (community workshops, focus group discussions, in-depth interviews, site visits and transect walks). Field research was carried out in May 2015 and covered eight of the 33 target villages in the target provinces of An Giang and Soc Trang.

This summary contains the key findings, arranged by evaluation criteria. Figure 1 furthermore provides a list of recommendations for future programming in community-based adaptation.

Relevance

Community-based adaptation to climate change as promoted by the project is found to be highly relevant. Evaluation results show that large shares of the project's target population are already affected by climate-related hazards, such as storms, floods and droughts. In Soc Trang, saline intrusion is an increasing concern. The Government of Vietnam recognizes these risks and has devised policies and plans to address them. The ICAM project is found to be closely aligned with these government policies.

- 97% of survey respondents say they have experienced changes in the climate over the past ten years. More than two-thirds (69%) say that hazards have become more damaging over this period.
- 73% anticipate hazard-induced damages and losses in the future. 44% say that they have taken concrete steps to be better prepared over the past four years. This gap between awareness and action indicates that many lack the capacity to adapt.
- Given increasingly unfavourable conditions, auto-adaptation is already occurring (e.g. migration, more groundwater extraction). Guidance to proactive and more effective modes of adaptation is highly relevant.
- In this context, the multi-stakeholder, multi-level planning process created by the ICAM project bears strong potential and has already led to greater bottom-up governance and responsiveness. The role of the project towards strengthening collaboration between government agencies and civil society on climate change-related issues is recognized.

Efficiency

The project expenditures per beneficiary household amount to AUD 1,486 (direct beneficiaries) and AUD 116 (indirect). CARE's cost-saving measures are recognized. It is also found that much of the costs in CBA planning should be seen as an investment, with its leverage increasing over time as similar processes are being replicated with government resources.

Effectiveness

The ICAM project has been successful in capacity-building of partners and in creating a comprehensive planning platform. This lead 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 (ICAM's key partner) has been strengthened. The dedication of partners to community-based adaptation, better inter-agency collaboration, stronger vertical links and responsiveness is recognized.

- Several design issues and structural challenges however led to below-target outcomes. Time and resources did not fully match the scale and scope of the project that had initially been conceptualized for a five-year implementation frame.

- While some challenges were identified and rectified, others persisted. Insufficient capacity to coach partner staff and a lack of time for village-based implementation stand out. With the latter being treated as dependent on completion of CBA planning, only eighteen months were left to promote climate-resilient livelihoods and disaster risk reduction. This timeframe was too short considering the scope and the capacity constraints mentioned above.

- The project conducted excellent research of options for climate-resilient livelihoods. While only some of them could be applied in the local context, they are a valuable resource for similar projects elsewhere.

Impact

With the late launch of village based adaptation and strong investments in capacity-building of local partners, it is 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. However to date, the negative effects of climate change and local degradation overshadow most project-related gains in the areas of crop cultivation, animal production, food security, water, health and income provide increasing impetus to adapt.

- Positive trends are observed in terms of disaster preparedness, access to finance, community cohesion, and village-government links. These are partially attributed to the ICAM project.

- In terms of more gender-equitable decision-making, the evaluation provides 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 (which nonetheless remains strongly dominated by men).

- Overall, there is a slight positive trend in the perceived preparedness of households to manage climate-related risks. 38% of respondents seeing an improvement attribute this change to the ICAM project.

Sustainability

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.

- Interviewed 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 of external (donor-based) support.

- Two-thirds (67%) of survey respondents who received training in climate-resilient livelihood (CRL) techniques say they currently apply all or most of them. The majority state they intend to continue the new practices (94%) and are capable to do so with (45%) or without (45%) external support.

- One-third of CRL beneficiaries stopped the application of new techniques as expected benefits did not occur. Further analysis of challenges such as access to markets and gendered value chain analysis is therefore recommended.

Figure 1 | **Overview of recommendations**

No.	Recommendation	Underlying reasons
Key recommendation A	**Re-frame community-based adaptation.**	
A.1	Integrate natural resource management into the CBA framework.	There are two reasons as to why natural resource management should be integrated into the CBA framework. ***First***, the effects of climate change often interplay with those of unsustainable practices. Both need to be addressed to tackle the combined effects of adversity. Without such integration, there is a risk of mal-adaptation, where adapting to one aspect may exacerbate another. The ***second*** reason is that local governments and communities have far greater leverage to actually *mitigate* local degradation, compared to the effects of climate change. The holistic adaptation is extremely relevant for the Mekong Delta region, which already experiences the combined effects of global and local phenomena.
A.2	Apply a layered approach to beneficiary support	Climate change impacts on most if not all people in the Mekong Delta - however, the way and the extent it does differs depending on socio-economic and livelihood profiles (amongst other variables). Furthermore, the extent to which people have the ability to adapt varies significantly. When planning external support to adaptation, three simple questions need to be asked: ***First***, who is being affected in what way? ***Second***, who has the knowledge and the resources to adapt on his/her own? ***Third***, how can the gaps in adaptive capacity be filled? Answering these questions should lead to a nuanced or layered approach, through which different groups and strata are supported in nuanced and targeted ways. Opening up to all members of a target community (poor or not) also facilitates wider engagement of all community members in planning and implementation.
A.3	Support existing adaptive mechanisms.	In many cases, people adapt autonomously - that is, without the inducement by government policy or external advice. Knowledge can be spread and skills built to assist proactive and sustainable ways of adaptation - thereby both preventing or reducing the hardship incurred by reactive adaptation, as well as the damages from mal-adaptation. One of the common mechanisms of auto-adaptation is migration, where family members seek casual or permanent work elsewhere. This and other forms of auto-adaptation shall be recognized as potentially effective adaptive mechanisms. Support could be provided to prospective and current migrants as well as to family members staying behind. This may include the formation of support groups (both for the migrants themselves and for family members staying behind) and the development of job-seeking skills, and vocational training.
Key recommendation B	**Strengthen the organizational underpinning.**	
B.1	Allow more time and resources for the CBA approach to succeed.	The ICAM project was ambitious; its design and resourcing would have been adequate for the five-year implementation frame that was originally anticipated. A three-year period however proved difficult, given that the project aimed for CBA planning and then (largely dependent) village-level implementation. The incongruence of objectives with time and resources should have been reconciled by either extending resources or by reducing targets. In future programming, it is crucial that a match between ends and means is maintained.
B.2	Ensure that technical expertise is sufficient to guide climate-resilient livelihoods.	Local technical expertise has to be integrated or built up to the extent that beneficiaries can be sufficiently guided and coached in the application of new techniques. This is particularly needed when beneficiaries endeavour into entirely new livelihood options (rather than amending techniques of livelihoods they are already familiar with).
B.3	Deploy bigger teams capable to coach.	The success of the indirect (partner-based) implementation approach is dependent on partner capacity. While a strong partner does not automatically lead a strong project results, the inverse is usually true: any capacity constraints of a local partner are constraints for the whole project - and thus need to be addressed. Building up that capacity to the extent that all relevant gaps are filled is pivotal both for implementation effectiveness and for sustainable outcomes. The size and composition of project teams must therefore reflect the ability to train and coach partners, without teams taking over the responsibility of the partners.
Key recommendation C	**Revisit the implementation mode.**	
C.1	Start field-level implementation sooner to boost community engagement.	Broad community engagement is crucial to reinforce community resilience. While the ICAM project engaged a large share of the target population in planning, it could have provided additional avenues of engagement to boost and maintain community interest. This could have included quick-win and no-regret options such as simple disaster preparedness measures. These were eventually carried out, but could have been implemented earlier to achieve a greater effect.
C.2	Focus on groups (rather than individuals) and use them to spread coverage.	Groups are not just a more efficient way to support beneficiaries than case-by-case assistance. They are also more effective as they enable consolidation through mutual support and learning, and can be a powerful element of the 'transmission belt' that transmits information to and from the project team. While group-based approaches featured strongly in the project's concept, only some groups (PAOT/DRR) proved effective, while others were either weak or non-existent (CRL, micro-finance). The effectiveness of groups can be increased further if used as a tool to spread knowledge across wider communities (as carried out to some extent by PAOT groups).
C.3	Monitor to manage.	Monitoring is not an end in itself, but a means to an end - that is, to ensure that progress remains aligned with objectives and timeframes. Identifying challenges timely enables swift response and rectification. In the case of the ICAM project, risks were reviewed and challenges identified - however, this did not always lead to the fully-fledged response that may have been required. Given this experience, it is not so much the monitoring regime itself but rather the use of that regime that needs to be given more attention in future programming.

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Introduction

Cái khó ló cái khôn.

Adversity is the mother of wisdom.
[Vietnamese proverb]

For more than 2,000 years, the Mekong Delta has played a strategic geopolitical role, as its riches have been a vital asset to whoever was in control throughout history. The sediment-fed soils around the mouth of the Mekong enabled populations to grow and prosper. As soon as the fourth century BC, extensive human settlements covered the area. By the first century AD, the Kingdom of Funan had developed an extensive network of canals and ports - the heartland of what became South-East Asia's first great economy.

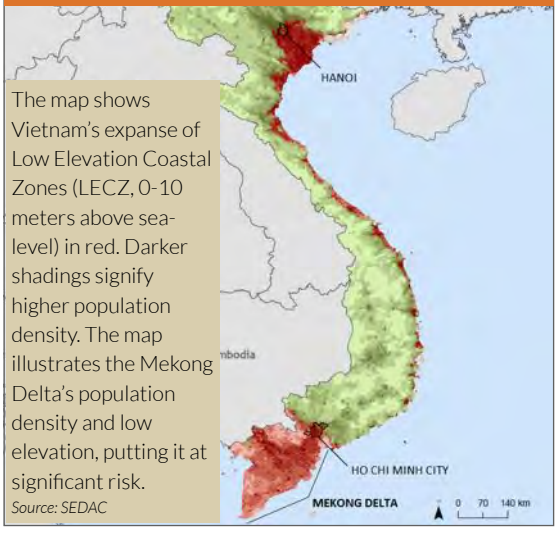
Control over the delta changed throughout history - yet, with its fertile grounds and a large population, the delta always maintained its role as an economic powerhouse. It continues to do so today: more than half of Vietnam's total rice production (2011: 54.8%) is based in the thirteen delta provinces. The delta is also the country's primary fishing region - it has the largest fleet of fishing vessels and a vast capacity in aquacultures, which account for two thirds of fishing output. The role of the Mekong delta to Vietnam is hard to over-stress: it is the country's main 'rice bowl' and its 'fishing net'.

Any adverse effects to this role bear strategic implications for the country as a whole, as well as practical challenges for the delta's 17.2 million people. The government has acknowledged climate change as an essential threat: a sea-level rise of one meter by the year 2100 is likely to permanently inundate entire provinces. Saline intrusion already hampers agricultural production in coastal areas, while hotter weather and greater variability in rainfall (droughts and floods) affect the entire delta. These climate change impacts are compounded by effects from unsustainable local practices as well as the construction of upstream dams.

With much of this overall adversity being inevitable, the need for the delta population to adapt is evident. In mid-2012, CARE launched the "Integrated Community-Based Adaptation" (ICAM) project in an effort to facilitate adaptive planning, reinforce the resilience of supported communities, and contribute to the evidence base that would in turn enable replication of effective adaptation measures.

This report presents the findings of the evaluation of the project, carried out in May 2015. The report is structured in three sections: *Section A* provides the background of the project and of the evaluation. *Section B* presents the findings in terms of the project's relevance, effectiveness, efficiency, impact, and sustainability. The final *section C* draws the lessons from the project, and makes recommendations as to how community-based adaptation can be sustained and further supported through future programming. The appendix furthermore provides detailed evidence (survey results, village-level findings, and workshop results).

Map 1 | **Vietnam's Mekong Delta Region**



The map shows Vietnam's expanse of Low Elevation Coastal Zones (LECZ, 0-10 meters above sea-level) in red. Darker shadings signify higher population density. The map illustrates the Mekong Delta's population density and low elevation, putting it at significant risk.
Source: SEDAC

SECTION A
BACKGROUND

1. Project overview

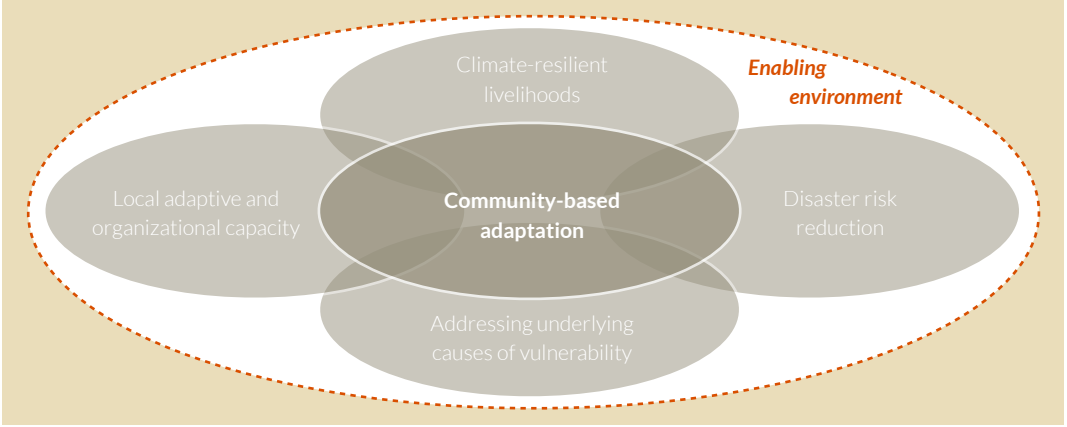
The ICAM project is one of three projects that CARE implemented with funding from the Australian Government's Community-Based Climate Change Action Grants (CBCCAG). Through these three projects[1] CARE and its partners aimed to a) promote climate-resilient livelihoods, b) reduce disaster risk, c) strengthen the capacity of communities as well as local civil society and governments, and d) address the underlying causes of vulnerability. These four elements are part of the framework for community-based adaptation ***(see fig. 2)***. CARE was also involved in another project in Vanuatu - led by Oxfam - that shared these objectives.[2]

The ICAM project featured three outcomes ***(see fig. 3)***; it aimed a) to ***increase the capacity for adaptive planning***, b) to ***reinforce the resilience*** of target villages, and c) to develop a ***foundation for upscaling*** (evidence base and capacity growth).

The ICAM project supported villagers in their adaptation efforts in two different geographical settings - riverine and coastal ***(see map overleaf)***. An Phu district in **An Giang province** borders Cambodia and is about 180 km upstream from the river's mouth. Historically, the area had been mostly marsh and swamp interspersed by arms of the Mekong. Over time, much of the area was made arable through a vast network of drainage and irrigation canals. The combined effects of climate change, upstream development and local degradation are already proving to be substantial stressors for the local population. ICAM focused its support on twelve villages across the three communes of Da Phuoc, Vinh Truong, and Khanh Binh. Meanwhile, Vinh Chau district in **Soc Trang province** is located on the coastline adjacent to the mouth of the Mekong. Here, the ICAM project targeted 21 villages across the two communes of Vinh Tan and Vinh Phuoc. Saline intrusion as well as increased frequency and intensity of typhoons are key direct concerns related to climate change.

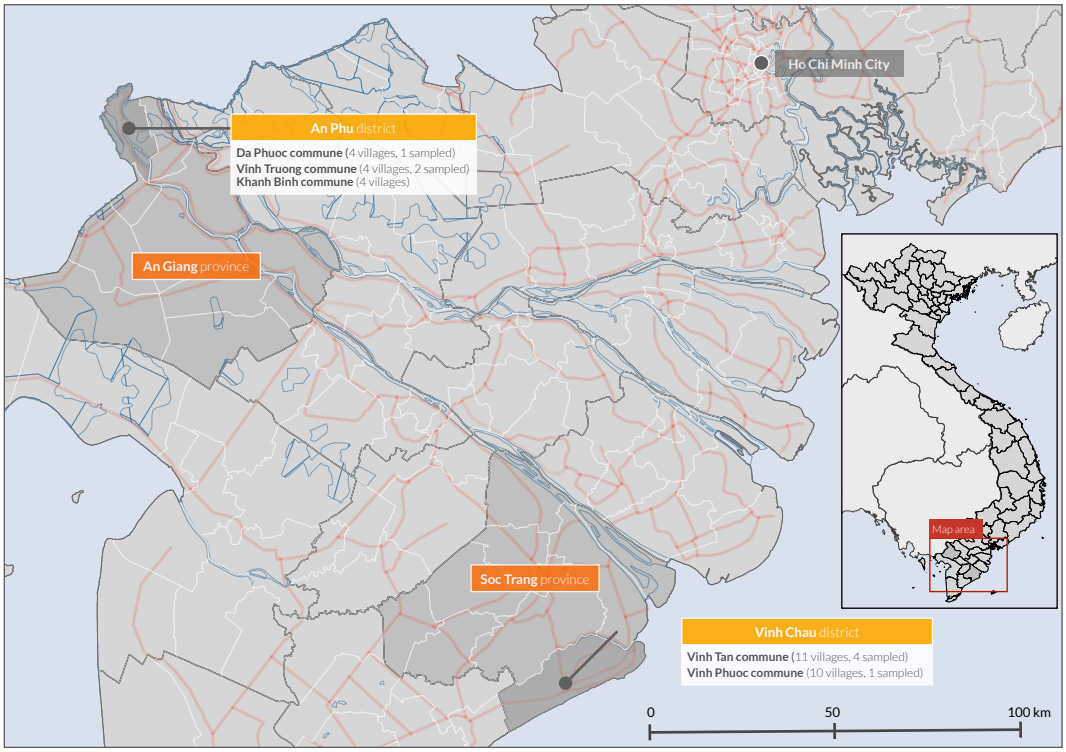
The project was based on an indirect implementation approach: it facilitated a multi-level, multi-stakeholder planning process that was to see enhanced community resilience as a process result. As such, it paid a lot of attention to stakeholder involvement and appropriate project set-up. Led by an overall Project Steering Committee (PSC)[3] and two separate Project Management Boards (PMB)[4] for An Giang and Soc Trang, actual village-level implementation was largely in the hands of the Vietnam Women's Union (VWU), assisted by the CARE project office, the Centre for Rural Communities Research and Development (CCRD), and various government agencies.[5] ICAM provided extensive training to the staff of VWU and other agencies, who then launched a bottom-up process of community-based adaptation. As villagers identified local risks, capacities and needs, the results of this process were shared with higher-level departments and integrated into Socio-Economic Development Plans (SEDP).

Figure 2 | **The framework for community-based adaptation**



1. The three projects are:
   - **Papua New Guinea:** "Community-based adaptation to climate change in Nissan district" (CBA CC),
   - **Timor-Leste:** "Climate change in a secure environment" (MAKA'AS),
   - **Vietnam**: "Integrated community-based adaptation in the Mekong (ICAM).
2. Oxfam, lead organization behind the project in Vanuatu, commissioned this evaluation separately. The results will be integrated into the synthesis report that is envisaged as the final product of this consultancy
3. The PSC included senior representatives of CARE, the Women's Union, Provincial People's Committees, province-level technical departments, and CCRD.
4. The two PMBs included the same departments as the PSC, but were confined to individual provinces (either An Giang or Soc Trang) and included district-level counterparts.
5. These agencies included the Department of Agriculture and Rural Development (DARD), teh Department of Natural Resources and the Environment (DoNRE), the Committee for Storm and Flood Control (CFSC), and the Department of Planning and Investment (DPI).

Map | **Location of ICAM project areas**

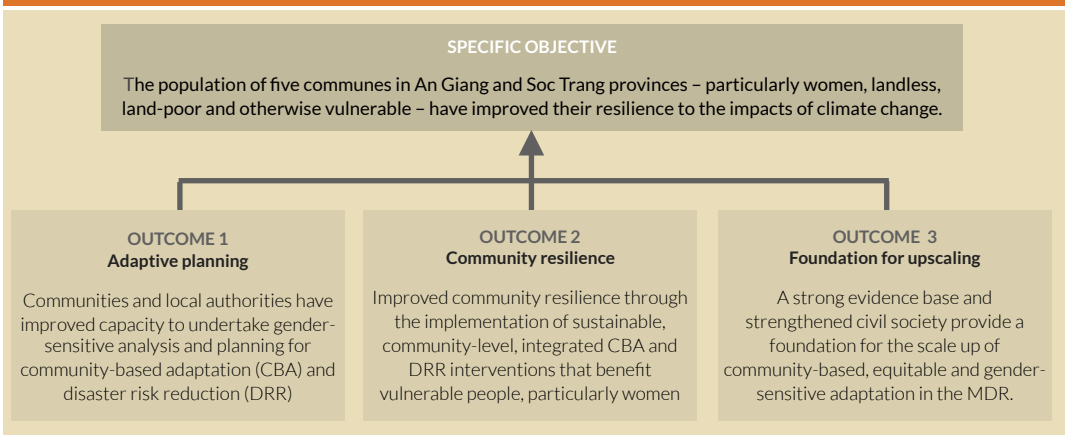


In terms of actual village-level implementation, activities included the promotion of climate-resilient livelihoods (CRL) options, the provision of low-interest loans through the VWU, reinforcement of response capacity (training, swimming lessons, life vests), awareness-raising and minor mitigation measures based on adaptation plans.

Monitoring data show that up to 51,672 persons from communities and government agencies benefitted from project activities. In terms of direct beneficiaries, 1,238 households were supported in CRL adoption, while 295 households received loans. These 1,533 households represent 36% of the 4,249 poor households that were the project's primary target group. At the same time, it is also recognized that the enhanced planning capacity may indirectly benefit the entire population of the 33 supported villages (18,876 households).[6]

In terms of contributing to the evidence base for community-based adaptation, the overall experience of the ICAM project provided numerous lessons for future programming - lessons that will be presented in chapter eight. In addition, the project team explored the suitability of several CRL options for poor and landless villagers.[7]

Figure 3 | **Objectives and outcomes of the ICAM project**



6. The number of beneficiaries from structural DRR investments - such as twelve green dykes and flood gates, as well as four safe shelters for kindergartens would need to be added but was difficult to quantify.

7. See "Documentation on testing climate resilience of livelihood options" (draft project document, February 2015).

2. Evaluation objectives and approach

It is worth recalling the general two-fold purpose of an evaluation: to deliver accountability to donors by assessing project achievements, and to identify lessons learnt. This identification enables the replication of what went well and the modification of what did not. This chapter discusses the '*what*' and the '*how*' of the present evaluation: it first looks at the concrete evaluation objectives and then proceeds with a brief look at the applied approach.

2.1 Objectives

The evaluation of the ICAM project is part of a multi-project evaluation process to collate and synthesize experiences in community-based adaptation across the Asia-Pacific region. With a focus on both *accountability* and *learning*, CARE Australia commissioned the evaluation of three projects it implemented since 2012 with funding from the Australian Government's Community-Based Climate Change Action Grants (CBCCAG).

The purpose of the evaluation consists of two aspects: *first*, it was to provide **accountability** by assessing the projects in terms of their relevance, effectiveness, efficiency, impact, and sustainability (see terms of reference, ToR). This was to include the provision of evidence of project outcomes and impact (intended or not) within the lives of women and men in target communities. Aside from these criteria, the evaluation would need to assess the role of the project towards a) gender equality and women's empowerment, and b) analyze the monitoring and evaluation system used. *Second*, the evaluation was to facilitate **evidence-based learning**. Based on the synthesis of project-level findings, the evaluation was to identify and map good practices and success factors as well as barriers and challenges, and make recommendations as to how effective and sustainable adaptation strategies for increased resilience can be further enhanced. In this context, the terms of reference provide a set of key research questions for each of the four CBA framework themes.

Thus tasked to provide a project-specific review as well as to generate insights for the synthesis report and future learning, the evaluation of the ICAM project was planned in two steps: *first*, an overall inception report was prepared that integrated the ToR key evaluation questions to into a meta-evaluation framework. To facilitate consistent approaches, generic research tools were also devised (see inception report). In a *second step*, a more specific evaluation plan for the ICAM project was prepared and research tools adapted to take the project-specific factors into account. In particular, the meta-evaluation framework was transformed into project-specific frameworks for accountability and evidence-based learning (see evaluation plan Vietnam).

2.2 Approach

Based on a mixed-method design, the evaluation was carried out between May 7th and 23rd and involved visits to eight villages as well as workshops and interviews with the CARE project team and partners in both An Giang and Soc Trang.

Village visits included two parallel streams of activities. *First*, enumerators[8] conducted survey interviews with poor and non-poor household members[9] *(see fig. 3)*. The survey questionnaire *(see appendix G)* covered respondents' involvement in the project, risk exposure, climate-resilient practices, disaster risk reduction, gender, sustainability, and a review of the project. Where possible, baseline questions were reiterated to enable a longitudinal comparison. As an additional measure, questions asked about changes and the extent to which these changes were attributable to the ICAM project. *Second*, five of the eight village visits included a range of qualitative tools, conducted as part of community workshops with randomly selected (poor) villagers.[10] These workshops included:

8. Twelve enumerators were recruited and trained for the survey. They used iSurvey, an application installed on the evaluator's iPod touch devices, for data collection. Compared to paper-based questionnaires and manual data digitization, this electronic data collection proved less time-consuming and less error-prone.

9. CARE's Monitoring and Evaluation officer meticulously compiled lists of village households (disaggregated by direct beneficiaries, other poor households, and non-poor households) and invited household members sampled by the evaluator to central meeting places - thus saving time that would otherwise have been spent on walking from door to door. The distinction between poor and non-poor households is based on the government's definition (formal lists).

10. In order to attain a sound survey sample as well as qualitative depth, the enumerator team was split into two on several days. This way, two villages could be covered in one day in terms of the survey. Villages in which community workshops were held are marked with an asterix (*) in figure 4.

Figure 4 | **Key survey data**

Province, district	Commune	Village	Village data				Sample		
			HH overall	Poor HH	Percentage poor households	Direct beneficiaries	Poor HH	Non-poor HH	Total
An Giang	Da Phuoc	Hà Bao II*	1,126	48	4.3%	18	35	28	63
An Phu	Vinh Truong	Vĩnh Nghĩa*	1,018	219	21.5%	21	35	28	63
		Vĩnh Bình	1,079	219	20.3%	29	35	28	63
Soc Trang	Vinh Tan	Tân Nam	441	291	66.0%	22	35	28	63
Vinh Chau		Nô Thum*	390	223	57.2%	22	35	28	63
		Nô Puôl*	809	310	38.3%	18	35	28	63
		Trà Vôn A	298	72	24.2%	12	35	28	63
	Vin Phuoc	Biển Trên*	497	67	13.5%	35	35	28	63
		Total	**5,658**	**1,449**		**177**	**280**	**224**	**504**

Eight of the the thirty-three project villages were selected based on Probability Proportional to Size (PPS)[11], using the number of poor households as sampling frame. In each village, 63 households were sampled that belonged to one of two strata (poor or non-poor). Amongst poor households, preference was given to direct beneficiaries. Where the number of direct beneficiaries was smaller than the poor household sample, the gap was distributed randomly. Selection of non-poor households was random. The confidence level is 95% and the margin of error 5.5% (poor households) and 6.5% (non-poor) respectively. For further information, see the sampling framework.

- *Trend analysis* - to identify changes in living conditions and underlying factors
- *Community mapping*- to help assess external support and changes in village capacity
- *Livelihood analysis* - to gather data on diversification
- *Hazard losses and coping strategy analysis* - to assess risk and coping mechanisms[12]

Furthermore, village visits featured focus group discussions with direct beneficiaries as well as Most Significant Change (MSC) interviews and site visits.[13] Given the project's indirect implementation approach and the evaluation's focus on evidence-based learning, the research design also featured inquiry amongst the CARE project team and stakeholders. This included an initial management workshop, interviews with VWU, DARD, DoNRE and DPI, and a concluding reflection workshop with all partners, at which initial evaluation findings and recommendations were presented and discussed.

2.3 Limitations

The evaluation progressed smoothly thanks to the excellent preparation on behalf of CARE as well as the professionalism of the entire team - including translator, facilitators, note-takers, and enumerators. However, several limitations need to be kept in mind: project activities were still ongoing by the time of the evaluation. Furthermore, although direct beneficiaries were given preference in sampling of poor households, their number was smaller than the required sample size - overall, direct beneficiaries represent 63.2% of poor household respondents. Thus, the project's impact on direct beneficiaries may be stronger than could be identified by the survey alone. In order to alleviate this shortcoming, survey results were not only disaggregated by poverty status, province and gender, but also by the number of project team visits that had been paid to respondents.[14]

Limited time available for the workshop and interviews with project staff was an additional constraint.

Survey interview in An Giang, using iSurvey. *Photo: P. Bolte*

11. For a concise description of PPS, see *http://www.who.int/tb/advisory_bodies/impact_measurement_taskforce/meetings/prevalence_survey/psws_probability_prop_size_bierrenbach.pdf*
12. Note that all qualitative tools are described in detail in the Vietnam evaluation plan.
13. While villagers were invited to a central location for survey interviews and community workshops, these in-depth interviews provided an opportunity to visit their households and inspect sites of climate-resilient livelihood options (e.g. bio-bedding).
14. The frequency of visits by project staff serves as a proxy indicator for intervention dose and is assumed to correlate with the beneficiary status of a respondent.

SECTION B
FINDINGS

Street vendor in An Giang. *Photo: P. Bolte*

3. Relevance

To what extent has the ICAM project been relevant? This chapter answers this question by looking at exposure and sensitivity to current and future risks (part 3.1), by analyzing the extent to which the project was aligned with government policy (3.2), and by looking at the relevance of the concrete activities pursued by the project (3.3).

Relevance:
"The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies."

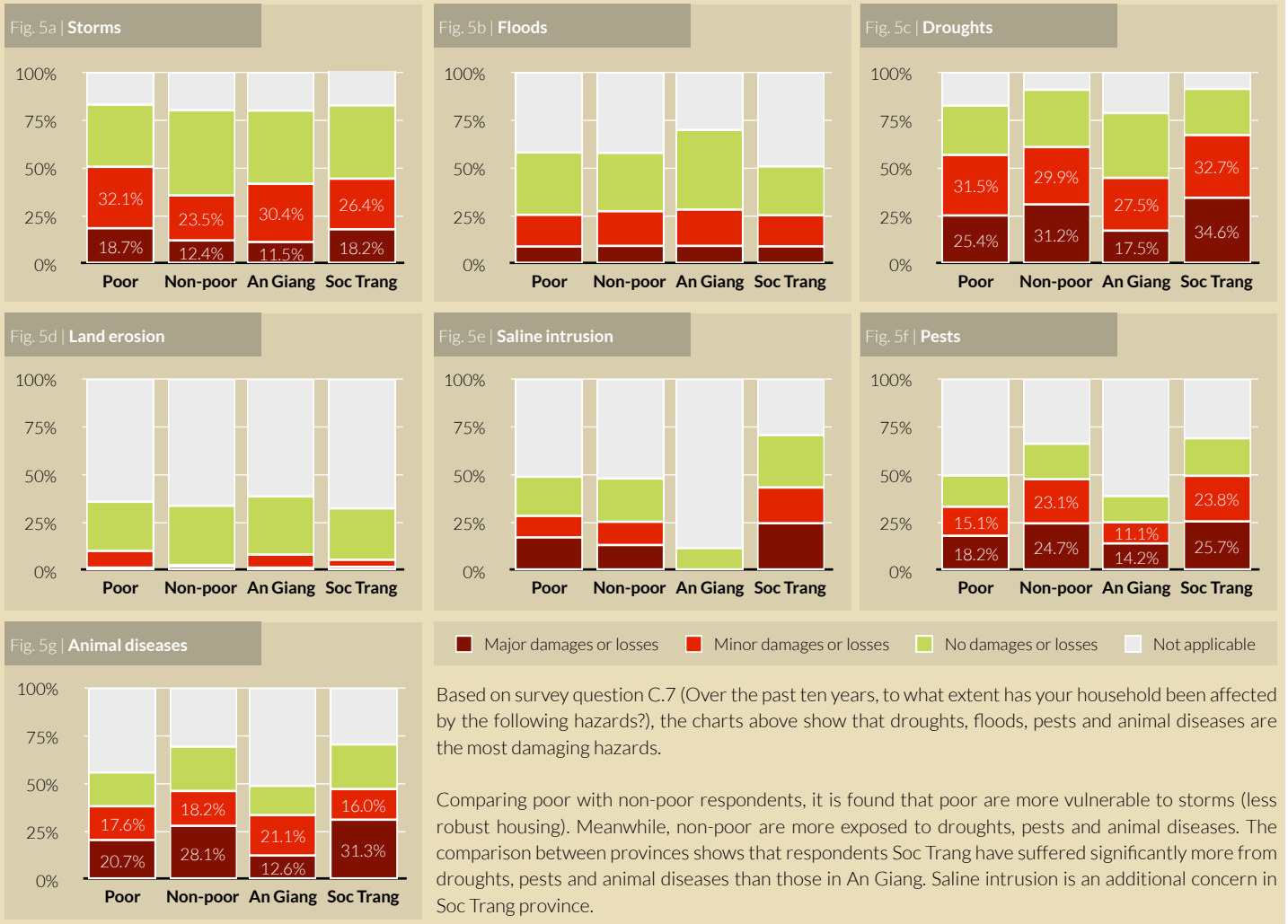
OECD 2010:32

3.1 The risk context

It is beyond doubt that the Mekong delta is already experiencing the effects of climate change, and that it will see greater and more damaging effects in the future. The combination of a dense population, low elevation, and high dependency on natural resources renders the delta extremely exposed and sensitive to climate change. Water plays a particularly crucial role. In the past, people managed water. In future, water is likely to 'manage' people.

Amongst survey respondents, 96.6% say that they have experienced changes in the climate over the past ten years, such as different times of rain and changes in the temperature. More than two-thirds (68.8%) say that hazards have become more damaging over this period. ***Figure*** 5 provides a multi-hazard analysis and shows how households (poor/non-poor, An Giang/Soc Trang) have been affected by the various hazards. Droughts are already

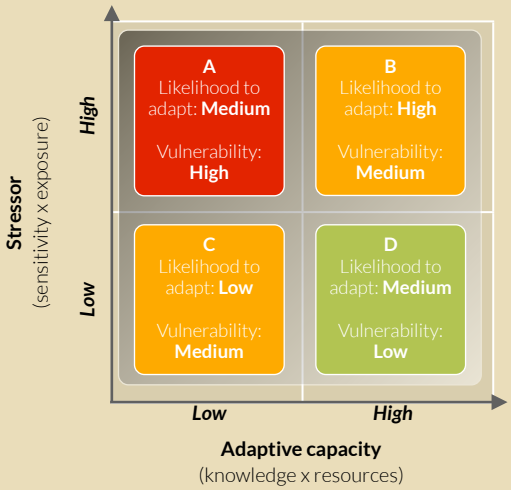
Figure 5 | **Multi-hazard analysis**



Based on survey question C.7 (Over the past ten years, to what extent has your household been affected by the following hazards?), the charts above show that droughts, floods, pests and animal diseases are the most damaging hazards.

Comparing poor with non-poor respondents, it is found that poor are more vulnerable to storms (less robust housing). Meanwhile, non-poor are more exposed to droughts, pests and animal diseases. The comparison between provinces shows that respondents Soc Trang have suffered significantly more from droughts, pests and animal diseases than those in An Giang. Saline intrusion is an additional concern in Soc Trang province.

Figure 6 | **Who adapts when?**



Actual adaptation as a function of stressor and adaptive capacity:
Strategically, it makes sense to break down the population into four groups (A, B, C, D). Groups A and B have most to gain from adaptation, but group A is less likely to do so. Reinforcing the adaptive capacity of group A is the most relevant and effective form of support - it is thus advisable that programs make group A their primary target.

In addition, programs should consider supporting all four groups in a layered (or gradual) approach that fills gaps as needed for each group. For instance, group B might be advised on the most appropriate adaptation techniques without giving material resources to do so (thus preventing mal-adaptation).

seen as the most damaging hazard - having affected more than two-thirds of respondents in Soc Trang, and almost half of those in An Giang. Almost three-quarters (72.6%) anticipate that hazards will cause damage and losses to their households in the future. Yet, this awareness has yet to trigger more concrete action: the shares who have taken actions over the past four years to be better prepared (43.6%) and who plan (further) steps in the future (38.3%) are significant - but the gap between awareness and action indicates that many lack the capacity to adapt.

Supporting capacity in adaptive planning is therefore extremely relevant. In this context, two important aspects are worth considering. ***First***, how can support be most relevant and effective? As illustrated in ***figure 6***, it is insightful to think of the Mekong delta population in four groups, with each of them being characterized by a different combination of the strength of a stressor (the extent of adversity that a household experiences) and its capacity to adapt. Households that are exposed and sensitive to climate change and other factors and that have limited resources and knowledge to adapt (group A) are most vulnerable; building their adaptive capacity and reducing their exposure and sensitivity (supporting a move towards group D)[15] is the most effective and relevant strategy; group A should thus be the primary target group of climate change adaptation.

In practice, group A consists mainly of poor and poorly educated farmers with a low degree of livelihood diversification.[16] The ICAM project meanwhile focussed mainly on poor and landless villagers (group C). While poverty reduction is a generally effective broad strategy to raise adaptive capacity, landless farmers tend to be less directly affected by climate change.[17] As many landless villagers receive income from agricultural work (31.7% of poor respondents did so in 2014), their livelihood can be affected more indirectly - for instance, when a drought-afflicted rice farmer can no longer afford casual workers.

The ***second*** aspect concerns the question of appropriate adaptation. Given the serious long-term outlook for the Mekong delta, the question is not so much ***whether***, but rather ***when***, ***how***, and ***how well*** people will adapt. To a large extent, adaptation will be reactive and autonomous (as is already happening) rather than proactive and policy-driven. Considering the inter-play between effects of climate change and of local environmental degradation illustrated in ***figure 7***, caution is advisable. Autonomous adaptation to drought and greater evaporation often means that farmers simply extract more groundwater to irrigate crops. This comes at an expense (use of pumps, drilling of more or deeper wells)[18] but may be an effective adaptive measure in the eyes of a farmer. Unknowingly, however, such adaptation to one stressor (drought) exacerbates another: land subsidence, which - based on present rates of groundwater extraction - is already a much more potent factor for flood risk than sea-level rise.[19] This example illustrates the need for effective policy responses that take all

15. Such strategies may combine the promotion of more drought-tolerant crops or crop varieties (reducing sensitivity) with livelihood diversification and adoption of non-agricultural income sources (reducing both exposure and sensitivity).

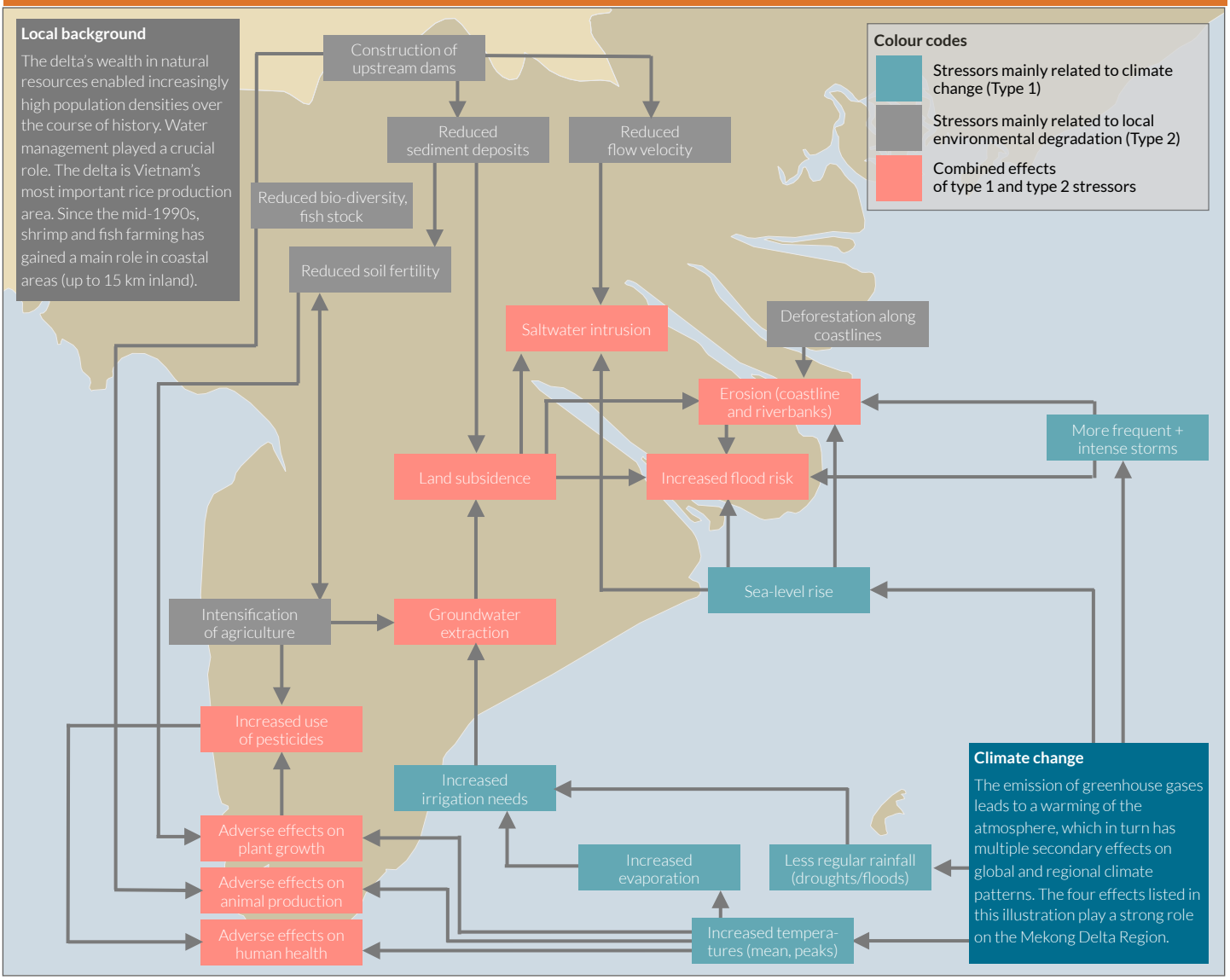
16. Shrimp farmers belong to this group: to break into the extremely lucrative but high-risk shrimp business, many farmers sell other assets or take up loans to invest. Yet, shrimp-farming is a difficult enterprise, with shrimps being extremely sensitive to temperature and water conditions. See Sun Pheng Kham et al (2012).

17. Likewise, non-poor villagers are more affected by pests and animal diseases - they have more to lose than poor and especially landless villagers. Storms are the only hazard that affects poor more than non-poor - a finding that is easily explained when considering the rudimental housing of many poor families.

18. In several focus group discussions, villagers complained about the high cost for irrigation pumps (diesel) and expressed that only better-off farmers could afford the use of pumps. The same restriction is at play when it comes to the drilling/deepening of wells. Nonetheless, deepening of wells is a common practice. In Vinh Chau, one farmer explained that wells had become ever deeper of the past ten years, now reaching up to 116 meters underground.

19. A recent study concludes that if present rates of ground water extraction continue, the Mekong delta will subside by an average of 0.88m (0.35-1.45m) by 2050. By comparison, this pales (and compounds) the anticipated sea-level rise of 0.1 to 0.3m by the same year. See Erban et al (2014).

Figure 7 | **Disruptions in the delta: schematic interplay between climate change and local degradation**



causes of adversity into account. For the Mekong delta (as for all other areas), effective adaptation should not single out climate change but address all aspects that bear adverse potential to a sustainable socio-economic basis. The fact that the ICAM project involved multiple government agencies in a multi-level planning process to enable adaptation is commendable and has merit for several reasons (outlined in chapter 5). The potential of this platform for advocacy towards a more holistic policy development is recognized and worth extending and expanding.

3.2 The policy context

The Government of Vietnam recognizes the substantial impact that climate change is expected to have on the country, and has devised the National Target Program to Respond to Climate Change (NTP) as an umbrella for a range of action plans and sectoral policies. The NTP includes the identification of appropriate mitigation and adaptation measures, the mainstreaming of climate change issues into socio-economic planning, and the development of action plans for sectors, ministries and sub-national divisions.[20] Both An Giang and Soc Trang provinces devised such provincial action plans in 2012 under the technical management of the respective Departments of Natural Resources and the Environment (DoNRE). The ICAM project was closely aligned with these plans, and the

20. See (IFAD 2014) for a good overview of Vietnam's plans and policies regarding climate change.

involvement of multiple departments (DARD, DoNRE, CFSC, DPI[21]) ensured ongoing consistency. In particular, the integration of climate change adaptation into commune and district-level Socio-Economic Development Plans (SEDP) facilitated under the ICAM project organizations was aligned with the province's strategic plans. Staff of departments and organizations found the adaptation to climate change in general and the CBA process in particular to be highly relevant and useful.

3.3 Relevance of ICAM project activities

ICAM project activities were carried out in support of either outcome 1 (adaptive planning capacity), outcome 2 (community resilience), or outcome 3 (evidence-based learning). In principle, all outcomes are relevant to the population of the Mekong delta, given the risk context laid out above. The CBA planning process in particular has merit and will be discussed in *chapter* 5. A similarly relevant aspect of the project was the engagement in policy dialogues such as the Southern Climate Change Working Group, strengthening civil society and developing plans and tools for overall climate change adaptation in the Mekong Delta.

But what about the actual activities that were geared to enhance community resilience? Aside from overall adaptive planning, the ICAM project contributed by raising awareness on climate change, by enhancing disaster preparedness and mitigation, and by aiming for climate-resilient livelihoods. Concerning the latter aspect, the project promoted a number of new techniques and supported an existing micro-loan scheme of the Women's Union (and made it more accessible for Cham women).

While the micro-loan scheme was seen as a relevant measure towards poverty reduction[22], interviewed loan holders said they were not further guided in using these loans to adapt to climate change. In fact, the micro-finance scheme was not in the original ICAM design and only added based on a proposal by the Women's Union, which has a long-standing scheme.

In terms of concrete options for climate-resilient livelihoods, the project explored several options through a detailed livelihood study and follow-up piloting. This led to the promotion of four main options: bio-bedding for chicken, bio-bedding for pigs, indoor mushroom production, and bio-fertilizer production. Further options were used on a smaller scale but proved difficult to upscale due to lacking demand and other factors. All four measures reduce water consumption compared to conventional methods[23], and are less labour-intensive.

Some problems were encountered with bio-bedding - particularly in An Giang: as the bio-beds generate heat, they were deemed unsuitable by some beneficiaries. Others amended the technique (letting pigs and chicken out on hot days; adding holes to chicken/pig sheds for additional circulation) and found the technique useful.

The measures in disaster risk reduction - construction of flood gates and green dykes as well as safe shelter for child care centers - were found to be very relevant. These were built as a result of the community-based planning and thus based on the input from communities - a rather novel feature in the Vietnamese context.

21. DPI was added to the ICAM governance in 2014. Aside from departments, the process also involved the VWU, VNRC and CCRD.

22. There is an indirect link (and relevance) in the sense that higher income correlates with greater resilience.

23. Bio-bedding requires less frequent cleaning and thus reduced water needs. Indoor mushroom implies less exposure to sunlight, and thus less evaporation and watering. However, the water quantity is dwarfed by the water requirements in crop cultivation.

4. Efficiency

To what extent was the ICAM project efficient? To answer this question, let us have a look first at the expenditures and then at the procedures and structures.

Efficiency:
"A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results."

OECD 2010:21

Between mid-2012 and June 2015, project expenditures amounted to AUD 2,191,195 - and thus remained well below the allocated budget of AUD 3,007,217. A no-cost extension until the end of 2015 was granted in June. Taking the quantifiable number of direct beneficiary households as a basis, expenditures per beneficiary household amounted to AUD 1,429. However, this in itself does not do the project justice: The figure is much lower when considering the larger number of beneficiaries of structural DRR investments (green dykes, flood gates), and lower still when taking the number of indirect beneficiary households - the population of all target villages as a basis (AUD 116 per household).

The full potential is being realised where project outcomes are being replicated with government resources: already, the government partners have extended coverage to five additional communes that were not directly included in the ICAM project (CARE has an advisory role). The project had cost-saving measures in place and was implemented with a very lean project team. The indirect implementation approach through partners is also recognized as an efficient implementation approach - in spite of the fact that every beneficiary and every staff member of partner organizations received VND 50,000 (AUD 3.00) for every activity they participated in (which is standard practice in Vietnam). The indirect implementation approach has the potential to harness existing relationships and thus quickly gain community trust.

The lean size of the project team may have kept direct staff costs down but is neither seen as the most effective nor the most efficient way to implement, given the needs for coaching and the sheer scale of the project. We will return to this aspect in subsequent chapters.

5. Effectiveness

Having presented the findings related to relevance and efficiency, it is time to ask: to what extent was the ICAM project effective? To what extent were its targets achieved? The chapter begins with a look at the project set-up and then analyses the level of target achievement for each of the three outcomes.

Effectiveness:
"The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance."

OECD 2010:20

5.1 Effectiveness of project set-up

Due to multiple design issues, the ICAM project was exposed to several risks. Throughout implementation, these issues were compounded by numerous structural challenges. As a result, the project's level of achievement was slightly below expectations. Let us analyze design issues and structural challenges first before turning to the assessment in terms of key indicators.

Four **design issues** stand out: *First*, the project was very **ambitious** considering its 30-month (later extended to 36 months) timeframe. It anticipated an indirect implementation approach through partners, as well as a thorough planning process on which actual village-level implementation would be based. But the required capacity-building, and the CBA planning process in particular, was going to take a lot of time, and since village-level implementation was viewed as dependent on preceding steps, there was an inherent risk that any delays would be to the detriment of that village-level implementation.

Second, the **ability to manage risks** was seen as too optimistic. The project design appropriately identified key risks (CARE 2012: risk matrix), but anticipated that these could be handled - not fully recognizing the limited leverage CARE would have over these issues (e.g. time commitment of partners and community members).

A related *third* factor concerns the **size of the project team**. Considering (a) the geographical separation between Soc Trang and An Giang, (b) the number of supported communes and villages, (c) the number of partners, (d) known knowledge gaps of the key partner in the most crucial expertise, (e) the overall envisaged complexity of the project, (f) a budget volume of around three million AUD, and (g) an implementation timeframe of only three years, the team size was far from adequate. Not even when considering that village-level implementation was to be in the hands of partners (rather than of CARE's) can a team of seven officers be seen as adequate.

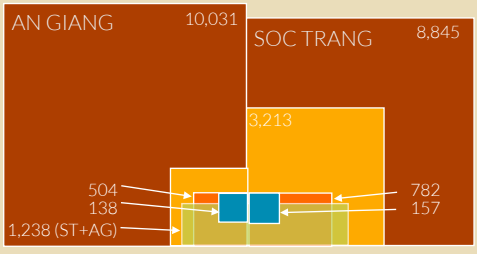
Fourth, the project design suffered from **targeting issues**. A key issue was the focus on the poor and landless. This limited targeting undermined the project's theory of change and instead marginalised the non-poor villagers (in particular those with agricultural land, who are more directly affected by climate change than landless villagers).[24] The limited targeting was compounded by the fact that out of the several identified potential options for climate-resilient livelihoods, only few proved feasible for wider application and could be considered general agricultural productivity measures rather than climate-resilient adaptation measures (i.e. low-interest loans, bio-bedding for chicken and pigs, indoor mushroom production).

Design issues were amplified by three **structural challenges** that affected the ICAM project throughout implementation. *First*, there were gaps in **technical support**. The selection of a Hanoi-based organization (CCRD) to consult on options for climate-resilient livelihoods meant that support was fragmented and suggested options were not locally appropriate.[25] Within CARE, there was furthermore a gap in management support to the project team: while many challenges were identified and reported by the local project team, team members pointed out that there had been insufficient response and support from CARE's country office.[26]

The *second* structural challenge concerns the **implementation mode**. Although the project design had envisaged the formation of climate-resilient livelihoods (CRL) groups and (later) micro-finance groups, these structures either did not eventuate or were weak in practice. Instead, VWU members dealt with individual beneficiaries - thereby missing opportunities to reinforce mutual support mechanisms. Amongst the small CARE project team, staff were allocated to functions rather than areas, thus necessitating multiple or joint visits to the same village, and binding more of the few resources than would have been needed.

The *third* structural challenge concerns **personnel**: several staff turnovers amongst CARE and partner organizations slowed down the project progress. Interviewees also pointed to initial project leadership driving the exclusive focus on CBA planning over the initial 18 months, which prevented earlier preparation of village-level implementation.[27]

Figure 8 | **Breadth of project coverage**



All households (indirect beneficiaries, e.g. from DRR)
Poor households
Households involved in CBA planning
Households that were supported in CRL
Households that received a VWU loan

The charts show the number of households who were involved and/or supported by the ICAM project in proportionally sized squares, in relation to overall households and target coverage.

24. The impact on the landless is rather indirect, as the ICAM design project correctly identifies: "Typically, the poor and vulnerable have no or little land - hence they work as hired labourers and are often laid off when there is adverse weather." (CARE 2012:6) The baseline study finds limited direct climate change impact on poor households' livelihoods and lists 'unstable employment' as the main concern (CARE 2013a:34).

25. Aside from the observation that bio-bedding may not be ideal in the hot and humid climate of the Mekong delta (especially in An Giang), many beneficiaries felt not sufficiently supported. Further benefits from bio-bedding were not fully explored.

26. This is a result from the management workshop; particularly in the early phase of the project, the project team felt not supported enough after having reported challenges.

27. While village-level actions such as road or dam upgrades are indeed dependent on planning outcomes, the reasoning that implementation of CRL activities was similarly dependent is unconvincing.

As a result of the design issues and structural challenges, the project did not reach all of its targets. The limited coverage is one indicator - illustrated in ***figure 8***.

Around 1,500 households directly benefitted from the ICAM project. The overall level of engagement between villagers and ICAM project partners was rather sporadic - with less than 5% saying that they discussed any ICAM-related issues with an implementing partner five times or more over the entire project period. Let us have a closer look at the project's level of achievement set against its indicators.[28]

5.2 Level of achievement: outcome 1

The ICAM project was arguably most successful with regard to outcome 1. With much time and effort devoted to capacity-building and CBA planning, the project created a basis whose long-term benefits are likely to emerge fully in years to come ***(see chapters 6 and 7)***. Aside from building skills and capacities amongst partners, it also facilitated a change of mindsets towards more collaborative and bottom-up planning.

Outcome 1
Communities and local authorities have improved capacity to undertake gender-sensitive analysis and planning for community-based adaptation (CBA) and disaster risk reduction (DRR)

Indicator **OC 1.1**	**Number of village/commune adaptation DRR and SEDP plans established**

All 33 villages prepared village adaptation plans, and villagers' concerns and plans were integrated into SEDPs of all five communes. Efforts to integrate these plans into district-level SEDPs were ongoing but had yet to succeed at the time of the evaluation.

Indicator **OC 1.2**	**Level of satisfaction of local people with participation in assessment and planning process**

Around 1,300 people were involved in local assessments and planning (representing 6.8% of all households). Amongst the survey sample, 46.3% of respondents said they were involved, and almost all of them were satisfied with the process (54.4% very satisfied, 38.0% rather satisfied). Villagers remarked that they appreciated the opportunity to voice concerns and to see them shaping village and commune-level plans. Some villagers in Soc Trang remarked that they had not heard back yet from the government, therefore not yet realizing the benefits of the planning process. This observation indicates that regular updates should be provided to villagers on the progress of commune-level planning.

Indicator **OC 1.3**	**SEDP/DRR/adaptation plans at sub-national level in the project provinces that incorporate gender concerns and ways to address them**

The members of government departments and mass organizations trained and sensitized to gender issues valued this training and found it useful, and interviewed government officers professed that they changed planning towards greater inclusiveness. It is also found that the promoted CRL options and the micro-finance scheme were suitable to enhance the economic concerns of women in particular. The dedication of participating government agencies and mass organizations to community-based adaptation, better inter-agency collaboration and stronger vertical links and responsiveness are encouraging signs that gender-sensitive CBA processes will be extended and replicated.

Indicator **OC 1.4**	**Percentage of community members and government actors who improved their knowledge on gender analysis, community-based adaptation, and DRR assessment and planning**

Concerning government partners, between 30 and 60 officers were trained in gender mainstreaming, CBA planning, and facilitation skills. Furthermore, 32 staff members took part in training of trainers courses and subsequently trained further officers in the facilitation of CBA processes. While no overall staff figures were available (which would have enabled the calculation of percentages), all interviewed facilitators said they had been sufficiently trained to guide the CBA processes. Given that CBA planning was a new activity, this is an evident improvement in knowledge and practice. It was further observed

28. As described in the evaluation plan, 16 out of the project's 51 indicators were selected for this evaluation.

that vertical (e.g. district-commune) and horizontal (inter-departmental) linkages had improved. For some province-level staff members, the CBA process provided the opportunity to hear village conditions and concerns first-hand for the first time.

Regarding community members, 38.1% of survey respondents say they were trained - however, there is no disaggregation available on the type of training they received.

Indicator	
OC 1.5	**SEDP/DRR and other sectoral plans are mainstreaming climate change**

Through awareness-raising activities and facilitation of CBA planning processes, the ICAM project ensured that all SEDP and DRR plans at the commune and village levels addressed climate change. Village CBA plans were attached to commune SEDPs and draft texts of SEDP reviewed to ensure that climate change adaptation was appropriately addressed.

5.3 Level of achievement: outcome 2

Outcome 2
Improved community resilience through the implementation of sustainable, community-level,

Before turning to the assessment of the five selected outcome 2 indicators, a few general points are worth considering. The indicators are not appropriate for measuring the resilience of either the community or the most vulnerable. While indicators OC 2.3 (awareness), OC 2.1 (attitude/behaviour) and OC2.5 (outcomes) could be logically linked, indicators OC 2.2 and 2.4 are rather output than outcome indicators. Furthermore, none of the indicators selected for this review are SMART [29] or have specific targets - thus making it impossible to assess whether an indicator target has been achieved or not.[30]

Indicator	
OC 2.1	**Vulnerable people change their attitude and behaviour to climate, environment and gender due to project activities**

Amongst respondents from poor households, 30.2% say they have learned new practices from the project. Amongst them, the majority says they apply all (30.8%) or most (35.9%) of what they have learned. Thus, amongst all poor households, 20.1% have learned from the project and changed behaviours. Amongst those respondents who have learned new techniques but not adopted them, the lack of required resources is the most-cited hurdle.

Indicator	
OC 2.3	**Percentage of people who improved their awareness of unavoidable impacts of climate change on community and livelihoods.**

Overall, almost half of all respondents say that their knowledge and understanding of climate change has improved over the past three years ***(see fig. 9a)***. Slightly more than one quarter of them attribute these gains 'mainly' to the ICAM project. As ***figure 9b*** illustrates, roughly 80% of all respondents have learned something new on the causes, impact and adaptive measures. For poor households, village meetings have been the most important source of knowledge gains.

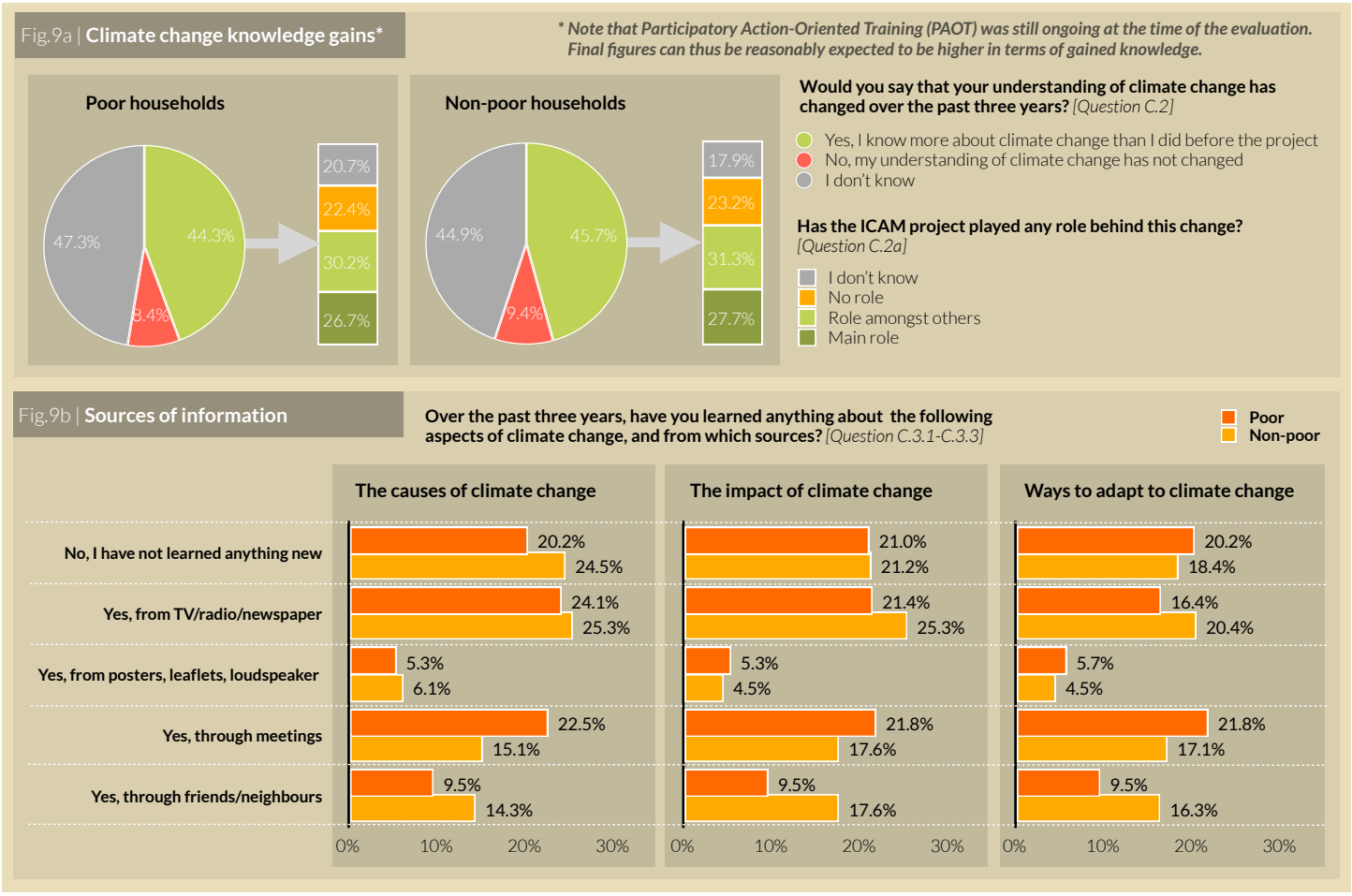
Indicator	
OC 2.4	**Number of climate-resilient livelihood options made and implemented**

The ICAM project explored several climate-resilient livelihood options. In fact, the study that CARE conducted to identify suitable CRL options could be considered as best practice - it is well-structured and explores potential options through a set of filters for various target groups (See CARE: 2013). Yet, the follow-on process to that study showed that some options were not suitable due to various factors (e.g. lack of market demand, set-up costs, political sensitivity). For instance, support for migration (seasonal or permanent) was considered as an adaptive option but deemed too politically sensitive. It ended up with four main options: a) bio-bedding for chicken-raising, b) bio-bedding for pig-raising, c) indoor mushroom production, and d) bio-fertilizer production. Other options that were implemented on a smaller scale included chili and sprout bean cultivation as well as small-scale trading and clothes production. These options are well documented, thus principally enabling replication.

29. SMART stand for Specific, Measurable, Achievable, Relevant, and Time-bound - when developing indicators, they should be tested against these five criteria. During the preparation of this evaluation, it was agreed to review project performance based on 16 of the 51 indicators.

30. Specific targets were set instead in various annual plans based on discussion with partners.

Figure 9 | **Knowledge of climate change raised**



Indicator	Percentage of poorest and vulnerable people (men/women) reporting that they have adopted/benefitted from climate change adaptive livelihood options (diversity, income)
OC 2.5	

Whether somebody has adopted a CRL option or benefitted from it are two different aspects - this indicator tries to measure both. Let us have a look at adoption first and then at the benefits. In terms of the CRL options promoted by the ICAM project, the uptake is very small; even amongst the project's main target group of poor households, it stands at less than 10%. The number of crops grown (for those who have land) has not changed (mean number of crop types in 2014 annual cycle for poor 1.14 and 1.5 for non-poor). Crop diversification was not a project objective but is worth assessing nonetheless, given its strong potential towards resilient livelihoods.

Furthermore, the overall livelihood mix has not significantly changed (neither amongst poor nor amongst non-poor households). There are some households who have benefitted from the adoption of CRL options (see case study) - but the number of such households is too small to be reflected in the statistical analysis. Given that the project had only 1.5 years to support climate-resilient livelihood options, and that it needed to pilot-test these options, such a statistically significant change in livelihoods would be unlikely under the best of circumstances.

The project invested in replication through farmer field schools in its final phase - the results of which are not fully reflected in this evaluation. Eleven households said that bio-bedding for pig-raising had benefitted them - ten other households meanwhile state that bio-bedding was not suitable to the humid and hot climate. Regarding the provision of small loans, 18 households said that the loan had helped them to escape from poverty.

With the percentage of households who have adopted CRL options being low, it is unsurprising that any benefits are difficult to identify through quantitative means. ***Figure 10*** provides the overall change in respondents' livelihood situation. It shows a roughly equal tripartition for all analyzed groups (based on gender, poverty status, and province) between those who say their situation has improved, declined, or stayed the same as in 2012, with the net trend being slightly negative for all groups (those who identify a decline outweigh those who see an improvement).

Asked about the underlying factors, there is an overwhelmingly negative role attributed to weather and market changes. Meanwhile, project-related factors were seen as not applicable for roughly two-thirds (meaning that they have not been involved). Amongst those who took up project-promoted activities, the share of those who say there was no net effect on overall livelihoods outweighs those who see a positive role ***(see fig. 10d)***. This applies for both genders, poor and non-poor, and for both provinces. In summary, there was little progress towards increase of income and diversity for either poor or non-poor households.

5.4 Level of achievement: outcome 3

Outcome 3
A strong evidence base and strengthened civil society provide a foundation for the scale up of community-based, equitable and gender-sensitive adaptation in the MDR.

On the ***regional level***, the ICAM project contributed to a strengthening of civil society networking, collaboration and information-sharing in the Delta. In particular, it supported the Southern Climate Change Working Group, led several debates on climate change and DRR, and held regular meetings on the issues of the Mekong Delta to share experiences and collaborate in advocacy efforts. ICAM also worked with other NGOs on joint projects, such as the development of a gender and climate change 'how-to' guide. Finally, the dynamic role of CARE Vietnam at the national level contributed to promoting the role of civil society organisations in climate change adaptation work, also strengthening the partnership dialogues between CSOs and the government on climate change and DRR.

On the ***local*** level, there was not so much an emergence of local CSOs. However, more than two-thirds of survey respondents say that collective engagement had improved over the past three years. While this is not all attributable to the project, it is reasonable to assume that the collective engagement launched in CBA planning (driven both by communities and government partners) is likely to endure, particularly as more tangible benefits emerge from these processes.

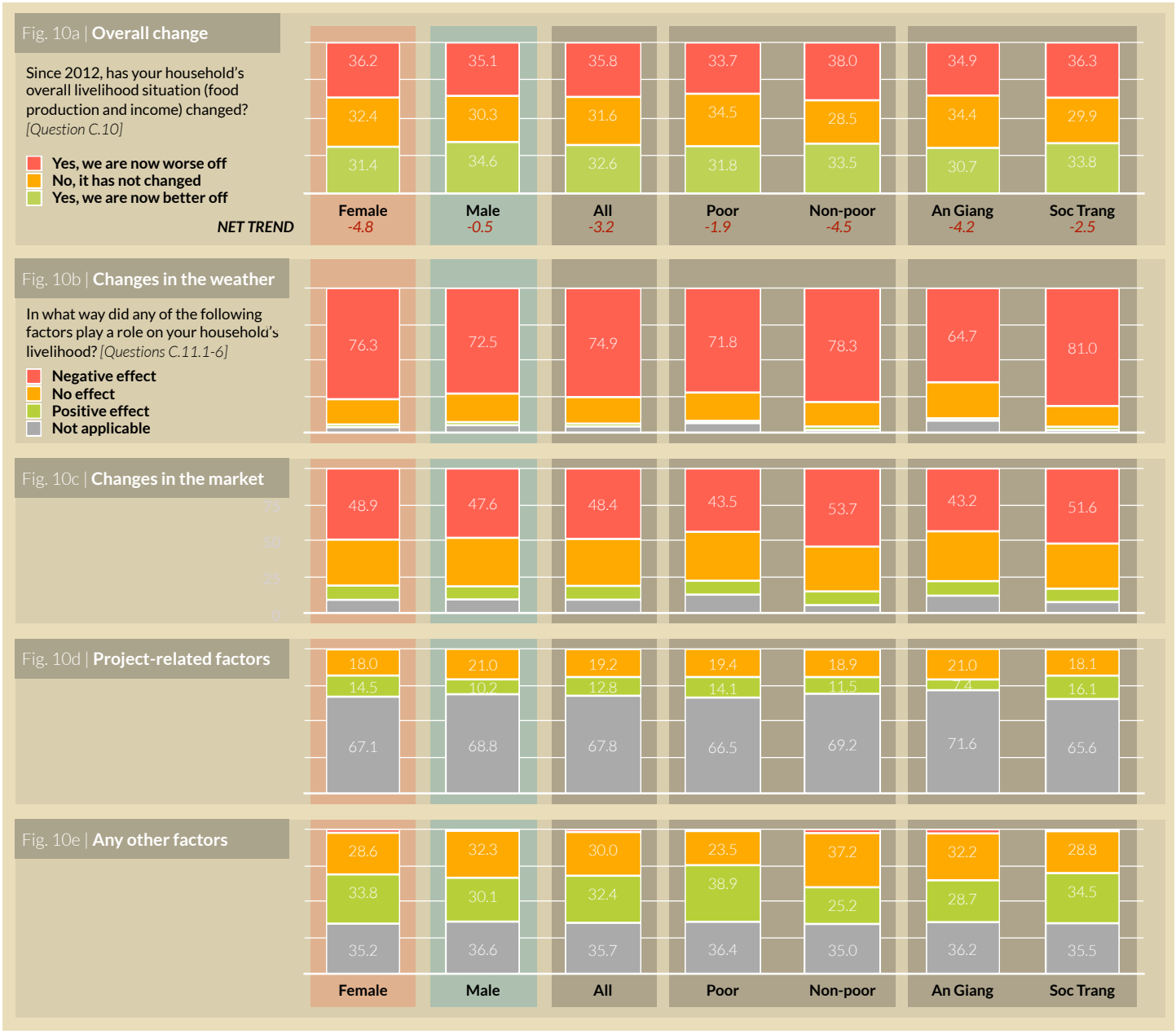
Indicator **OC 3.1**	**Number of effective and climate-resilient CBA models in the target communities documented.**

This indicator does not sufficiently specify what is meant by CBA models. If it refers to the village level plans, all 33 of them are documented. If it refers to CRL models in particular, it is worth highlighting the detailed assessment and documentation of eleven CRL options (CARE 2013). Although most of them could not be used for the project context, the documentation provides a valuable resource for programming in different contexts. The follow-up documentation on piloting CRL covers three options (bio-bedding for chickens, bio-bedding for pigs, and mushroom production; see CARE 2015).

Indicator **OC 3.2**	**Number of community-level social organizations, with high participation of women and vulnerable people, established and operating effectively in target communes.**

The ICAM project did not lead to the development of any community-based organizations. While project monitoring data indicate that five existing organizations had been identified for strengthening, no such organization was mentioned during village visits. The project reportedly created CRL and micro-finance groups - however, it emerged during focus group

Figure 10 | **Overall change in livelihood situations and underlying factors**



discussions that the beneficiaries of CRL and micro-finance interventions were supported on a case-by-case basis (being supported individually by Women's Union staff - and that they did not feel being part of any such group.

Indicator	
OC 3.3	**Number of models that can be replicated.**

Out of the piloted CRL options, bio-bedding is seen as the most promising for replication. It is worth further exploring the modifications implemented by beneficiaries in Soc Trang to reduce the additional heat produced by the bio-bed (greater ventilation through amended design of the pig/chicken shed; letting animals out to a shaded and fenced 'courtyard' on days of extreme heat). With regard to indoor mushroom production, interviewed beneficiaries cited a lack of demand - an issue that could be addressed by linking suppliers with buyers. In addition to these two models, it is also worth re-visiting the options that had been assessed in 2013 but were then not applied by the ICAM project - these may be more applicable in different contexts.

6. Impact

Impact:
"Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended."

OECD 2010:24

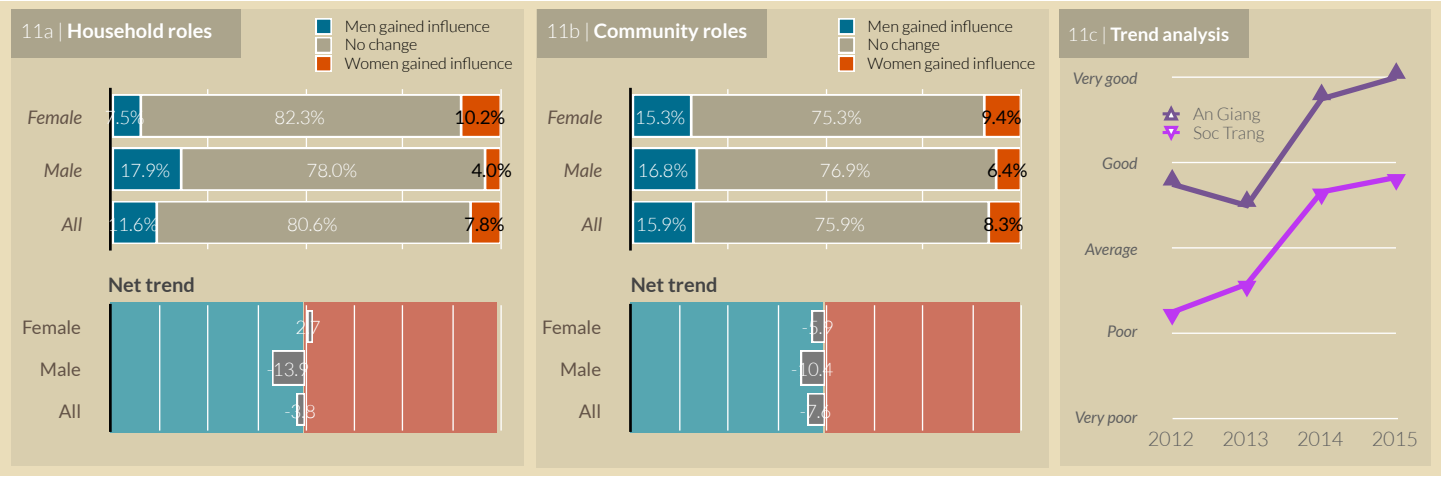
Considering the later than anticipated implementation of village-based adaptation activities and the strong investment in capacity-building of local partners, it is reasonable to assume that the ICAM's impact will only emerge over years to come. The dedication of participating government agencies and mass organizations to community-based adaptation, better inter-agency collaboration and stronger vertical links and responsiveness are encouraging signs that the CBA approach will be extended and replicated, thus generating positive impacts on target villages and households over the long haul. In fact, CBA processes have already been extended to areas not directly supported by the ICAM project.

The groundwork provided through the project represents a good basis for further community-level adaptation. The recent trends described by target communities - through survey, trend analysis and focus group discussion - point towards increasing pressures and thus incentives to adapt. As presented in ***figure 10***, the ***overall*** trend in terms of livelihood is slightly negative, mainly due to climate factors and market conditions. The trend analysis ***(see appendix E on p. 47)*** also illustrates downward trends in terms of crop cultivation, animal production, food security, water, health, and - to a lesser extent - income. So far, the combined effects of various stressors outweigh project gains in these regards. They do represent a strong impetus for further and accelerated adaptation.

The ICAM project meanwhile had an impact on disaster preparedness, access to finance, and - to a lesser extent - on community cohesion and links to local governments: the positive trends in these regards are partially attributed to the project. With regard to the involvement of women in community affairs, there is a discrepancy between the results of trend analysis and household survey ***(see figure 11)***. Trend analysis and focus group discussions indicated that the role of women in community-level decision-making had increased - in part due to the ICAM project. Most group discussions pointed to the Women's Union increasingly inviting women to village-level meetings, and encouraging them to share their concerns. Meanwhile, survey results point towards a slight shift in favour of men - thus suggesting that an emerging pattern in favour of a stronger role of women may thus far be limited mostly to direct project beneficiaries.

Looking into the future, there is more heavy lifting to be done for households and communities to better adapt to multiple stressors, and to become more resilient. Using the CBA planning framework and experience as a basis, this should incorporate at least six elements listed below.

Figure 11 | **Perceived changes in gender roles**



Livelihood analysis in An Giang *Photo: Giang Pham*

First, it should include further diversification of livelihoods towards reduced sensitivity and exposure to climate risks. There is so far very little diversification - livelihood compositions in 2015 closely mirror those of 2012 (see appendix B).

Second, it should include the adoption of more climate-resilient techniques. Less than 10% of either poor or non-poor households have adopted such measures thus far.

Third, it should aim for a further increase in the ability of communities and households to prepare for and respond to disasters. There is already net positive trend in perceived household and community disaster preparedness, with one-third attributing these improvements to the ICAM project.[31]

Fourth, it should include enhanced capacity for collective action and adaptive action. More than two-thirds see collective action strengthened, with around 10% of these respondents attributing the improvements to the project. Collective action and - more broadly, social capital - are crucial elements of community resilience (IFRC 2012).

Fifth, it should include further improvements in the links between villages and the government. While this was one of the ICAM's stronger aspects, improvements are perceived to be moderate thus far, with around one-quarter saying that the villagers effectiveness to getting the government to take a desired course of action as 'high'.

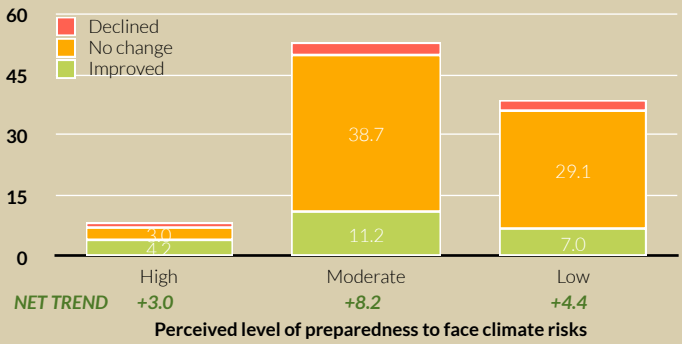
Sixth, it should lead to more gender-equitable distribution of decision-making power. As the charts in ***appendix D (see p.45)*** demonstrate, community affairs in the Mekong delta remain strongly dominated by men.

Overall, it should lead to villagers being better prepared for and adapted to face climate risks. The survey shows that there is a minor net positive trend already ***(see fig. 12)*** - out of those seeing improvements, 37.8% of poor and 19.5% of non-poor households attribute this change to the ICAM project. Yet, this means that only 8.0% of poor households see their ability to face climate risks increased mainly because of the ICAM project (4.0% for non-poor households). Even when considering that the survey sample for poor households included just 66.7% of direct beneficiaries, this shows that more improvements are needed.

31. Towards the end of the project, Participatory Action-Oriented Training (PAOT) was conducted. The fact that PAOT elements were mentioned by several villagers indicates that a stronger effect could have been achieved if more time had been available.

Figure 12 | **Preparedness to face climate risks: little change**

The cross-tabulation between perceived preparedness to face climate risks (x-axis, question C.22) and the extent to which that preparedness has changed over the last three years (y-axis, question C. 23) shows that while there is a slightly positive net trend, a clear majority sees no change. Less than 10% see their preparedness as high. There is no statistically significant difference based on gender, poverty status or province.



7. Sustainability

Sustainability:
"The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time."

OECD 2010:36

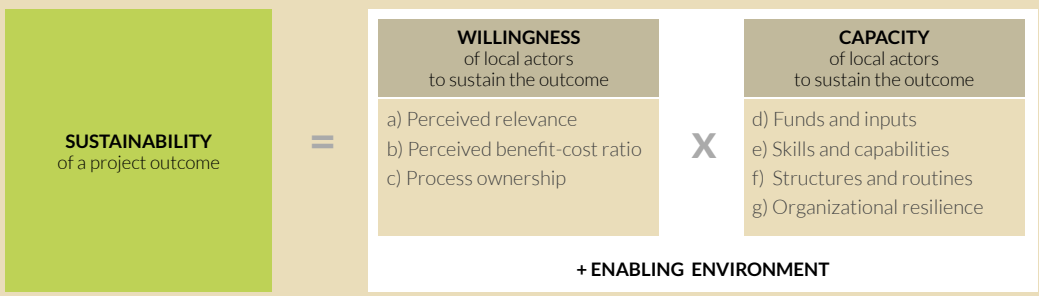
The sustainability of an intervention largely depends on a strong sense of local ownership - local actors' *willingness* and *capacity* to continue running or maintaining the intervention's results. Neither willingness nor capacity is a fixed given *(see figure 13)*.

Local actors' **willingness** to continue maintaining outcomes usually is a function of *a) perceived relevance* (did an activity address a community concern?), *b) the perceived benefit-cost ratio* (did an activity generate tangible benefits, how much input is needed to maintain these, and do the benefits justify the inputs?), and *c) process ownership* (did local actors invent, steer, participate, accept or reject the underlying process?).

Similarly, local actors' **capacity** can be broken down to *d) funds and inputs* (do beneficiaries have the time and money to sustain the outcome?), *e) skills and capabilities* (do they have the required technical skills?), *f) structures and routines* (are there solid organizational structures underpinning the outcome?), and *g) organizational resilience* (will beneficiaries be able to adapt after a shock such as the death of a local leader?). In addition to the willingness and capacity, the extent of an **enabling environment** also plays a role.

Having described the key components of sustainability, how is the ICAM project judged against them? In answering this question, it is worth distinguishing between the enhanced planning capacity and experience of local partners, and the adoption of climate-resilient livelihoods. Concerning the planning capacity (to conduct CBA processes), it was found that most partners saw climate change adaptation in general and the CBA process in particular as very relevant. Having driven the CBA processes and realizing its benefits, they are *willing* to sustain and replicate this mode of planning - and presented a strategy for planning ahead. Government staff say that they will 'drive further' even if they will stop receiving the project payments of VND 50,000 (AUD 3.00) for every planning meeting or training they attend. They furthermore saw themselves *capable* to continue driving CBA planning, having

Figure 13 | **What makes a project outcome sustainable?**



Cham family in An Giang *Photo: Giang Pham*

received numerous trainings and gained experience. Several officers pointed out that they would try to expand the CBA approach to all communes and villages in their districts. In fact, the government has already replicated the CBA approach in five new communes with its own resources and CARE being in a technical advisory role.

Overall, the enhanced planning capacity and modus is thus seen as sustainable. Yet, the extent to which CBA planning will be applied further depends on the commitment and leadership of involved agencies - busy schedules and staff turnover may be to the detriment of continued application.

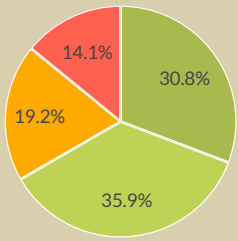
In terms of climate-resilient livelihoods, the outlook is mixed: on the one hand, some beneficiaries who applied CRL options successfully are likely to sustain these practices. Raising chickens and pigs on bio bedding is not difficult for those who already raised chickens and pigs through conventional approaches, but in need of more support to those who never raised these animals before.

Those who do not realize a benefit from new approaches are unlikely to sustain them,and some have already stopped application ***(see fig.14a)***. For instance, several households who tried mushroom production stopped production, citing the lack of a market. Some pig farmers have reverted from bio-bedding to conventional practices. More than nine out of ten households who currently apply new techniques however are willing and capable to sustain new practices ***(see fig. 14b and c)***. Regarding the micro-finance component, the Women's Union plans to continue its program with external funding.

Figure 14 | **Sustainability of new techniques**

14a | **Current application of learned techniques**

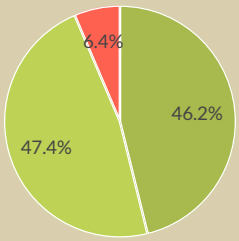
To what extent do you currently apply what you have learned? *[Question G.3]*



- I apply everything I have learned
- I apply most of what I have learned
- I do not yet apply [...], but plan to do so in the future
- I do not apply anything I have learned

14b | **Willingness to sustain application**

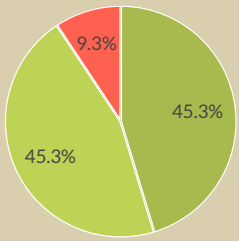
Do you think that the new techniques that you have learned are worth applying into the future? *[Question G.5]*



- Yes, all of them
- Yes, some of them
- No

14c | **Capacity to sustain application**

Thinking of the technique that is most important to you, do you think you will be able to apply it in the future? *[Question G.6]*



- Yes, on my own
- Yes, with support...
- No

The charts above illustrate a considerable level of sustainability of CRL practices: ***First***, almost all of the respondents who have learned new techniques, two-thirds apply all or most of these techniques **(fig. 16a)**. ***Second***, more than 9 out of ten respondents see these techniques worth sustaining (**fig.16b).** ***Third***, roughly the same share says they will be able to sustain those techniques most important to them **(fig. 16c).**

SECTION C | LEARNING

Photo: P. Bolte

8. Recommendations

In an effort to support the adaptation of vulnerable communities to climate change, CARE and its partners invested considerable time and resources into the ICAM project. While the greater capacity of government agencies and mass organizations in community-based planning is likely to create further impact in years to come, at the time of the evaluation this impact had yet to emerge beyond initial changes in terms of villagers and communities adapting to climate change.

The ICAM experience has the potential to trigger several changes - in the way community-based adaptation is framed, in the way the organizational underpinning is arranged, and in the way support to adaptation is provided. Let us look at these three aspects in detail.

8.1 Re-framing community-based adaptation

Everyone adapts all the time. As surrounding conditions change, it is in the human condition to adapt to them - realizing new opportunities or coping with adversity in the process. Vietnam's Mekong Delta region is no exception. As the region experiences economic transformations, the effects of climate change and of environmental degradation, its population will adapt in some way. The question is not so much *whether*, but rather *how* and *how well* people adapt.

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 in the ICAM project, should be amended in three ways: *first*, natural resource management needs to become an integral element. *Second*, the focus on the most vulnerable shall to be replaced with a layered approach. *Third*, external efforts should be based on improving existing mechanisms whenever possible.

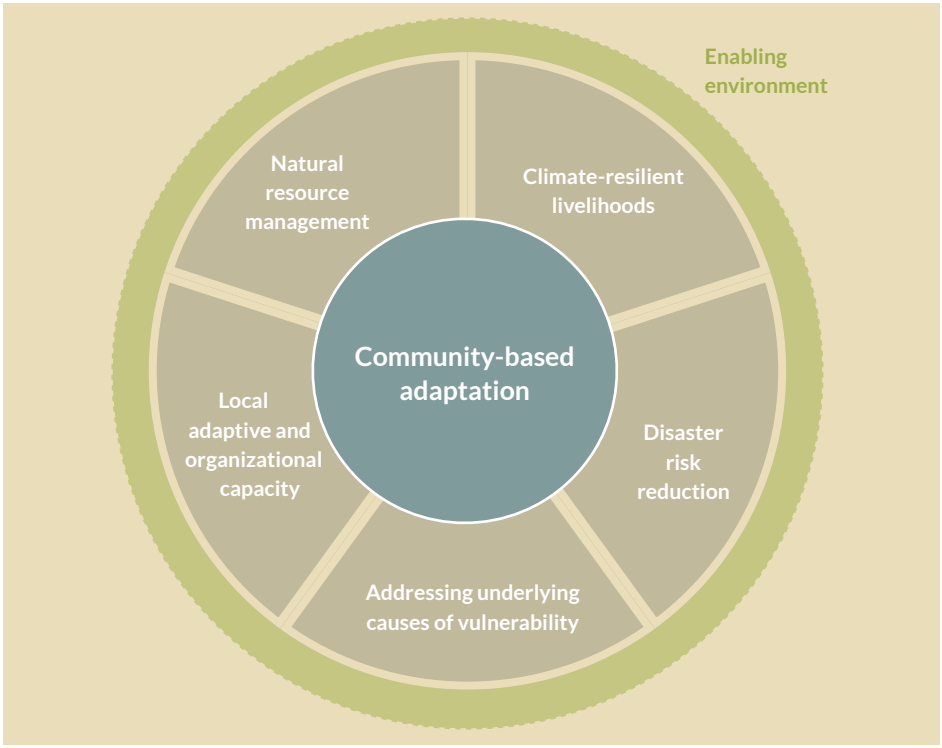
A.1 Integrate natural resources management into community-based adaptation.

Undoubtedly, the Mekong Delta is affected by climate change, and will see stronger adverse effects in the years to come. Community-based adaptation (CBA) geared to raise adaptive capacity and, as a result, resilience, is thus extremely relevant - but must address another factor at the same time: local environmental degradation.

Unsustainable natural resource management in the densely-populated delta contributes adversely to overall socio-economic outcomes - in many cases, there is an interplay between the effects of climate change and of local degradation. Take the increased flood risk, which is a combined effect of sea level rise (around 10 cm by 2050), land subsidence (average 88cm by 2050 at current rates of groundwater extraction) and several other factors. Simply adapting to climate factors (e.g. hotter weather and longer dry spells) may address one factor but exacerbate another. This is already happening: farmers report that they have to use more water from wells to irrigate. With groundwater levels sinking, the wells get drilled to greater depths - in Soc Trang, some wells now go 116 meters below the surface.

At current trends, the outlook for the Mekong Delta is dim: with around a meter of increased flood load, much more drastic adaptation measures will be needed, both structural and non-structural. And even with such decisive measures, it is unlikely that current levels of productivity can be sustained. In turn, this will lead to significant transformations, which have already begun. With increasingly less secure food and water,

Figure 15 | **The fifth element: adding NRM to CBA**



and poor economic prospects, people migrate out of the delta, in search for casual or permanent jobs elsewhere.[32]

There is another reason why local degradation needs to be addressed: local governments and communities have far greater leverage to actually *mitigate* local degradation, compared to the effects of climate change.

Several interviewed government officers indeed shared concern over these issues. Indeed, the ICAM project raised these issues, particularly management of water resources in Soc Trang, and also included relevant key messages in the behaviour change communication. The multi-stakeholder platform established though the project is an excellent platform to further promote and develop concerted action on the combined effects of climate change and local environ-mental degradation.

The need to further integrate natural resource management into the CBA framework is particularly evident in the Mekong Delta Region. Such re-framing is not just conceptually convincing, but also based on similar experiences elsewhere *(see figure 15)*.[33] The integration of natural resource management into the CBA framework is geared to enable sustainable and more holistic adaptation and to actually mitigate risks where possible.

A.2 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. The evaluation of the ICAM project showed that poor and landless villagers may lack the assets and diversity needed to absorb stressors. However, without fields, the impact of climate change is less direct and less intensive as it is on farmers. A farmer, rich or poor, may have as little capacity to adapt as a landless worker when he or she lacks the knowledge of appropriate adaptation techniques.

Arguably, everybody in the Mekong delta is affected by climate change, but to different degrees *(see fig. 5)*. Those who base their livelihoods on agricultural activities are inherently more sensitive and exposed to changing climate patterns than people with non-agricultural incomes. This extends to many poor and landless: as many of the landless villagers, especially in An Giang, generate income from casual labour in paddy fields, they are likely to lose that income if a farmer suffers a crop failure.

There are of course overlaps between adaptation and poverty alleviation *(see fig.18)*. Households who escape poverty have greater resources to adapt. The poverty status also inversely correlates with the level of diversification - as the survey data show, non-poor households have slightly more diversified livelihoods (median: three sources) than poor households (two sources). From that perspective, reducing poverty is an effective way for adaptation.

Yet, climate change adaptation projects should deploy a more nuanced and targeted approach. They need to ask three simple questions.

32. The Mekong Delta Regions' net migration deficit increased four-fold between 1999 and 2009 and was the highest in the country. Most migrants stayed close to their home provinces, and Ho Chi Minh City was the main destination for migrants. See Renaud/Kuenzer 2012:118-119

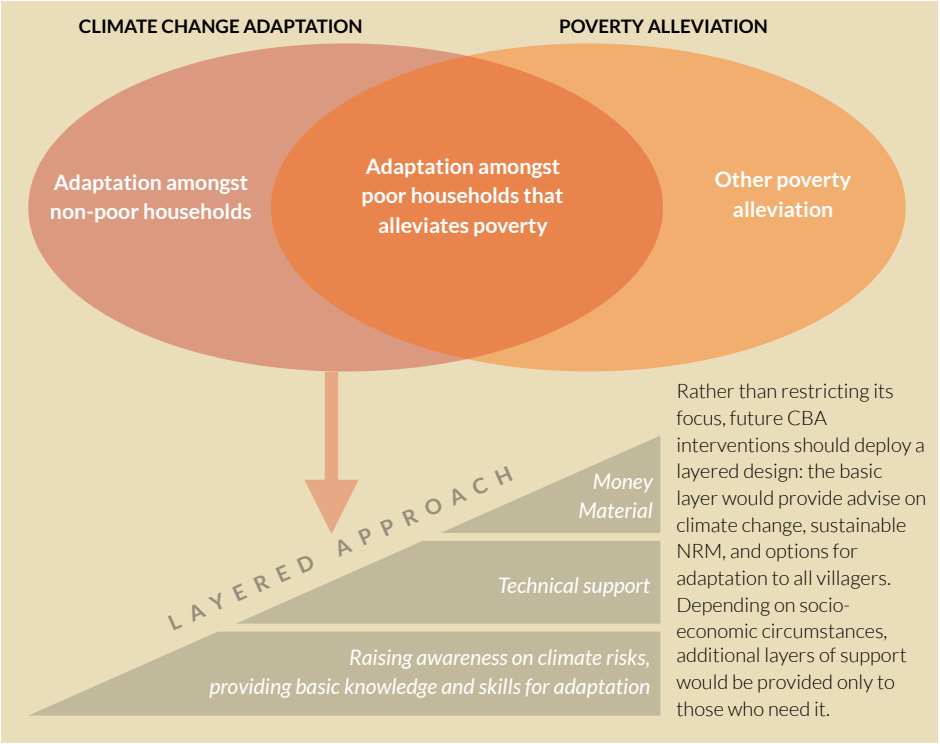
33. The evaluations of ICAM's sister projects in Papua New Guinea and Timor-Leste include similar observations that call for the integration of NRM into the CBA framework. More generally, it has been found that the distinction between climate change impact and local environmental degradation (and the interplay) is often poorly understood and reflected upon.

First, who is being affected in what way? *Second*, who has the knowledge and the resources to adapt on his/her own? *Third*, how can the gaps in adaptive capacity be filled?

The response to these questions leads to a nuanced or layered approach. Conceptually, we proposed four groups that are each characterized by a combination of the strength of the stressor and the strength of adaptive capacity. In reality, the picture is far more complex.

But what this model and the ICAM experience show is that the vulnerability to climate change is not only determined by the poverty status. Therefore, it makes sense to adopt a layered design *(see fig. 16)* that does not preclude anyone from being assisted - instead, the level and type of support is based on the combination of stressor and capacity.

Figure 16 | **Towards a layered approach**



There is another reason why non-poor households should be included: the community. The ICAM project carried the community basis in its name, but focussed its main efforts on part of the community - poor households (DRR being an exception). Although the focus was widened to the 'near-poor' after the mid-term review, this did not principally address the basic criticism: that members of the entire community should design and carry adaptation. While CBA planning as well as PAOT was based on the wider community, there are several proven ways to broaden community engagement further, such as the formation of neighbourhood, gender, or livelihood groups.

A.3 Support existing adaptive mechanisms.

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

One of the common mechanisms of auto-adaptation is migration, where all or some family members seek casual or permanent work elsewhere. This mode of adaptation was considered by the ICAM project, but deemed too politically sensitive for further exploration.

It is understood that migration is seen with negative connotations, or even as a sign of failed adaptation. This view is not peculiar to Vietnam, yet it appears unjustified, as a paper on migration and climate change (see Tacoli 2009:514-15) demonstrates. Rather than turning a blind eye on migration, governments and external partners should support migration as an effective way of adaptation. Given its dim outlook over the next decades, such a policy shift is particularly relevant for the Mekong Delta.

Support could be provided for prospective and current migrants as well as to those left behind. It may include the formation of support groups (both for the migrants themselves and for those staying behind) and the development of job-seeking skills, and vocational training.[34]

34. As it emerged in an interview with a government official in Soc Trang, vocational training was indeed amongst the common requests of villagers during CBA planning sessions.

8.2 Strengthening the organizational underpinning

The second main lesson from the ICAM experience concerns the organizational structure needed to facilitate community-based adaptation. The ICAM project was an ambitious and principally commendable undertaking to both build processes and generate outcomes. Yet, the results indicate that the organizational underpinning must be reflective of that scope. One needs the right amount of mechanics and time if the dual goals are to build a vehicle that is to reach a destination. Building on that metaphor, the project had not enough mechanics, time, and was working on the roadmap at the same time. Future projects should either limit their ambition or ensure that time, partners and resources are more appropriate for the task ahead.

B.1 Allow more time and resources for the CBA approach to succeed.

Four reasons are paramount when considering the merit of the CBA approach pursued by the ICAM project: ***First***, it facilitates government responsiveness and informed decision-making, as mid-level administration staff (province, district) see local conditions and concerns first-hand. ***Second***, it encourages horizontal collaboration between departments - a sound basis for concerted adaptation efforts.

Third, it has the potential to increase the leverage of donor funds, in that it triggers co-funding for planned activities. ***Fourth***, the approach favours sustainability: 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 commune- and village-level outcomes.

Yet, the approach requires time ***as well as*** adequate resources. In the case of the ICAM project, 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 appears to be a realistic timeframe in the Vietnamese context. Any downward implementation (actually driving the car that has been constructed) will thus require additional time. The originally anticipated extension by another 30-month phase would have enabled greater field-level results. At least in the Vietnamese context, an overall timeframe of five years seems more realistic for a CBA project.

B.2 Ensure that technical expertise is sufficient to guide climate-resilient practices.

Commendably, the ICAM project explored several climate-resilient practices suitable for landless and poor households. While this process was guided by CCRD, the level of guidance to beneficiaries varied, and proved insufficient in several cases. The full range of benefits from promoted and additional activities could have been explored more comprehensively, building on the excellent livelihood study that CARE had conducted. The technical support gaps also contributed to several failures (where chickens died, or mushroom production failed to create benefits).

If the technical expertise amongst CARE and partners is deemed insufficient, external expertise should be sought from qualified institutions who are familiar with local conditions and who can easily provide regular support and coaching. This will be required in particular for higher-risk adaptation, where households not only adapt the technique of existing livelihoods, but venture out to entirely new livelihoods.

B.3 Deploy bigger teams who are capable to coach.

Strategically, CARE is a firm promoter of indirect implementation: rather than directly supporting beneficiaries, it programs through local partners to enable sustainable outcomes - unsurprisingly, sustainability is one of the key successes of the ICAM project.

However, the modus operandi may need to be fine-tuned for every specific context: what does it take to enable local intermediaries? Is it enough to provide training courses, or is longer-term coaching more appropriate? The answer will always depend on the capacity of individual actors. Yet, it is undisputed that reiterative practice of a newly acquired skill helps consolidate and refine that skill. In the context of the ICAM project, both training and coaching was required - particularly when considering the extent to which many aspects such as climate-resilient livelihoods and community facilitation were new to main implementing partners.

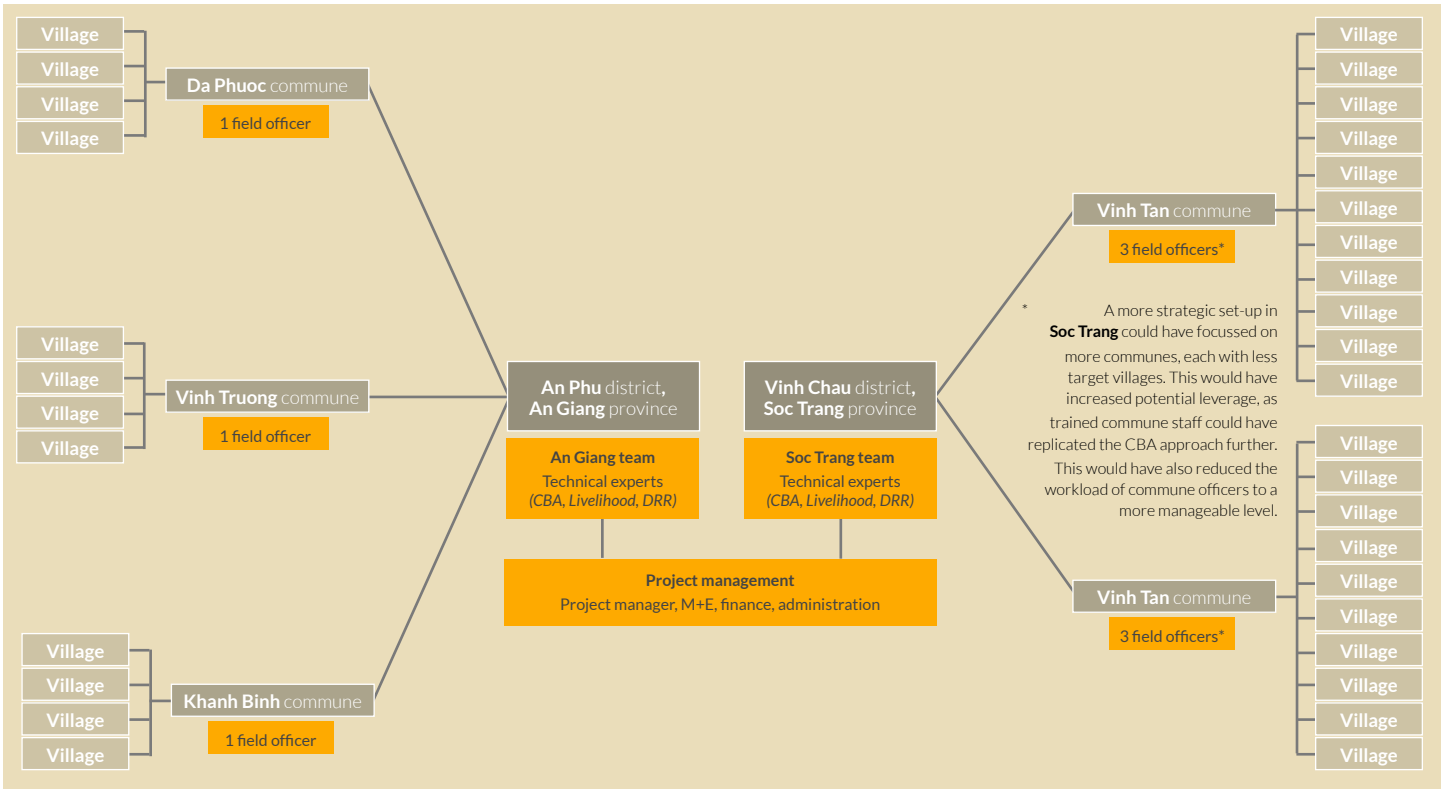
CARE's project team consisted of a project manager, an M+E officer, a finance and an administration officer, plus four sectoral officers (one for CBA, two for livelihoods, one for DRR) and an international and a national advisor.

Given the geographical spread over 33 villages in two separate provinces, the number of partners and the known knowledge gaps, as well as the multi-faceted design of the project, the size and set-up of CARE's project team was rather minimalist. This small team size constrained the ICAM project's ability to deliver the extent of coaching that may have been ideal. In addition, the team members' job descriptions were based on sectors rather than geographical areas. This meant that the same village would be visited by two officers in short succession (or at the same time).[35]

Amongst the poor households who have been in touch with CARE or any of the ICAM partners, the average number of visits they received is 2.5 over the entire project period. Even if this figure was doubled - accounting for the fact that the survey sample amongst poor households included one third of non-beneficiaries - this amounts to a considerably low intervention dose. With government partners having other duties outside the ICAM project, there would have been two possible solutions: either the number of villages would have been reduced to a more manageable level. Alternatively, the government and VWU staff would have required a temporary surge of support in the form of more CARE officers. Taking the scope and objectives of the ICAM project as a basis, the team size would have needed to be at least twice as big. As suggested in ***figure 17***, an appropriately sized team

35. Whereas sector-based staffing implies that two staff members would visit the same community to work on issues around their respective expertise, location-based staffing would bring the benefit that two communities can be visited in the same time, with each of them covering both sectoral aspects.

Figure 17 | **Alternative CARE staffing for the ICAM project, based on its existing scope**



would have had a core team with available technical expertise in both provinces, as well as field officers for every three to four villages.

While worries about sustainability and ownership under such a model are legitimate, the risk of a lower sense of ownership can be reduced by clearly defining the roles of field officers as supportive to existing commune staff, and by thus preventing them taking over the role and responsibility of village engagement. Where field officers are not accepted, the number of supported villages per commune needs to be reduced. Either way, the balance of priorities (process ownership versus outcome level) will require fine-tuning. In future CBA programming, the size and set-up of the project team needs much more serious and realistic consideration.

8.3 Revisiting the implementation mode

The third key lesson that can be drawn from the ICAM experience concerns the implementation mode. Sequencing, targeting and the role of monitoring need to be reviewed to render community-based adaptation more effective in the future.

C.1 Start field implementation sooner to boost community engagement.

The ICAM project treated all actual village-level implementation as dependent on CBA planning outcomes. In principle, it of course makes sense to plan before you implement. But given the time required for this planning process in the Vietnamese context, the start-up phase is rather long to maintain community interest. While thorough planning may be required for mitigation measures or fully-fledged training initiatives, there is furthermore no obvious reason why quick-win efforts, geared to mobilize and maintain community interest, need to wait until the final SEDP is approved.

Early activities could have included quick-win/no-regret options to boost community interest early on. Basic awareness-raising on climate change, coupled with basic enablers such disaster risk reduction measures, should have been launched in the project's first year. With households thus realizing relevance and potential benefits of the project early on, a broader and more solid foundation for the community-based adaptation process could have been achieved.

C.2 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, but also become vehicles through which climate-resilient practices can be promoted throughout the community.

The ICAM project concept had envisaged the formation of climate-resilient livelihoods (CRL) groups and (later) micro-finance groups. However, these structures were rather weak in practice, as support to beneficiaries was largely based on Women's Union staff meeting villagers one by one, rather than providing support to a group.

With regard to PAOT and DRR, the group-based approach was found to be much stronger by comparison.

Case study

Vuong To Phuong *(pictured)* lives in Bien Tren village in Soc Trang's Vinh Phau district with her husband and her two children, 10 and 12 years old. Her husband is a construction worker, making a modest income. The family has been classified by the government as poor.

Ms Vuong was interested when she heard from the Women's Union about the pig-raising on bio-bedding. She had tried raising pigs five years earlier, but was unsuccessful as pigs were affected by various animal diseases - eventually, she gave up the activity and focussed on small-scale vegetable production instead.

The bio-bedding technique sounded promising, and she was willing to give it a try. Supported by the Women's Union (and the ICAM project), she constructed a pig house together with her husband.

By the time of the evaluation in May 2015, she had already raised and sold nine pigs. In three rounds, she bought young piglets for VND 1.1 million each and sold them three months later for VND 4.4 million. Deducting her expenses for food and vaccines, she earned around VND 19.2 million (AUD 1,200) within one year.

She is impressed with the bio-bedding technique: "The pigs are clean, and so far I have not had any problems with any diseases like I used to", says Ms Vuong, adding that the technique required less work than the conventional approach. Ms Vuong already invested some of the additional income: with her husband, she prepared a fish pond at the back of her house, anticipating further income in the years to come.

C.3 Monitor to manage.

Monitoring project progress is of little value unless the obtained information is being used. Monitoring is not an end in itself, but a means to an end. In the case of the ICAM project, progress and activities were monitored in great detail. In fact, many of the challenges were well-documented. Partially as a result, some changes were carried out - such as the expansion of the project focus to the 'near-poor', and personnel changes.

Yet, despite the efforts of the project team, there was neither a sufficiently systemic response nor a continuous use of monitoring data to manage these challenges. In particular during the early phase of the project, team members felt that identified concerns were not met by an adequate response from either CARE Vietnam or CARE Australia.

The lesson from the ICAM project is not so much that the monitoring system itself would need to be improved (although there is room for improvement, *see chapter* 5), but rather the use of that system. While the ICAM risk matrix was updated every six months, its potential to identify and address challenges could have been tapped more fully. 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.

9. Conclusion

The ICAM project was an ambitious undertaking to plan and assist adaptation to climate change in the Mekong Delta. With multiple stressors impacting on the delta's population, its objective of reinforcing resilience remains highly relevant. The fundamental approach of community-based adaptation planning has strong merit, and the capacity-building of involved partner organizations as well as the experience they have gained is seen as a promising precursor for achieving greater impact in years to come.

At the same time, this evaluation also found that several design issues and structural challenges led the ICAM project to not fully develop its potential. Given that it was to facilitate ***processes*** and to generate field-level ***outcomes***, as well as its scope and its complexity, the project was not ideally resourced and structured in terms of staff and technical support. The restrained focus on poor and landless households is seen with particular concern - community resilience requires broader engagement, while support to adaptation shall not bypass anyone affected by climate change. Several structural challenges compounded the design issues. As a result, the anticipated coverage (in terms of households) was not reached.

These results should not discourage further efforts in community-based adaptation, but rather encourage change and improvements. CARE and its partners have the opportunity to turn the project's challenges into future strengths. To facilitate this process, the report makes three key recommendations.

Re-framing community-based adaptation includes the integration of natural resource management into the CBA framework, the adoption of a layered design that fills adaptive capacity gaps (knowledge and/or resources) amongst the broader community, and the recognition of and support for existing adaptive measures, particularly of migration.

Strengthening the organizational underpinning concerns the allocation of more adequate time and resources to similar projects. The selection of key partners, the required technical expertise, and the preparation of a team that has the capacity to coach are aspects that will need to be addressed.

Re-visiting the implementation mode includes the initial boosting of community engagement through early quick-win/no regret activities, a stronger practical use of groups (rather than individuals), and a better utilization of monitoring regimes to manage challenges more timely.

As the combined impacts of climate change and environmental degradation are expected accelerate, the need to adapt will not abate. CARE and its partners should build on the foundation they have shaped through the ICAM project. With an enhanced frame, structure, and mode, the ICAM partners will be in a good position to better assist households and communities becoming more resilient.

APPENDIX

CONTENTS

Photo: P. Bolte

A. Literature

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Evaluation conducted by: banyaneer

Key to question colour codes: Situation; Change; Attribution; Multi-select; Additional analysis

EVALUATION ICAM PROJECT | VIETNAM		All respondents						Disaggregation based on A.6				Disaggregation by province (0.2)				Disaggregation based on B.6							
		Female		Male		All		Poor		Non-poor		An Giang (1,2,3)		Soc Trang (4,5,6,7,8)		5 or more times		3-4 times		1-2 times		Not at all	
No.	Text English	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
A	BASIC INFORMATION																						
A.2	How many people live in your household?																						
	Median	4		4		4		4		4		4		4		4		4		4		4	
	Average	4.53		4.54		4.53		4.45		4.62		4.41		4.6		4.78		4.48		4.64		4.41	
A.3	What is the gender of the head of the household?																						
1	Female	124	38.99	19	10.05	143	28.21	80	30.53	63	25.71	52	27.23	91	28.8	5	21.74	17	29.31	33	28.21	57	27.01
2	Male	194	61.01	170	89.95	364	71.79	182	69.47	182	74.29	139	72.77	225	71.2	18	78.26	41	70.69	84	71.79	154	72.99
A.4	What ethnic group does your household belong to?																						
1	Kinh	98	30.82	83	43.92	181	35.7	86	32.82	95	38.78	156	81.68	25	7.91	6	26.09	14	24.14	35	29.91	83	39.34
2	Khmer	175	55.03	80	42.33	255	50.3	142	54.2	113	46.12	4	2.09	251	79.43	11	47.83	35	60.34	64	54.7	101	47.87
3	Chinese	28	8.81	11	5.82	39	7.69	17	6.49	22	8.98	0	0	39	12.34	5	21.74	6	10.34	6	5.13	14	6.64
4	Cham	17	5.35	14	7.41	31	6.11	16	6.11	15	6.12	31	16.23	0	0	1	4.35	3	5.17	12	10.26	12	5.69
5	Other	0	0	1	0.53	1	0.2	1	0.38	0	0	0	0	1	0.32	0	0	0	0	0	0	1	0.47
A.5	How old are you?																						
1	18 – 25 years	7	2.2	2	1.06	9	1.78	7	2.67	2	0.82	0	0	9	2.85	0	0	2	3.45	4	3.42	3	1.42
2	26 – 40 years	103	32.39	56	29.63	159	31.36	80	30.53	79	32.24	49	25.65	110	34.81	12	52.17	23	39.66	40	34.19	57	27.01
3	41 – 55 years	126	39.62	68	35.98	194	38.26	94	35.88	100	40.82	79	41.36	115	36.39	3	13.04	17	29.31	48	41.03	86	40.76
4	56 years or older	82	25.79	63	33.33	145	28.6	81	30.92	64	26.12	63	32.98	82	25.95	8	34.78	16	27.59	25	21.37	65	30.81
A.6	What is your household's economic status?																						
1	Poor (officially registered, with book)	164	51.57	98	51.85	262	51.68	262	100	0	0	96	50.26	166	52.53	12	52.17	36	62.07	62	52.99	102	48.34
2	Non-poor	154	48.43	91	48.15	245	48.32	0	0	245	100	95	49.74	150	47.47	11	47.83	22	37.93	55	47.01	109	51.66
A.7	And in 2012, what was your household's economic status?																						
1	Poor (officially registered, with book)	201	63.21	107	56.61	308	60.75	222	84.73	86	35.1	101	52.88	207	65.51	17	73.91	38	65.52	78	66.67	117	55.45
2	Non-poor	117	36.79	82	43.39	199	39.25	40	15.27	159	64.9	90	47.12	109	34.49	6	26.09	20	34.48	39	33.33	94	44.55
B	INVOLVEMENT IN THE PROJECT																						
B.1	Have you heard of the ICAM project implemented by the Women's Union and CARE?																						
1	Yes	170	53.46	94	49.74	264	52.07	141	53.82	123	50.2	101	52.88	163	51.58	23	100	56	96.55	102	87.18	71	33.65
2	No	148	46.54	95	50.26	243	47.93	121	46.18	122	49.8	90	47.12	153	48.42	0	0	2	3.45	15	12.82	140	66.35
B.2	Are you, or is any member of your household, a member of the Women's Union?																						
1	Yes	133	43.61	56	33.33	189	39.96	96	39.67	93	40.26	49	28.65	140	46.36	16	69.57	43	74.14	65	56.03	53	25.24
2	No	172	56.39	112	66.67	284	60.04	146	60.33	138	59.74	122	71.35	162	53.64	7	30.43	15	25.86	51	43.97	157	74.76
99	I don't know	13		21		34		20		14		20		14		0		0		1		1	
B.3	Are you, or is any member of your household, a member of a climate-resilient livelihoods group established with CARE support (e.g. indoor mushroom, chicken- or pig-raising)?																						
1	Yes	77	28.73	22	15.07	99	23.91	58	26.85	41	20.71	28	18.67	71	26.89	17	77.27	34	58.62	34	30.91	9	4.41
2	No	191	71.27	124	84.93	315	76.09	158	73.15	157	79.29	122	81.33	193	73.11	5	22.73	24	41.38	76	69.09	195	95.59
99	I don't know	50		43		93		46		47		41		52		1		0		7		7	
B.3a	Are you, or is any member of your household, a member of awareness raising groups/ DRR groups established with CARE support?																						
1	Yes	64	24.33	31	21.83	95	23.46	56	26.54	39	20.1	24	16.44	71	27.41	14	66.67	25	44.64	45	40.54	9	4.46
2	No	199	75.67	111	78.17	310	76.54	155	73.46	155	79.9	122	83.56	188	72.59	7	33.33	31	55.36	66	59.46	193	95.54
99	I don't know	55		47		102		51		51		45		57		2		2		6		9	
B.4	Over the past three years, have you received any training through the ICAM project?																						
1	Yes	131	48.7	62	43.06	193	46.73	107	50	86	43.22	61	40.4	132	50.38	22	95.65	56	98.25	95	81.9	14	6.97
2	No	138	51.3	82	56.94	220	53.27	107	50	113	56.78	90	59.6	130	49.62	1	4.35	1	1.75	21	18.1	187	93.03
99	I don't know	49		45		94		48		46		40		54		0		1		1		10	
B.4a	Who provided this training?																						
1	Women's Union	105	96.33	42	87.5	147	93.63	77	95.06	70	92.11	31	81.58	116	97.48	17	100	46	92	73	94.81	8	80
2	DARD	3	2.75	4	8.33	7	4.46	4	4.94	3	3.95	6	15.79	1	0.84	0	0	3	6	3	3.9	1	10
3	DoNRE	0	0	1	2.08	1	0.64	0	0	1	1.32	1	2.63	0	0	0	0	0	0	1	1.3	0	0
4	CFSC	1	0.92	1	2.08	2	1.27	0	0	2	2.63	0	0	2	1.68	0	0	1	2	0	0	1	10
5	CCRD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	I don't know	209		141		350		181		169		153		197		6		8		40		201	
B.5	Considering the beginning of the ICAM project (which included Care WU, DARD, DONRE, CCRD), which of the following statements best describes your involvement?																						
1	I have not been involved in any assessments or planning meeti	121	48.99	87	62.14	208	53.75	103	51.76	105	55.85	83	58.87	125	50.81	0	0	6	10.53	17	15.04	185	97.37
2	I participated in meetings but did not contribute	85	34.41	28	20	113	29.2	57	28.64	56	29.79	28	19.86	85	34.55	10	45.45	27	47.37	70	61.95	3	1.58
3	I participated in meetings and contributed to planning	41	16.6	25	17.86	66	17.05	39	19.6	27	14.36	30	21.28	36	14.63	12	54.55	24	42.11	26	23.01	2	1.05
99	I don't know	71		49		120		63		57		50		70		1		1		4		21	
B.5a	How satisfied were you with the planning process?																						
1	Very satisfied	68	56.67	25	49.02	93	54.39	50	54.35	43	54.43	36	63.16	57	50	14	66.67	28	56	46	50.55	4	80
2	Rather satisfied	44	36.67	21	41.18	65	38.01	37	40.22	28	35.44	18	31.58	47	41.23	7	33.33	19	38	37	40.66	1	20
3	Rather dissatisfied	8	6.67	5	9.8	13	7.6	5	5.43	8	10.13	3	5.26	10	8.77	0	0	3	6	8	8.79	0	0
4	Very dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	I don't know	198		138		336		170		166		134		202		2		8		26		206	
B.6	How often in the past two years have you discussed any issues around the ICAM project with implementing partners (CARE, Women's Union, DARD, DONRE, CFSC)?																						
1	1-2 times	73	27.86	44	29.93	117	28.61	62	29.25	55	27.92	40	26.85	77	29.62	0	0	0	0	117	100	0	0

2	3-4 times	48	18.32	10	6.8	58	14.18	36	16.98	22	11.17	16	10.74	42	16.15	0	0	58	100	0	0	0	0
3	5 times or more often	17	6.49	6	4.08	23	5.62	12	5.66	11	5.58	7	4.7	16	6.15	23	100	0	0	0	0	0	0
4	Not at all	124	47.33	87	59.18	211	51.59	102	48.11	109	55.33	86	57.72	125	48.08	0	0	0	0	0	0	211	100
99	I don't know	56		42		98		50		48		42		56		0		0		0		0	
C	**CLIMATE-RESILIENT LIVELIHOODS**																						
C.1	**I would like to ask you about your knowledge of climate change. Which of the following statements best applies to you?**																						
1	I don't know what the term climate change means	156	49.06	72	38.1	228	44.97	123	46.95	105	42.86	75	39.27	153	48.42	3	13.04	8	13.79	42	35.9	126	59.72
2	I understand what climate change means but do not know how	84	26.42	53	28.04	137	27.02	69	26.34	68	27.76	60	31.41	77	24.37	7	30.43	19	32.76	37	31.62	48	22.75
3	I understand what climate change means and the way in which	78	24.53	64	33.86	142	28.01	70	26.72	72	29.39	56	29.32	86	27.22	13	56.52	31	53.45	38	32.48	37	17.54
C.2	**And would you say that your understanding of climate change has changed over the past four years**																						
1	Yes, I know more about climate change than I did before.	134	84.81	94	81.74	228	83.52	116	84.06	112	82.96	90	80.36	138	85.71	19	95	43	86	68	93.15	54	66.67
2	No, my understanding of climate change hasn't changed	24	15.19	21	18.26	45	16.48	22	15.94	23	17.04	22	19.64	23	14.29	1	5	7	14	5	6.85	27	33.33
99	I don't know	160		74		234		124		110		79		155		3		8		44		130	
C.2a	**Has the ICAM project (which included Care WU, DARD, DONRE, CCRD) played any role behind this change?**																						
1	No, it did not play a role	24	24.24	24	34.29	48	28.4	26	28.26	22	28.57	22	35.48	26	24.3	2	11.11	2	4.65	7	11.48	29	76.32
2	Yes, it played a positive role amongst others	37	37.37	22	31.43	59	34.91	35	38.04	24	31.17	19	30.65	40	37.38	8	44.44	21	48.84	25	40.98	5	13.16
3	Yes, it played the main role	38	38.38	24	34.29	62	36.69	31	33.7	31	40.26	21	33.87	41	38.32	8	44.44	20	46.51	29	47.54	4	10.53
99	I don't know	219		119		338		170		168		129		209		5		15		56		173	
C.3.1	**The causes of climate change**																						
1	NO, I have not learned anything new on this aspect	70	22.01	43	22.75	113	22.29	53	20.23	60	24.49	53	27.75	60	18.99	2	8.7	14	24.14	25	21.37	44	20.85
2	YES, from TV, radio or nespaper	66	20.75	59	31.22	125	24.65	63	24.05	62	25.31	54	28.27	71	22.47	14	60.87	26	44.83	36	30.77	33	15.64
3	YES, from posters, leaflets, tloudspeaker broadcast	13	4.09	16	8.47	29	5.72	14	5.34	15	6.12	8	4.19	21	6.65	8	34.78	6	10.34	8	6.84	6	2.84
4	YES, through meetings (commune, village, group)	52	16.35	44	23.28	96	18.93	59	22.52	37	15.1	33	17.28	63	19.94	15	65.22	27	46.55	42	35.9	8	3.79
5	YES, through discussion with friends and neighbours	32	10.06	28	14.81	60	11.83	25	9.54	35	14.29	28	14.66	32	10.13	4	17.39	10	17.24	21	17.95	18	8.53
C.3.2	**The general impact of climate change**																						
1	NO, I have not learned anything new on this aspect	66	20.75	41	21.69	107	21.1	55	20.99	52	21.22	46	24.08	61	19.3	4	17.39	8	13.79	22	18.8	44	20.85
2	YES, from TV, radio or nespaper	61	19.18	57	30.16	118	23.27	56	21.37	62	25.31	52	27.23	66	20.89	10	43.48	29	50	33	28.21	32	15.17
3	YES, from posters, leaflets, tloudspeaker broadcast	7	2.2	18	9.52	25	4.93	14	5.34	11	4.49	12	6.28	13	4.11	6	26.09	5	8.62	9	7.69	4	1.9
4	YES, through meetings (commune, village, group)	59	18.55	41	21.69	100	19.72	57	21.76	43	17.55	34	17.8	66	20.89	14	60.87	30	51.72	40	34.19	12	5.69
5	YES, through discussion with friends and neighbours	38	11.95	30	15.87	68	13.41	25	9.54	43	17.55	30	15.71	38	12.03	6	26.09	13	22.41	19	16.24	21	9.95
C.3.3	**Actions I can take to better adapt to the effects of climate change**																						
1	NO, I have not learned anything new on this aspect	54	16.98	44	23.28	98	19.33	53	20.23	45	18.37	43	22.51	55	17.41	6	26.09	4	6.9	18	15.38	40	18.96
2	YES, from TV, radio or nespaper	49	15.41	44	23.28	93	18.34	43	16.41	50	20.41	41	21.47	52	16.46	8	34.78	19	32.76	26	22.22	31	14.69
3	YES, from posters, leaflets, tloudspeaker broadcast	12	3.77	14	7.41	26	5.13	15	5.73	11	4.49	9	4.71	17	5.38	6	26.09	6	10.34	8	6.84	6	2.84
4	YES, through meetings (commune, village, group)	60	18.87	39	20.63	99	19.53	57	21.76	42	17.14	37	19.37	62	19.62	11	47.83	28	48.28	45	38.46	13	6.16
5	YES, through discussion with friends and neighbours	40	12.58	25	13.23	65	12.82	25	9.54	40	16.33	31	16.23	34	10.76	5	21.74	15	25.86	20	17.09	18	8.53
C.4	**Over the past three years, has anybody in your household participated in an awareness –raising activities on climate change and adaptation?**																						
1	Yes	80	51.61	50	45.05	130	48.87	74	54.81	56	42.75	46	42.99	84	52.83	17	85	40	80	57	78.08	12	15
2	No	75	48.39	61	54.95	136	51.13	61	45.19	75	57.25	61	57.01	75	47.17	3	15	10	20	16	21.92	68	85
99	I don't know	163		78		241		127		114		84		157		3		8		44		131	
C.5	**Over the past three years, has your household received any information through a project-related climate change awareness-raising activities (e.g. posters, leaflets?**																						
1	Yes	72	47.06	43	39.09	115	43.73	62	46.62	53	40.77	45	42.06	70	44.87	15	75	34	70.83	46	66.67	16	19.75
2	No	81	52.94	67	60.91	148	56.27	71	53.38	77	59.23	62	57.94	86	55.13	5	25	14	29.17	23	33.33	65	80.25
99	I don't know	165		79		244		129		115		84		160		3		10		48		130	
C.5a	**To what extent was the information provided by these awareness-raising activities useful?**																						
1	Very useful	45	62.5	31	72.09	76	66.09	42	67.74	34	64.15	29	64.44	47	67.14	9	60	19	55.88	34	73.91	12	75
2	Somewhat useful	27	37.5	11	25.58	38	33.04	20	32.26	18	33.96	15	33.33	23	32.86	6	40	15	44.12	12	26.09	3	18.75
3	Not useful	0	0	1	2.33	1	0.87	0	0	1	1.89	1	2.22	0	0	0	0	0	0	0	0	1	6.25
99	I don't know	246		146		392		200		192		146		246		8		24		71		195	
C.6	**Over the past ten years, have you experienced any changes in the climate, such as different times of rain, changes in temperature, drought etc)?**																						
1	Yes	303	96.5	175	96.69	478	96.57	243	95.29	235	97.92	181	97.31	297	96.12	20	90.91	56	98.25	116	99.15	204	98.55
2	No	11	3.5	6	3.31	17	3.43	12	4.71	5	2.08	5	2.69	12	3.88	2	9.09	1	1.75	1	0.85	3	1.45
99	I don't know	4		8		12		7		5		5		7		1		1		0		4	
C.7.1	**Storms/ whirlwind**																						
1	Major damages or losses	54	17.09	25	13.23	79	15.64	49	18.7	30	12.35	22	11.52	57	18.15	4	17.39	7	12.07	19	16.38	30	14.29
2	Minor damages or losses	88	27.85	53	28.04	141	27.92	84	32.06	57	23.46	58	30.37	83	26.43	8	34.78	17	29.31	33	28.45	57	27.14
3	No damages or losses	125	39.56	68	35.98	193	38.22	85	32.44	108	44.44	73	38.22	120	38.22	9	39.13	17	29.31	46	39.66	75	35.71
99	I don't know	2		0		2		0		2		0		2		0		0		1		1	
0	NOT APPLICABLE	49	15.51	43	22.75	92	18.22	44	16.79	48	19.75	38	19.9	54	17.2	2	8.7	17	29.31	18	15.52	48	22.86
C.7.2	**Floods**																						
1	Major damages or losses	32	10.13	15	7.98	47	9.33	24	9.2	23	9.47	18	9.47	29	9.24	4	17.39	2	3.45	8	6.9	24	11.48
2	Minor damages or losses	52	16.46	35	18.62	87	17.26	43	16.48	44	18.11	36	18.95	51	16.24	5	21.74	10	17.24	24	20.69	26	12.44
3	No damages or losses	100	31.65	59	31.38	159	31.55	85	32.57	74	30.45	79	41.58	80	25.48	5	21.74	17	29.31	34	29.31	73	34.93
99	I don't know	2		1		3		1		2		1		2		0		0		1		2	
0	NOT APPLICABLE	132	41.77	79	42.02	211	41.87	109	41.76	102	41.98	57	30	154	49.04	9	39.13	29	50	50	43.1	86	41.15
C.7.3	**Droughts**																						
1	Major damages or losses	94	29.84	48	25.4	142	28.17	66	25.38	76	31.15	33	17.46	109	34.6	9	39.13	20	34.48	34	29.31	58	27.62
2	Minor damages or losses	87	27.62	68	35.98	155	30.75	82	31.54	73	29.92	52	27.51	103	32.7	6	26.09	21	36.21	36	31.03	57	27.14
3	No damages or losses	91	28.89	49	25.93	140	27.78	67	25.77	73	29.92	64	33.86	76	24.13	6	26.09	12	20.69	28	24.14	60	28.57
99	I don't know	3		0		3		2		1		2		1		0		0		1		1	
0	NOT APPLICABLE	43	13.65	24	12.7	67	13.29	45	17.31	22	9.02	40	21.16	27	8.57	2	8.7	5	8.62	18	15.52	35	16.67
C.7.4	**Land erosion (river and sea)**																						
1	Major damages or losses	5	1.63	4	2.15	9	1.83	4	1.58	5	2.09	3	1.57	6	1.99	1	4.35	1	1.82	1	0.88	5	2.42

2	Minor damages or losses	13	4.25	11	5.91	24	4.88	22	8.7	2	0.84	13	6.81	11	3.65	3	13.04	2	3.64	7	6.19	11	5.31
3	No damages or losses	84	27.45	55	29.57	139	28.25	65	25.69	74	30.96	58	30.37	81	26.91	5	21.74	14	25.45	31	27.43	50	24.15
99	I don't know	12		3		15		9		6		0		15		0		3		4		4	
0	NOT APPLICABLE	204	66.67	116	62.37	320	65.04	162	64.03	158	66.11	117	61.26	203	67.44	14	60.87	38	69.09	74	65.49	141	68.12
C.7.5	**Saline intrusion**																						
1	Major damages or losses	49	15.65	28	15.14	77	15.46	45	17.37	32	13.39	0	0	77	24.76	5	21.74	9	15.79	19	16.67	28	13.59
2	Minor damages or losses	44	14.06	14	7.57	58	11.65	29	11.2	29	12.13	0	0	58	18.65	3	13.04	7	12.28	14	12.28	25	12.14
3	No damages or losses	62	19.81	45	24.32	107	21.49	53	20.46	54	22.59	22	11.76	85	27.33	7	30.43	12	21.05	28	24.56	33	16.02
99	I don't know	5		4		9		3		6		4		5		0		1		3		5	
0	NOT APPLICABLE	158	50.48	98	52.97	256	51.41	132	50.97	124	51.88	165	88.24	91	29.26	8	34.78	29	50.88	53	46.49	120	58.25
C.7.6	**Pests**																						
1	Major damages or losses	64	20.38	43	22.99	107	21.36	47	18.22	60	24.69	27	14.21	80	25.72	9	39.13	19	33.93	24	20.69	40	19.14
2	Minor damages or losses	55	17.52	40	21.39	95	18.96	39	15.12	56	23.05	21	11.05	74	23.79	3	13.04	11	19.64	27	23.28	37	17.7
3	No damages or losses	62	19.75	25	13.37	87	17.37	42	16.28	45	18.52	26	13.68	61	19.61	5	21.74	6	10.71	19	16.38	39	18.66
99	I don't know	4		2		6		4		2		1		5		0		2		1		2	
0	NOT APPLICABLE	133	42.36	79	42.25	212	42.32	130	50.39	82	33.74	116	61.05	96	30.87	6	26.09	20	35.71	46	39.66	93	44.5
C.7.7	**Animal diseases**																						
1	Major damages or losses	78	24.68	44	23.53	122	24.25	54	20.69	68	28.1	24	12.63	98	31.31	5	21.74	15	25.86	36	31.3	47	22.49
2	Minor damages or losses	47	14.87	43	22.99	90	17.89	46	17.62	44	18.18	40	21.05	50	15.97	6	26.09	15	25.86	24	20.87	24	11.48
3	No damages or losses	67	21.2	35	18.72	102	20.28	46	17.62	56	23.14	29	15.26	73	23.32	7	30.43	11	18.97	24	20.87	37	17.7
99	I don't know	2		2		4		1		3		1		3		0		0		2		2	
0	NOT APPLICABLE	124	39.24	65	34.76	189	37.57	115	44.06	74	30.58	97	51.05	92	29.39	5	21.74	17	29.31	31	26.96	101	48.33
C.8.1	**Over the past ten years, have hazards become more frequent or more damaging?**																						
1	Yes	211	69.41	126	67.74	337	68.78	166	65.1	171	72.77	128	69.57	209	68.3	16	69.57	39	68.42	82	71.93	135	66.83
2	No	93	30.59	60	32.26	153	31.22	89	34.9	64	27.23	56	30.43	97	31.7	7	30.43	18	31.58	32	28.07	67	33.17
99	I don't know	14		3		17		7		10		7		10		0		1		3		9	
C.8.2	**In future, do you think that hazards are likely to cause damages or losses to your household?**																						
1	Yes	203	73.29	118	71.52	321	72.62	161	70.93	160	74.42	116	71.6	205	73.21	18	81.82	38	77.55	78	78	136	71.96
2	No	74	26.71	47	28.48	121	27.38	66	29.07	55	25.58	46	28.4	75	26.79	4	18.18	11	22.45	22	22	53	28.04
99	I don't know	41		24		65		35		30		29		36		1		9		17		22	
C.8.3	**Over the past four years, have you done anything to be better prepared for these hazards?**																						
1	Yes	129	41.61	87	47.03	216	43.64	115	45.45	101	41.74	109	58.92	107	34.52	18	78.26	32	55.17	56	50	78	37.86
2	No	181	58.39	98	52.97	279	56.36	138	54.55	141	58.26	76	41.08	203	65.48	5	21.74	26	44.83	56	50	128	62.14
99	I don't know	8		4		12		9		3		6		6		0		0		5		5	
C.8.4	**Do you plan to take (further) action to be better prepared for and adapted to hazards in future?**																						
1	Yes	103	33.66	85	45.95	188	38.29	109	43.08	79	33.19	94	51.93	94	30.32	17	73.91	26	47.27	50	43.48	70	34.83
2	No	203	66.34	100	54.05	303	61.71	144	56.92	159	66.81	87	48.07	216	69.68	6	26.09	29	52.73	65	56.52	131	65.17
99	I don't know	12		4		16		9		7		10		6		0		3		2		10	
C.9	**To what extent does on-farm and off-farm work contribute to your livelihood (food and income)?**																						
	Median	72.5		79		74		81		64		89		61		61		58		77		75	
	Mean	60.58		61.33		60.86		64.69		56.76		70.04		55.31		52.39		52.9		61.5		60.6	
C.9a	**Back in 2012, was this mix different?**																						
1	Yes	100	31.75	58	30.69	158	31.35	69	26.54	89	36.48	54	28.27	104	33.23	9	39.13	22	38.6	32	27.35	44	20.95
2	No	215	68.25	131	69.31	346	68.65	191	73.46	155	63.52	137	71.73	209	66.77	14	60.87	35	61.4	85	72.65	166	79.05
99	I don't know	3		0		3		2		1		0		3		0		1		0		1	
C.9b	**So thinking of 2012, how much did on-farm and off-farm work contribute to your livelihood (food production and income) back then?**																						
	Median	67		64.5		67		71		60		68		64.5		63		72		56		69	
	Mean	56.09		57.5		56.61		60.59		53.52		59.91		54.89		50		58.18		55.5		53.41	
C.9c	**Has the ICAM project (which included Care WU, DARD, DONRE, CCRD) played any role behind this change?**																						
1	No, it did not play a role	32	54.24	20	60.61	52	56.52	20	52.63	32	59.26	18	58.06	34	55.74	1	14.29	7	35	12	41.38	25	89.29
2	Yes, it played a positive role amongst others	17	28.81	11	33.33	28	30.43	14	36.84	14	25.93	11	35.48	17	27.87	4	57.14	10	50	11	37.93	2	7.14
3	Yes, it played the main role	10	16.95	2	6.06	12	13.04	4	10.53	8	14.81	2	6.45	10	16.39	2	28.57	3	15	6	20.69	1	3.57
99	I don't know	259		156		415		224		191		160		255		16		38		88		183	
C.10	**Since 2012, has your household's overall livelihood situation (food production and income) changed?**																						
1	Yes, we are now better off than in 2012.	99	31.43	65	34.57	164	32.6	83	31.8	81	33.47	58	30.69	106	33.76	12	52.17	23	40.35	43	36.75	55	26.07
2	No, it hasn't changed	102	32.38	57	30.32	159	31.61	90	34.48	69	28.51	65	34.39	94	29.94	1	4.35	19	33.33	32	27.35	79	37.44
3	Yes, we are now worse off than in 2012.	114	36.19	66	35.11	180	35.79	88	33.72	92	38.02	66	34.92	114	36.31	10	43.48	15	26.32	42	35.9	77	36.49
99	I don't know	3		1		4		1		3		2		2		0		1		0		0	
C.10a	**Has the ICAM project (which included Care WU, DARD, DONRE, CCRD) played any role behind this change?**																						
1	No, it did not play a role	103	74.64	68	72.34	171	73.71	84	74.34	87	73.11	58	68.24	113	76.87	11	61.11	17	50	41	58.57	86	94.51
2	Yes, it played a positive role amongst others	24	17.39	20	21.28	44	18.97	21	18.58	23	19.33	19	22.35	25	17.01	4	22.22	12	35.29	24	34.29	4	4.4
3	Yes, it played the main role	11	7.97	6	6.38	17	7.33	8	7.08	9	7.56	8	9.41	9	6.12	3	16.67	5	14.71	5	7.14	1	1.1
99	I don't know	180		95		275		149		126		106		169		5		24		47		120	
C.11.1	**Any changes in the weather**																						
1	Not applicable	14	4.42	11	5.82	25	4.94	19	7.25	6	2.46	17	8.95	8	2.53	0	0	0	0	4	3.42	11	5.24
2	Positive effect	6	1.89	4	2.12	10	1.98	4	1.53	6	2.46	3	1.58	7	2.22	0	0	0	0	3	2.56	5	2.38
3	No effect	55	17.35	37	19.58	92	18.18	51	19.47	41	16.8	47	24.74	45	14.24	3	13.04	8	13.79	22	18.8	42	20
4	Negative effect	242	76.34	137	72.49	379	74.9	188	71.76	191	78.28	123	64.74	256	81.01	20	86.96	50	86.21	88	75.21	152	72.38
C.11.2	**Any changes in the market (access/prices)**																						
1	Not applicable	31	9.78	19	10.05	50	9.88	35	13.36	15	6.15	24	12.63	26	8.23	1	4.35	3	5.17	10	8.55	23	10.95
2	Positive effect	31	9.78	17	8.99	48	9.49	25	9.54	23	9.43	19	10	29	9.18	4	17.39	3	5.17	14	11.97	16	7.62
3	No effect	100	31.55	63	33.33	163	32.21	88	33.59	75	30.74	65	34.21	98	31.01	6	26.09	17	29.31	34	29.06	73	34.76
4	Negative effect	155	48.9	90	47.62	245	48.42	114	43.51	131	53.69	82	43.16	163	51.58	12	52.17	35	60.34	59	50.43	98	46.67

C.11.3	**Any changes in cultivation techniques**																						
1	Not applicable	*197*	**66.55**	*107*	**57.84**	*304*	**63.2**	*170*	**68.55**	*134*	**57.51**	*129*	**73.3**	*175*	**57.38**	*10*	**45.45**	*25*	**43.86**	*63*	**56.76**	*136*	**69.04**
2	Positive effect	*44*	**14.86**	*45*	**24.32**	*89*	**18.5**	*42*	**16.94**	*47*	**20.17**	*24*	**13.64**	*65*	**21.31**	*9*	**40.91**	*18*	**31.58**	*26*	**23.42**	*30*	**15.23**
3	No effect	*49*	**16.55**	*26*	**14.05**	*75*	**15.59**	*29*	**11.69**	*46*	**19.74**	*19*	**10.8**	*56*	**18.36**	*3*	**13.64**	*12*	**21.05**	*20*	**18.02**	*25*	**12.69**
4	Negative effect	*6*	**2.03**	*7*	**3.78**	*13*	**2.7**	*7*	**2.82**	*6*	**2.58**	*4*	**2.27**	*9*	**2.95**	*0*	**0**	*2*	**3.51**	*2*	**1.8**	*6*	**3.05**
C.11.4	**Adoption of climate-resilient crops**																						
1	Not applicable	*211*	**71.77**	*124*	**67.39**	*335*	**70.08**	*183*	**74.69**	*152*	**65.24**	*143*	**81.71**	*192*	**63.37**	*10*	**45.45**	*33*	**58.93**	*69*	**63.3**	*148*	**74.75**
2	Positive effect	*44*	**14.97**	*36*	**19.57**	*80*	**16.74**	*35*	**14.29**	*45*	**19.31**	*19*	**10.86**	*61*	**20.13**	*8*	**36.36**	*11*	**19.64**	*21*	**19.27**	*33*	**16.67**
3	No effect	*28*	**9.52**	*23*	**12.5**	*51*	**10.67**	*22*	**8.98**	*29*	**12.45**	*12*	**6.86**	*39*	**12.87**	*4*	**18.18**	*10*	**17.86**	*15*	**13.76**	*15*	**7.58**
4	Negative effect	*11*	**3.74**	*1*	**0.54**	*12*	**2.51**	*5*	**2.04**	*7*	**3**	*1*	**0.57**	*11*	**3.63**	*0*	**0**	*2*	**3.57**	*4*	**3.67**	*2*	**1.01**
C.11.5	**Any other factors (related to the project)**																						
1	Not applicable	*194*	**67.13**	*128*	**68.82**	*322*	**67.79**	*165*	**66.53**	*157*	**69.16**	*126*	**71.59**	*196*	**65.55**	*12*	**54.55**	*20*	**35.71**	*47*	**42.34**	*170*	**87.63**
2	Positive effect	*42*	**14.53**	*19*	**10.22**	*61*	**12.84**	*35*	**14.11**	*26*	**11.45**	*13*	**7.39**	*48*	**16.05**	*7*	**31.82**	*17*	**30.36**	*29*	**26.13**	*6*	**3.09**
3	No effect	*52*	**17.99**	*39*	**20.97**	*91*	**19.16**	*48*	**19.35**	*43*	**18.94**	*37*	**21.02**	*54*	**18.06**	*3*	**13.64**	*18*	**32.14**	*35*	**31.53**	*18*	**9.28**
4	Negative effect	*1*	**0.35**	*0*	**0**	*1*	**0.21**	*0*	**0**	*1*	**0.44**	*0*	**0**	*1*	**0.33**	*0*	**0**	*1*	**1.79**	*0*	**0**	*0*	**0**
C.11.6	**Any other factors (unrelated to the project)**																						
1	Not applicable	*101*	**35.19**	*68*	**36.56**	*169*	**35.73**	*90*	**36.44**	*79*	**34.96**	*63*	**36.21**	*106*	**35.45**	*7*	**31.82**	*14*	**25.45**	*22*	**19.82**	*85*	**43.81**
2	Positive effect	*97*	**33.8**	*56*	**30.11**	*153*	**32.35**	*96*	**38.87**	*57*	**25.22**	*50*	**28.74**	*103*	**34.45**	*6*	**27.27**	*22*	**40**	*50*	**45.05**	*54*	**27.84**
3	No effect	*82*	**28.57**	*60*	**32.26**	*142*	**30.02**	*58*	**23.48**	*84*	**37.17**	*56*	**32.18**	*86*	**28.76**	*9*	**40.91**	*17*	**30.91**	*38*	**34.23**	*50*	**25.77**
4	Negative effect	*7*	**2.44**	*2*	**1.08**	*9*	**1.9**	*3*	**1.21**	*6*	**2.65**	*5*	**2.87**	*4*	**1.34**	*0*	**0**	*2*	**3.64**	*1*	**0.9**	*5*	**2.58**
C.12	**Does your household have access to seasonal weather forecasts?**																						
1	Yes	*132*	**45.05**	*97*	**53.89**	*229*	**48.41**	*100*	**42.37**	*129*	**54.43**	*81*	**47.93**	*148*	**48.68**	*14*	**70**	*33*	**60**	*59*	**52.68**	*94*	**46.77**
2	No	*161*	**54.95**	*83*	**46.11**	*244*	**51.59**	*136*	**57.63**	*108*	**45.57**	*88*	**52.07**	*156*	**51.32**	*6*	**30**	*22*	**40**	*53*	**47.32**	*107*	**53.23**
99	I don't know	*25*		*9*		*34*		*26*		*8*		*22*		*12*		*3*		*3*		*5*		*10*	
C.12a	**Does your household use this climate information?**																						
1	Yes	*93*	**70.45**	*72*	**74.23**	*165*	**72.05**	*72*	**72**	*93*	**72.09**	*59*	**72.84**	*106*	**71.62**	*12*	**85.71**	*27*	**81.82**	*44*	**74.58**	*58*	**61.7**
2	No	*39*	**29.55**	*25*	**25.77**	*64*	**27.95**	*28*	**28**	*36*	**27.91**	*22*	**27.16**	*42*	**28.38**	*2*	**14.29**	*6*	**18.18**	*15*	**25.42**	*36*	**38.3**
99	I don't know	*186*		*92*		*278*		*162*		*116*		*110*		*168*		*9*		*25*		*58*		*117*	
C.12b	**In what way do you use these seasonal weather forecasts? [Select all that apply]**																						
1	To select the types of crops that I plant	*41*	**12.89**	*39*	**20.63**	*80*	**15.78**	*34*	**12.98**	*46*	**18.78**	*22*	**11.52**	*58*	**18.35**	*7*	**30.43**	*11*	**18.97**	*18*	**15.38**	*35*	**16.59**
2	To decide on the timing of planting and harvesting	*49*	**15.41**	*42*	**22.22**	*91*	**17.95**	*36*	**13.74**	*55*	**22.45**	*27*	**14.14**	*64*	**20.25**	*8*	**34.78**	*14*	**24.14**	*23*	**19.66**	*32*	**15.17**
3	To decide on the most suitable cultivation technique	*25*	**7.86**	*31*	**16.4**	*56*	**11.05**	*20*	**7.63**	*36*	**14.69**	*25*	**13.09**	*31*	**9.81**	*4*	**17.39**	*3*	**5.17**	*11*	**9.4**	*35*	**16.59**
4	To make other preparations	*45*	**14.15**	*34*	**17.99**	*79*	**15.58**	*35*	**13.36**	*44*	**17.96**	*36*	**18.85**	*43*	**13.61**	*5*	**21.74**	*13*	**22.41**	*30*	**25.64**	*23*	**10.9**
99	I don't know	*2*	**0.63**	*0*	**0**	*2*	**0.39**	*0*	**0**	*2*	**0.82**	*1*	**0.52**	*1*	**0.32**	*0*	**0**	*0*	**0**	*1*	**0.85**	*1*	**0.47**
C.13/14	**BLOCK**																						
1	**Crop production for household consumption**																						
C.13	Applied in 2014	*48*	**15.09**	*31*	**16.4**	*79*	**15.58**	*26*	**9.92**	*53*	**21.63**	*25*	**13.09**	*54*	**17.09**	*5*	**21.74**	*13*	**22.41**	*19*	**16.24**	*32*	**15.17**
C.14	Applied in 2011	*41*	**12.89**	*33*	**17.46**	*74*	**14.6**	*26*	**9.92**	*48*	**19.59**	*27*	**14.14**	*47*	**14.87**	*2*	**8.7**	*13*	**22.41**	*15*	**12.82**	*30*	**14.22**
2	**Crop production for sales/income-generation**																						
C.13	Applied in 2014	*113*	**35.53**	*69*	**36.51**	*182*	**35.9**	*77*	**29.39**	*105*	**42.86**	*39*	**20.42**	*143*	**45.25**	*14*	**60.87**	*27*	**46.55**	*47*	**40.17**	*66*	**31.28**
C.14	Applied in 2011	*109*	**34.28**	*74*	**39.15**	*183*	**36.09**	*80*	**30.53**	*103*	**42.04**	*40*	**20.94**	*143*	**45.25**	*12*	**52.17**	*26*	**44.83**	*45*	**38.46**	*68*	**32.23**
3	**Production of animals and animal products**																						
C.13	Applied in 2014	*130*	**40.88**	*80*	**42.33**	*210*	**41.42**	*99*	**37.79**	*111*	**45.31**	*61*	**31.94**	*149*	**47.15**	*16*	**69.57**	*39*	**67.24**	*53*	**45.3**	*61*	**28.91**
C.14	Applied in 2011	*107*	**33.65**	*71*	**37.57**	*178*	**35.11**	*85*	**32.44**	*93*	**37.96**	*44*	**23.04**	*134*	**42.41**	*12*	**52.17**	*28*	**48.28**	*43*	**36.75**	*59*	**27.96**
4	**Agricultural worker (casual, seasonal, permanent)**																						
C.13	Applied in 2014	*98*	**30.82**	*51*	**26.98**	*149*	**29.39**	*83*	**31.68**	*66*	**26.94**	*61*	**31.94**	*88*	**27.85**	*6*	**26.09**	*19*	**32.76**	*31*	**26.5**	*66*	**31.28**
C.14	Applied in 2011	*99*	**31.13**	*50*	**26.46**	*149*	**29.39**	*85*	**32.44**	*64*	**26.12**	*65*	**34.03**	*84*	**26.58**	*6*	**26.09**	*22*	**37.93**	*32*	**27.35**	*64*	**30.33**
5	**Other on-farm work**																						
C.13	Applied in 2014	*19*	**5.97**	*20*	**10.58**	*39*	**7.69**	*19*	**7.25**	*20*	**8.16**	*11*	**5.76**	*28*	**8.86**	*1*	**4.35**	*4*	**6.9**	*13*	**11.11**	*12*	**5.69**
C.14	Applied in 2011	*14*	**4.4**	*19*	**10.05**	*33*	**6.51**	*16*	**6.11**	*17*	**6.94**	*11*	**5.76**	*22*	**6.96**	*1*	**4.35**	*4*	**6.9**	*12*	**10.26**	*9*	**4.27**
6	**Skilled labour (capentry, metal work etc**																						
C.13	Applied in 2014	*10*	**3.14**	*7*	**3.7**	*17*	**3.35**	*10*	**3.82**	*7*	**2.86**	*8*	**4.19**	*9*	**2.85**	*2*	**8.7**	*1*	**1.72**	*6*	**5.13**	*6*	**2.84**
C.14	Applied in 2011	*9*	**2.83**	*7*	**3.7**	*16*	**3.16**	*9*	**3.44**	*7*	**2.86**	*8*	**4.19**	*8*	**2.53**	*2*	**8.7**	*1*	**1.72**	*6*	**5.13**	*5*	**2.37**
7	**Fishing**																						
C.13	Applied in 2014	*43*	**13.52**	*28*	**14.81**	*71*	**14**	*46*	**17.56**	*25*	**10.2**	*19*	**9.95**	*52*	**16.46**	*4*	**17.39**	*9*	**15.52**	*16*	**13.68**	*31*	**14.69**
C.14	Applied in 2011	*45*	**14.15**	*30*	**15.87**	*75*	**14.79**	*45*	**17.18**	*30*	**12.24**	*27*	**14.14**	*48*	**15.19**	*3*	**13.04**	*9*	**15.52**	*19*	**16.24**	*31*	**14.69**
8	**Small business activities**																						
C.13	Applied in 2014	*105*	**33.02**	*51*	**26.98**	*156*	**30.77**	*67*	**25.57**	*89*	**36.33**	*68*	**35.6**	*88*	**27.85**	*8*	**34.78**	*21*	**36.21**	*40*	**34.19**	*50*	**23.7**
C.14	Applied in 2011	*104*	**32.7**	*46*	**24.34**	*150*	**29.59**	*65*	**24.81**	*85*	**34.69**	*63*	**32.98**	*87*	**27.53**	*8*	**34.78**	*22*	**37.93**	*37*	**31.62**	*48*	**22.75**
9	**Formal employee**																						
C.13	Applied in 2014	*15*	**4.72**	*11*	**5.82**	*26*	**5.13**	*9*	**3.44**	*17*	**6.94**	*11*	**5.76**	*15*	**4.75**	*1*	**4.35**	*8*	**13.79**	*5*	**4.27**	*10*	**4.74**
C.14	Applied in 2011	*16*	**5.03**	*9*	**4.76**	*25*	**4.93**	*8*	**3.05**	*17*	**6.94**	*10*	**5.24**	*15*	**4.75**	*1*	**4.35**	*8*	**13.79**	*5*	**4.27**	*9*	**4.27**
10	**Handicraft production**																						
C.13	Applied in 2014	*3*	**0.94**	*2*	**1.06**	*5*	**0.99**	*1*	**0.38**	*4*	**1.63**	*5*	**2.62**	*0*	**0**	*0*	**0**	*0*	**0**	*2*	**1.71**	*3*	**1.42**
C.14	Applied in 2011	*2*	**0.63**	*1*	**0.53**	*3*	**0.59**	*0*	**0**	*3*	**1.22**	*3*	**1.57**	*0*	**0**	*0*	**0**	*0*	**0**	*1*	**0.85**	*2*	**0.95**
11	**Remittances**																						
C.13	Applied in 2014	*40*	**12.58**	*27*	**14.29**	*67*	**13.21**	*32*	**12.21**	*35*	**14.29**	*25*	**13.09**	*42*	**13.29**	*3*	**13.04**	*6*	**10.34**	*10*	**8.55**	*27*	**12.8**
C.14	Applied in 2011	*33*	**10.38**	*23*	**12.17**	*56*	**11.05**	*26*	**9.92**	*30*	**12.24**	*18*	**9.42**	*38*	**12.03**	*2*	**8.7**	*3*	**5.17**	*9*	**7.69**	*24*	**11.37**
12	**Non-timber forest products**																						
C.13	Applied in 2014	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**
C.14	Applied in 2011	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**	*0*	**0**
13	**Other off-farm work**																						
C.13	Applied in 2014	*158*	**49.69**	*77*	**40.74**	*235*	**46.35**	*123*	**46.95**	*112*	**45.71**	*94*	**49.21**	*141*	**44.62**	*11*	**47.83**	*22*	**37.93**	*58*	**49.57**	*91*	**43.13**

C.14	Applied in 2011	145	45.6	74	39.15	219	43.2	116	44.27	103	42.04	90	47.12	129	40.82	11	47.83	21	36.21	53	45.3	84	39.81
X.1	Number of activities 2014																						
	Median	2		2		2		2		3		2		2		3		3		2		2	
	Mean	2.46		2.4		2.44		2.26		2.63		2.24		2.56		3.09		2.91		2.56		2.16	
X.2	Number of activities 2011																						
	Median	2		2		2		2		2		2		2		3		3		2		2	
	Mean	2.28		2.31		2.29		2.14		2.45		2.13		2.39		2.61		2.71		2.37		2.05	
X.3	Change in mean number of activities (C.13-C.14)																						
	Mean change	0.18		0.09		0.15		0.12		0.18		0.11		0.17		0.48		0.21		0.2		0.1	
C.15/16 BLOCK																							
1	Adoption of climate-resilient crops																						
C.15	Applied in 2014	44	13.84	33	17.46	77	15.19	34	12.98	43	17.55	13	6.81	64	20.25	8	34.78	14	24.14	22	18.8	26	12.32
C.16	Introduced in the last three years	35	11.01	32	16.93	67	13.21	27	10.31	40	16.33	15	7.85	52	16.46	8	34.78	12	20.69	19	16.24	22	10.43
2	Adjustment of planting times																						
C.15	Applied in 2014	45	14.15	45	23.81	90	17.75	37	14.12	53	21.63	23	12.04	67	21.2	3	13.04	16	27.59	22	18.8	37	17.54
C.16	Introduced in the last three years	34	10.69	40	21.16	74	14.6	32	12.21	42	17.14	21	10.99	53	16.77	4	17.39	13	22.41	16	13.68	29	13.74
3	Seed saving and storage																						
C.15	Applied in 2014	21	6.6	24	12.7	45	8.88	24	9.16	21	8.57	15	7.85	30	9.49	4	17.39	7	12.07	13	11.11	11	5.21
C.16	Introduced in the last three years	24	7.55	26	13.76	50	9.86	25	9.54	25	10.2	18	9.42	32	10.13	5	21.74	9	15.52	13	11.11	14	6.64
4	Casual labour																						
C.15	Applied in 2014	185	58.18	98	51.85	283	55.82	159	60.69	124	50.61	108	56.54	175	55.38	14	60.87	31	53.45	65	55.56	106	50.24
C.16	Introduced in the last three years	174	54.72	100	52.91	274	54.04	154	58.78	120	48.98	107	56.02	167	52.85	13	56.52	31	53.45	60	51.28	105	49.76
5	Home-gardening																						
C.15	Applied in 2014	27	8.49	21	11.11	48	9.47	22	8.4	26	10.61	8	4.19	40	12.66	7	30.43	8	13.79	8	6.84	19	9
C.16	Introduced in the last three years	28	8.81	20	10.58	48	9.47	20	7.63	28	11.43	8	4.19	40	12.66	6	26.09	9	15.52	8	6.84	19	9
6	Irrigation																						
C.15	Applied in 2014	18	5.66	20	10.58	38	7.5	19	7.25	19	7.76	11	5.76	27	8.54	4	17.39	4	6.9	9	7.69	11	5.21
C.16	Introduced in the last three years	18	5.66	19	10.05	37	7.3	19	7.25	18	7.35	10	5.24	27	8.54	5	21.74	5	8.62	9	7.69	10	4.74
7	New agricultural practices																						
C.15	Applied in 2014	18	5.66	28	14.81	46	9.07	19	7.25	27	11.02	21	10.99	25	7.91	7	30.43	7	12.07	12	10.26	16	7.58
C.16	Introduced in the last three years	14	4.4	25	13.23	39	7.69	16	6.11	23	9.39	17	8.9	22	6.96	6	26.09	6	10.34	9	7.69	15	7.11
8	Tree replanting																						
C.15	Applied in 2014	62	19.5	53	28.04	115	22.68	58	22.14	57	23.27	33	17.28	82	25.95	13	56.52	18	31.03	25	21.37	31	14.69
C.16	Introduced in the last three years	66	20.75	52	27.51	118	23.27	57	21.76	61	24.9	51	26.7	67	21.2	11	47.83	16	27.59	24	20.51	37	17.54
9	Rainwater harvesting																						
C.15	Applied in 2014	69	21.7	22	11.64	91	17.95	55	20.99	36	14.69	18	9.42	73	23.1	6	26.09	12	20.69	20	17.09	25	11.85
C.16	Introduced in the last three years	69	21.7	24	12.7	93	18.34	56	21.37	37	15.1	18	9.42	75	23.73	6	26.09	13	22.41	19	16.24	25	11.85
10	Water storage																						
C.15	Applied in 2014	90	28.3	40	21.16	130	25.64	80	30.53	50	20.41	56	29.32	74	23.42	10	43.48	19	32.76	35	29.91	54	25.59
C.16	Introduced in the last three years	86	27.04	37	19.58	123	24.26	76	29.01	47	19.18	54	28.27	69	21.84	10	43.48	18	31.03	34	29.06	49	23.22
11	Removing children from school																						
C.15	Applied in 2014	15	4.72	6	3.17	21	4.14	11	4.2	10	4.08	11	5.76	10	3.16	2	8.7	2	3.45	5	4.27	10	4.74
C.16	Introduced in the last three years	18	5.66	5	2.65	23	4.54	11	4.2	12	4.9	12	6.28	11	3.48	2	8.7	3	5.17	4	3.42	12	5.69
12	Use of loans for income diversification																						
C.15	Applied in 2014	125	39.31	46	24.34	171	33.73	91	34.73	80	32.65	58	30.37	113	35.76	17	73.91	37	63.79	44	37.61	45	21.33
C.16	Introduced in the last three years	93	29.25	49	25.93	142	28.01	79	30.15	63	25.71	57	29.84	85	26.9	11	47.83	23	39.66	34	29.06	46	21.8
13	Rationing food																						
C.15	Applied in 2014	102	32.08	66	34.92	168	33.14	94	35.88	74	30.2	75	39.27	93	29.43	13	56.52	20	34.48	39	33.33	54	25.59
C.16	Introduced in the last three years	101	31.76	67	35.45	168	33.14	94	35.88	74	30.2	76	39.79	92	29.11	13	56.52	20	34.48	41	35.04	52	24.64
X.4	Number of activities 2014																						
	Median	2		2		2		2		2		2		2.5		4		3		2		2	
	Mean	2.58		2.66		2.61		2.68		2.53		2.36		2.76		4.7		3.36		2.73		2.11	
X.5	Introduced over the last three years																						
	Median	2		2		2		2		2		2		2		4		3		2		2	
	Mean	2.39		2.62		2.48		2.54		2.41		2.43		2.51		4.35		3.07		2.48		2.06	
C.17/18 BLOCK																							
1	Indoor mushroom production																						
C.17	Applied in 2014	2	0.63	3	1.59	5	0.99	3	1.15	2	0.82	5	2.62	0	0	1	4.35	1	1.72	2	1.71	0	0
C.18	Applied in 2011	1	0.31	1	0.53	2	0.39	2	0.76	0	0	2	1.05	0	0	0	0	0	0	1	0.85	1	0.47
2	Sprout vegetables																						
C.17	Applied in 2014	4	1.26	5	2.65	9	1.78	7	2.67	2	0.82	5	2.62	4	1.27	1	4.35	3	5.17	3	2.56	2	0.95
C.18	Applied in 2011	0	0	2	1.06	2	0.39	2	0.76	0	0	1	0.52	1	0.32	0	0	0	0	2	1.71	0	0
3	Pig-raising with bio-bedding																						
C.17	Applied in 2014	21	6.6	3	1.59	24	4.73	17	6.49	7	2.86	0	0	24	7.59	7	30.43	10	17.24	5	4.27	1	0.47
C.18	Applied in 2011	4	1.26	1	0.53	5	0.99	4	1.53	1	0.41	2	1.05	3	0.95	1	4.35	2	3.45	2	1.71	0	0
4	Chicken-raising with bio-bedding																						
C.17	Applied in 2014	10	3.14	7	3.7	17	3.35	11	4.2	6	2.45	12	6.28	5	1.58	2	8.7	9	15.52	6	5.13	0	0
C.18	Applied in 2011	4	1.26	3	1.59	7	1.38	4	1.53	3	1.22	6	3.14	1	0.32	1	4.35	4	6.9	2	1.71	0	0
5	Integrated pest management																						
C.17	Applied in 2014	62	19.5	43	22.75	105	20.71	51	19.47	54	22.04	34	17.8	71	22.47	13	56.52	18	31.03	25	21.37	34	16.11
C.18	Applied in 2011	35	11.01	34	17.99	69	13.61	31	11.83	38	15.51	20	10.47	49	15.51	7	30.43	7	12.07	14	11.97	27	12.8
6	Production and use of bio-fertilizer																						
C.17	Applied in 2014	39	12.26	41	21.69	80	15.78	32	12.21	48	19.59	24	12.57	56	17.72	6	26.09	8	13.79	20	17.09	37	17.54

C.18	Applied in 2011	34	10.69	38	20.11	72	14.2	28	10.69	44	17.96	20	10.47	52	16.46	7	30.43	8	13.79	15	12.82	35	16.59
X.6	Number of activities 2014																						
	Median	0		0		0		0		0		0		0		1		1		0		0	
	Mean	0.43		0.54		0.47		0.46		0.49		0.42		0.51		1.3		0.84		0.52		0.35	
X.7	Number of activities 2011																						
	Median	0		0		0		0		0		0		0		1		0		0		0	
	Mean	0.25		0.42		0.31		0.27		0.35		0.27		0.34		0.7		0.36		0.31		0.3	
X.8	Change in mean number of activities (C.13-C.14)																						
	Mean change	0.19		0.12		0.16		0.19		0.13		0.15		0.17		0.61		0.48		0.21		0.05	
C.19	Number of crops 2014																						
	Median	1		1		1		0		1		0		1		1.5		1		1		1	
	Mean	1.23		1.45		1.32		1.14		1.5		0.85		1.58		1.59		1.53		1.44		1.18	
C.20	Number of crops 2011																						
	Median	1		1		1		1		1		0		1		1		1		1		1	
	Mean	1.18		1.31		1.23		1.06		1.41		0.77		1.49		1.45		1.37		1.39		1.08	
X.9	Change in mean number of crops																						
		0.05		0.14		0.09		0.08		0.09		0.08		0.08		0.14		0.16		0.05		0.11	
C.21	Over the past three years, have anyone in your household held any loan?																						
1	Yes	173	54.75	76	40.86	249	49.6	135	52.12	114	46.91	83	43.68	166	53.21	19	82.61	45	78.95	70	60.34	71	33.97
2	No	143	45.25	110	59.14	253	50.4	124	47.88	129	53.09	107	56.32	146	46.79	4	17.39	12	21.05	46	39.66	138	66.03
99	I don't know	2		3		5		3		2		1		4		0		1		1		2	
C.21a	Who provided these loans?																						
1	A bank	59	18.55	45	23.81	104	20.51	54	20.61	50	20.41	34	17.8	70	22.15	7	30.43	14	24.14	27	23.08	35	16.59
2	The Women's Union	92	28.93	18	9.52	110	21.7	60	22.9	50	20.41	29	15.18	81	25.63	12	52.17	30	51.72	42	35.9	18	8.53
3	A money lender (with interest)	36	11.32	12	6.35	48	9.47	25	9.54	23	9.39	19	9.95	29	9.18	3	13.04	5	8.62	8	6.84	19	9
4	Relatives, friends or neighbours	14	4.4	7	3.7	21	4.14	14	5.34	7	2.86	13	6.81	8	2.53	5	21.74	2	3.45	7	5.98	3	1.42
99	I don't know	4	1.26	3	1.59	7	1.38	5	1.91	2	0.82	3	1.57	4	1.27	0	0	1	1.72	1	0.85	3	1.42
C.21b	What was the main use of these loans?																						
1	Investment in climate-resilient agriculture	36	20.93	10	13.51	46	18.7	25	18.94	21	18.42	9	11.11	37	22.42	6	31.58	16	35.56	18	25.71	4	5.88
2	Investment in other agriculture	50	29.07	37	50	87	35.37	41	31.06	46	40.35	17	20.99	70	42.42	6	31.58	14	31.11	18	25.71	30	44.12
3	Investment in off-farm activities (small business)	49	28.49	12	16.22	61	24.8	34	25.76	27	23.68	32	39.51	29	17.58	4	21.05	12	26.67	20	28.57	13	19.12
4	Enhancing house/property	17	9.88	5	6.76	22	8.94	11	8.33	11	9.65	10	12.35	12	7.27	2	10.53	0	0	6	8.57	10	14.71
5	Medical care/emergencies	10	5.81	3	4.05	13	5.28	10	7.58	3	2.63	6	7.41	7	4.24	0	0	1	2.22	7	10	3	4.41
6	Ceremonies, other personal use	10	5.81	7	9.46	17	6.91	11	8.33	6	5.26	7	8.64	10	6.06	1	5.26	2	4.44	1	1.43	8	11.76
99	I don't know	146		115		261		130		131		110		151		4		13		47		143	
C.21c	Concerning the outcomes of having this loan, which of the following statements applies to you? (Multiple selections)																						
1	I have been able to earn more money.	80	25.16	37	19.58	117	23.08	60	22.9	57	23.27	38	19.9	79	25	14	60.87	21	36.21	39	33.33	24	11.37
2	I have been able to diversify income.	51	16.04	19	10.05	70	13.81	34	12.98	36	14.69	12	6.28	58	18.35	4	17.39	18	31.03	23	19.66	19	9
3	I have been able to adopt climate-resilient activities.	9	2.83	6	3.17	15	2.96	8	3.05	7	2.86	2	1.05	13	4.11	1	4.35	7	12.07	3	2.56	3	1.42
4	I have not been able to repay my loan on schedule.	31	9.75	17	8.99	48	9.47	25	9.54	23	9.39	18	9.42	30	9.49	2	8.7	7	12.07	10	8.55	17	8.06
C.22	How would you describe your household's ability to address climate risks such as irregular and unpredictable or extreme rainfall?																						
1	High	21	7.47	18	10.78	39	8.71	24	10.76	15	6.67	20	11.83	19	6.81	4	18.18	9	16.67	10	9.09	12	6.49
2	Moderate	145	51.6	88	52.69	233	52.01	109	48.88	124	55.11	87	51.48	146	52.33	16	72.73	35	64.81	64	58.18	95	51.35
3	Low	115	40.93	61	36.53	176	39.29	90	40.36	86	38.22	62	36.69	114	40.86	2	9.09	10	18.52	36	32.73	78	42.16
99	I don't know	37		22		59		39		20		22		37		1		4		7		26	
C.23	Which of the following statements best describes your household?																						
1	We are now better-adapted and more prepared for climate ch	67	22.95	34	19.43	101	21.63	50	21.28	51	21.98	37	22.29	64	21.26	15	65.22	23	42.59	22	19.64	33	16.84
2	Over the past four years, there has been no change in our abili	212	72.6	123	70.29	335	71.73	172	73.19	163	70.26	113	68.07	222	73.75	8	34.78	29	53.7	81	72.32	150	76.53
3	We are now less prepared for climate change than we were fo	13	4.45	18	10.29	31	6.64	13	5.53	18	7.76	16	9.64	15	4.98	0	0	2	3.7	9	8.04	13	6.63
99	I don't know	26		14		40		27		13		25		15		0		4		5		15	
C.23a	In your view, to what extent has the ICAM project (which included Care WU, DARD, DONRE, CCRD) played a role behind this improvement?																						
1	Main positive role	17	30.91	8	25.81	25	29.07	17	37.78	8	19.51	10	32.26	15	27.27	8	53.33	7	31.82	7	31.82	2	8
2	Positive role amongst others	25	45.45	7	22.58	32	37.21	16	35.56	16	39.02	9	29.03	23	41.82	7	46.67	13	59.09	9	40.91	2	8
3	No role	13	23.64	16	51.61	29	33.72	12	26.67	17	41.46	12	38.71	17	30.91	0	0	2	9.09	6	27.27	21	84
99	I don't know	263		158		421		217		204		160		261		8		36		95		186	
D	DISASTER RISK REDUCTION																						
D.1	How prepared is your household to handle a disaster?																						
1	Very prepared	10	3.14	10	5.35	20	3.96	11	4.21	9	3.69	12	6.35	8	2.53	9	39.13	3	5.17	4	3.42	3	1.43
2	Somewhat prepared	97	30.5	72	38.5	169	33.47	86	32.95	83	34.02	81	42.86	88	27.85	6	26.09	29	50	46	39.32	70	33.33
3	Somewhat unprepared	155	48.74	81	43.32	236	46.73	122	46.74	114	46.72	66	34.92	170	53.8	8	34.78	24	41.38	51	43.59	97	46.19
4	Very unprepared	56	17.61	24	12.83	80	15.84	42	16.09	38	15.57	30	15.87	50	15.82	0	0	2	3.45	16	13.68	40	19.05
99	I don't know	0		2		2		1		1		2		0		0		0		0		1	
D.2	Compared to four years ago, is your household today more or less able to handle a disaster?																						
1	More able	86	27.65	67	36.22	153	30.85	81	31.76	72	29.88	70	37.63	83	26.77	15	65.22	28	49.12	37	31.9	50	24.39
2	No change	208	66.88	106	57.3	314	63.31	158	61.96	156	64.73	102	54.84	212	68.39	8	34.78	27	47.37	73	62.93	136	66.34
3	Less able	17	5.47	12	6.49	29	5.85	16	6.27	13	5.39	14	7.53	15	4.84	0	0	2	3.51	6	5.17	19	9.27
99	I don't know	7		4		11		7		4		5		6		0		1		1		6	
D.2a	In your view, to what extent has the CARE project played a role behind this improvement?																						
1	Main positive role	28	40	13	25	41	33.61	20	30.77	21	36.84	12	23.53	29	40.85	6	40	13	46.43	19	54.29	2	5.41
2	Positive role amongst others	17	24.29	16	30.77	33	27.05	19	29.23	14	24.56	15	29.41	18	25.35	9	60	11	39.29	7	20	6	16.22
3	No role	25	35.71	23	44.23	48	39.34	26	40	22	38.6	24	47.06	24	33.8	0	0	4	14.29	9	25.71	29	78.38
99	I don't know	248		137		385		197		188		140		245		8		30		82		174	
D.3	Which of the following statements best describes your household?																						

1	We have not done anything to prepare for a disaster or emerg	207	65.09	104	55.03	311	61.34	160	61.07	151	61.63	87	45.55	224	70.89	9	39.13	27	46.55	66	56.41	145	68.72
2	We have not done anything to prepare for a disaster or emerg	25	7.86	18	9.52	43	8.48	24	9.16	19	7.76	23	12.04	20	6.33	1	4.35	6	10.34	10	8.55	16	7.58
3	We just recently began preparing for a disaster or emergency	37	11.64	22	11.64	59	11.64	31	11.83	28	11.43	24	12.57	35	11.08	2	8.7	9	15.52	19	16.24	17	8.06
4	We are prepared for a disaster or emergency	49	15.41	45	23.81	94	18.54	47	17.94	47	19.18	57	29.84	37	11.71	11	47.83	16	27.59	22	18.8	33	15.64
D.4.1	**Are villagers usually warned ahead of a storm?**																						
1	Yes	253	84.9	150	83.8	403	84.49	213	86.23	190	82.61	158	88.76	245	81.94	21	91.3	49	89.09	102	88.7	168	84.42
2	No	45	15.1	29	16.2	74	15.51	34	13.77	40	17.39	20	11.24	54	18.06	2	8.7	6	10.91	13	11.3	31	15.58
99	I don't know	20		10		30		15		15		13		17		0		3		2		12	
D.4.2	**Does your village have a disaster response or emergency plan?**																						
1	Yes	174	68.5	117	74.52	291	70.8	154	72.3	137	69.19	121	76.58	170	67.19	20	86.96	39	82.98	73	72.28	124	70.86
2	No	80	31.5	40	25.48	120	29.2	59	27.7	61	30.81	37	23.42	83	32.81	3	13.04	8	17.02	28	27.72	51	29.14
99	I don't know	64		32		96		49		47		33		63		0		11		16		36	
D.4.3	**Does your village have an organized group that decides what to do in disasters or emergencies?**																						
1	Yes	170	66.41	121	77.07	291	70.46	159	71.62	132	69.11	121	80.13	170	64.89	17	77.27	39	79.59	69	70.41	118	69.41
2	No	86	33.59	36	22.93	122	29.54	63	28.38	59	30.89	30	19.87	92	35.11	5	22.73	10	20.41	29	29.59	52	30.59
99	I don't know	62		32		94		40		54		40		54		1		9		19		41	
D.4.4	**Have villagers been trained to assist others in the event of a disaster?**																						
1	Yes	171	68.13	113	73.38	284	70.12	158	75.6	126	64.29	119	79.33	165	64.71	19	90.48	35	72.92	76	73.79	123	69.1
2	No	80	31.87	41	26.62	121	29.88	51	24.4	70	35.71	31	20.67	90	35.29	2	9.52	13	27.08	27	26.21	55	30.9
99	I don't know	67		35		102		53		49		41		61		2		10		14		33	
D.4.5	**Does your community have evacuation routes?**																						
1	Yes	75	32.47	71	44.38	146	37.34	80	40.4	66	34.2	43	31.39	103	40.55	10	50	18	41.86	42	45.65	60	34.48
2	No	156	67.53	89	55.62	245	62.66	118	59.6	127	65.8	94	68.61	151	59.45	10	50	25	58.14	50	54.35	114	65.52
99	I don't know	87		29		116		64		52		54		62		3		15		25		37	
D.4.6	**Does your community have a shelter identified where people can go in the event of a disaster?**																						
1	Yes	102	40.64	75	45.18	177	42.45	97	44.5	80	40.2	44	30.99	133	48.36	11	55	23	50	44	44	73	38.83
2	No	149	59.36	91	54.82	240	57.55	121	55.5	119	59.8	98	69.01	142	51.64	9	45	23	50	56	56	115	61.17
99	I don't know	67		23		90		44		46		49		41		3		12		17		23	
D.5	**Overall, how prepared is your community to handle a disaster?**																						
1	Very prepared	26	9.92	24	14.72	50	11.76	31	14.29	19	9.13	26	16.67	24	8.92	9	39.13	3	6.25	15	13.89	21	11.67
2	Somewhat prepared	142	54.2	96	58.9	238	56	119	54.84	119	57.21	95	60.9	143	53.16	11	47.83	32	66.67	58	53.7	112	62.22
3	Somewhat unprepared	83	31.68	39	23.93	122	28.71	62	28.57	60	28.85	31	19.87	91	33.83	3	13.04	13	27.08	33	30.56	40	22.22
4	Very unprepared	11	4.2	4	2.45	15	3.53	5	2.3	10	4.81	4	2.56	11	4.09	0	0	0	0	2	1.85	7	3.89
99	I don't know	56		26		82		45		37		35		47		0		10		9		31	
D.6	**Compared to three years ago, is your community today more or less able to handle a disaster?**																						
1	More able	154	54.23	109	63.37	263	57.68	140	59.07	123	56.16	119	70.41	144	50.17	18	78.26	23	45.1	67	60.36	123	64.74
2	No change	122	42.96	63	36.63	185	40.57	92	38.82	93	42.47	48	28.4	137	47.74	4	17.39	28	54.9	43	38.74	62	32.63
3	Less able	8	2.82	0	0	8	1.75	5	2.11	3	1.37	2	1.18	6	2.09	1	4.35	0	0	1	0.9	5	2.63
99	I don't know	34		17		51		25		26		22		29		0		7		6		21	
D.6a	**In your view, to what extent has the ICAM project (which included Care, WU, DARD, DONRE, CCRD) played a role behind this improvement?**																						
1	Main positive role	23	25	20	29.41	43	26.88	21	25.3	22	28.57	18	25.71	25	27.78	5	29.41	8	36.36	21	36.84	7	12.5
2	Positive role amongst others	49	53.26	32	47.06	81	50.62	43	51.81	38	49.35	38	54.29	43	47.78	11	64.71	11	50	24	42.11	30	53.57
3	No role	20	21.74	16	23.53	36	22.5	19	22.89	17	22.08	14	20	22	24.44	1	5.88	3	13.64	12	21.05	19	33.93
99	I don't know	226		121		347		179		168		121		226		6		36		60		155	
E	**GENDER**																						
E.0	**What is your civil status?**																						
1	Married	269	84.59	176	93.12	445	87.77	220	83.97	225	91.84	156	81.68	289	91.46	20	86.96	49	84.48	109	93.16	180	85.31
2	Single, widowed or divorced	49	15.41	13	6.88	62	12.23	42	16.03	20	8.16	35	18.32	27	8.54	3	13.04	9	15.52	8	6.84	31	14.69
E.1.1	**...decides what to do with family income?**																						
1	Only men	16	5.95	37	21.02	53	11.91	28	12.73	25	11.11	23	14.74	30	10.38	3	15	5	10.2	5	4.59	36	20
2	Mostly men	31	11.52	39	22.16	70	15.73	34	15.45	36	16	21	13.46	49	16.96	4	20	5	10.2	26	23.85	20	11.11
3	Men and women equally	63	23.42	40	22.73	103	23.15	45	20.45	58	25.78	33	21.15	70	24.22	6	30	16	32.65	18	16.51	38	21.11
4	Mostly women	78	29	33	18.75	111	24.94	54	24.55	57	25.33	32	20.51	79	27.34	3	15	13	26.53	31	28.44	38	21.11
5	Only women	81	30.11	27	15.34	108	24.27	59	26.82	49	21.78	47	30.13	61	21.11	4	20	10	20.41	29	26.61	48	26.67
99	I don't know	49		13		62		42		20		35		27		3		9		8		31	
E.1.2	**...attends meetings or activities in the village?**																						
1	Only men	6	2.26	51	29.14	57	12.95	31	14.09	26	11.82	30	19.61	27	9.41	4	20	1	2.04	9	8.26	34	19.32
2	Mostly men	43	16.23	70	40	113	25.68	57	25.91	56	25.45	46	30.07	67	23.34	4	20	8	16.33	27	24.77	45	25.57
3	Men and women equally	40	15.09	27	15.43	67	15.23	30	13.64	37	16.82	22	14.38	45	15.68	1	5	10	20.41	13	11.93	28	15.91
4	Mostly women	104	39.25	22	12.57	126	28.64	66	30	60	27.27	29	18.95	97	33.8	6	30	18	36.73	33	30.28	40	22.73
5	Only women	72	27.17	5	2.86	77	17.5	36	16.36	41	18.64	26	16.99	51	17.77	5	25	12	24.49	27	24.77	29	16.48
99	I don't know	53		14		67		42		25		38		29		3		9		8		35	
E.1.3	**...decides what to plant, when and where (food crops)?**																						
1	Only men	28	13.86	42	30.88	70	20.71	36	21.95	34	19.54	33	28.45	37	16.67	2	13.33	5	12.5	16	18.18	41	30.6
2	Mostly men	36	17.82	49	36.03	85	25.15	43	26.22	42	24.14	27	23.28	58	26.13	4	26.67	10	25	25	28.41	33	24.63
3	Men and women equally	97	48.02	42	30.88	139	41.12	59	35.98	80	45.98	40	34.48	99	44.59	7	46.67	18	45	34	38.64	46	34.33
4	Mostly women	24	11.88	2	1.47	26	7.69	13	7.93	13	7.47	5	4.31	21	9.46	0	0	5	12.5	8	9.09	8	5.97
5	Only women	17	8.42	1	0.74	18	5.33	13	7.93	5	2.87	11	9.48	7	3.15	2	13.33	2	5	5	5.68	6	4.48
99	I don't know	116		53		169		98		71		75		94		8		18		29		77	
E.1.4	**...decides what to plant, when and where (cash crops)?**																						
1	Only men	27	14.67	39	29.77	66	20.95	34	22.08	32	19.88	27	30.34	39	17.26	3	17.65	6	16.22	15	17.65	37	28.91
2	Mostly men	41	22.28	53	40.46	94	29.84	47	30.52	47	29.19	28	31.46	66	29.2	5	29.41	11	29.73	29	34.12	32	25
3	Men and women equally	86	46.74	38	29.01	124	39.37	58	37.66	66	40.99	27	30.34	97	42.92	8	47.06	18	48.65	30	35.29	49	38.28

4	Mostly women	21	11.41	0	0	21	6.67	10	6.49	11	6.83	2	2.25	19	8.41	0	0	1	2.7	10	11.76	6	4.69
5	Only women	9	4.89	1	0.76	10	3.17	5	3.25	5	3.11	5	5.62	5	2.21	1	5.88	1	2.7	1	1.18	4	3.12
99	I don't know	134		58		192		108		84		102		90		6		21		32		83	
E.1.5	...decides on agricultural investments?																						
1	Only men	28	12.61	47	30.92	75	20.05	40	21.62	35	18.52	34	30.36	41	15.65	4	21.05	7	15.22	16	16.67	41	27.15
2	Mostly men	51	22.97	52	34.21	103	27.54	52	28.11	51	26.98	29	25.89	74	28.24	4	21.05	14	30.43	32	33.33	35	23.18
3	Men and women equally	99	44.59	49	32.24	148	39.57	66	35.68	82	43.39	37	33.04	111	42.37	10	52.63	17	36.96	34	35.42	60	39.74
4	Mostly women	27	12.16	2	1.32	29	7.75	15	8.11	14	7.41	4	3.57	25	9.54	0	0	4	8.7	11	11.46	8	5.3
5	Only women	17	7.66	2	1.32	19	5.08	12	6.49	7	3.7	8	7.14	11	4.2	1	5.26	4	8.7	3	3.12	7	4.64
99	I don't know	96		37		133		77		56		79		54		4		12		21		60	
E.1.6	...prepares food?																						
1	Only men	13	5.75	34	22.82	47	12.53	24	13.48	23	11.68	21	16.15	26	10.61	1	6.67	4	9.09	8	9.09	27	17.31
2	Mostly men	39	17.26	39	26.17	78	20.8	41	23.03	37	18.78	21	16.15	57	23.27	2	13.33	7	15.91	27	30.68	32	20.51
3	Men and women equally	106	46.9	59	39.6	165	44	75	42.13	90	45.69	57	43.85	108	44.08	8	53.33	22	50	31	35.23	61	39.1
4	Mostly women	32	14.16	5	3.36	37	9.87	16	8.99	21	10.66	8	6.15	29	11.84	0	0	4	9.09	11	12.5	17	10.9
5	Only women	36	15.93	12	8.05	48	12.8	22	12.36	26	13.2	23	17.69	25	10.2	4	26.67	7	15.91	11	12.5	19	12.18
99	I don't know	92		40		132		84		48		61		71		8		14		29		55	
E.1.7	...cares for children?																						
1	Only men	1	0.37	4	2.27	5	1.13	2	0.91	3	1.33	3	1.94	2	0.69	0	0	0	0	0	0	4	2.22
2	Mostly men	5	1.87	7	3.98	12	2.7	7	3.2	5	2.22	6	3.87	6	2.08	0	0	0	0	5	4.63	2	1.11
3	Men and women equally	7	2.61	14	7.95	21	4.73	11	5.02	10	4.44	8	5.16	13	4.5	2	10	0	0	3	2.78	14	7.78
4	Mostly women	115	42.91	66	37.5	181	40.77	88	40.18	93	41.33	53	34.19	128	44.29	5	25	26	53.06	42	38.89	59	32.78
5	Only women	140	52.24	85	48.3	225	50.68	111	50.68	114	50.67	85	54.84	140	48.44	13	65	23	46.94	58	53.7	101	56.11
99	I don't know	50		13		63		43		20		36		27		3		9		9		31	
E.2	Which of the following statements best applies to your household?																						
1	Over the past three years, men have gained more influence in	20	7.55	31	17.92	51	11.64	27	12.5	24	10.81	20	13.07	31	10.88	0	0	3	6.12	12	11.01	18	10.34
2	Over the past three years, there has been no change in the wa	218	82.26	135	78.03	353	80.59	173	80.09	180	81.08	121	79.08	232	81.4	17	85	43	87.76	88	80.73	144	82.76
3	Over the past three years, women have gained more influence	27	10.19	7	4.05	34	7.76	16	7.41	18	8.11	12	7.84	22	7.72	3	15	3	6.12	9	8.26	12	6.9
99	I don't know	53		16		69		46		23		38		31		3		9		8		37	
E.2a	What is the main reason for this change?																						
1	Factors related to the CARE project	1	2.22	0	0	1	1.27	0	0	1	2.56	1	3.33	0	0	0	0	0	0	1	5	0	0
2	Other factors	44	97.78	34	100	78	98.73	40	100	38	97.44	29	96.67	49	100	3	100	5	100	19	95	28	100
99	I don't know	273		155		428		222		206		161		267		20		53		97		183	
E.3	Over the past four years, has the workload of the women in your household changed?																						
1	Yes, it has increased	75	27.99	47	26.86	122	27.54	67	30.45	55	24.66	42	27.1	80	27.78	6	30	17	34.69	29	26.61	53	29.61
2	No	141	52.61	104	59.43	245	55.3	115	52.27	130	58.3	90	58.06	155	53.82	9	45	23	46.94	58	53.21	100	55.87
3	Yes, it has decreased	52	19.4	24	13.71	76	17.16	38	17.27	38	17.04	23	14.84	53	18.4	5	25	9	18.37	22	20.18	26	14.53
99	I don't know	50		14		64		42		22		36		28		3		9		8		32	
E.3a	What is the main reason for this change?																						
1	Factors related to the CARE project	9	7.38	2	2.99	11	5.82	4	4.04	7	7.78	3	4.84	8	6.3	1	9.09	3	11.54	5	9.8	0	0
2	Other factors	113	92.62	65	97.01	178	94.18	95	95.96	83	92.22	59	95.16	119	93.7	10	90.91	23	88.46	46	90.2	74	100
99	I don't know	196		122		318		163		155		129		189		12		32		66		137	
E.4.1	...takes part in village meetings?																						
1	Only men	5	1.67	2	1.1	7	1.45	4	1.59	3	1.3	4	2.22	3	0.99	0	0	1	1.72	0	0	6	3.09
2	Mostly men	44	14.67	65	35.71	109	22.61	46	18.25	63	27.39	64	35.56	45	14.9	3	13.04	12	20.69	28	24.35	45	23.2
3	Men and women equally	63	21	40	21.98	103	21.37	55	21.83	48	20.87	42	23.33	61	20.2	2	8.7	13	22.41	22	19.13	31	15.98
4	Mostly women	180	60	73	40.11	253	52.49	141	55.95	112	48.7	68	37.78	185	61.26	15	65.22	32	55.17	65	56.52	105	54.12
5	Only women	8	2.67	2	1.1	10	2.07	6	2.38	4	1.74	2	1.11	8	2.65	3	13.04	0	0	0	0	7	3.61
99	I don't know	18		7		25		10		15		11		14		0		0		2		17	
E.4.2	...speaks during village meetings?																						
1	Only men	7	2.43	9	5	16	3.42	10	4.03	6	2.73	6	3.45	10	3.4	1	4.55	3	5.36	3	2.65	8	4.26
2	Mostly men	63	21.88	87	48.33	150	32.05	79	31.85	71	32.27	68	39.08	82	27.89	2	9.09	16	28.57	41	36.28	57	30.32
3	Men and women equally	87	30.21	49	27.22	136	29.06	73	29.44	63	28.64	47	27.01	89	30.27	8	36.36	20	35.71	27	23.89	46	24.47
4	Mostly women	122	42.36	35	19.44	157	33.55	79	31.85	78	35.45	48	27.59	109	37.07	10	45.45	17	30.36	40	35.4	71	37.77
5	Only women	9	3.12	0	0	9	1.92	7	2.82	2	0.91	5	2.87	4	1.36	1	4.55	0	0	2	1.77	6	3.19
99	I don't know	30		9		39		14		25		17		22		1		2		4		23	
E.4.3	...influences decisions about village affairs?																						
1	Only men	17	6.39	13	8.02	30	7.01	14	6.14	16	8	18	11.54	12	4.41	3	13.04	2	3.7	3	2.83	20	11.98
2	Mostly men	129	48.5	96	59.26	225	52.57	123	53.95	102	51	80	51.28	145	53.31	9	39.13	33	61.11	59	55.66	71	42.51
3	Men and women equally	70	26.32	34	20.99	104	24.3	56	24.56	48	24	29	18.59	75	27.57	6	26.09	12	22.22	26	24.53	42	25.15
4	Mostly women	43	16.17	12	7.41	55	12.85	26	11.4	29	14.5	26	16.67	29	10.66	3	13.04	7	12.96	16	15.09	24	14.37
5	Only women	7	2.63	7	4.32	14	3.27	9	3.95	5	2.5	3	1.92	11	4.04	2	8.7	0	0	2	1.89	10	5.99
99	I don't know	52		27		79		34		45		35		44		0		4		11		44	
E.4.4	...makes decisions about village affairs?																						
1	Only men	37	13.41	39	23.08	76	17.08	39	16.6	37	17.62	37	22.56	39	13.88	5	22.73	8	14.81	8	7.48	51	28.02
2	Mostly men	160	57.97	98	57.99	258	57.98	132	56.17	126	60	88	53.66	170	60.5	9	40.91	37	68.52	72	67.29	78	42.86
3	Men and women equally	54	19.57	25	14.79	79	17.75	44	18.72	35	16.67	25	15.24	54	19.22	4	18.18	7	12.96	20	18.69	37	20.33
4	Mostly women	20	7.25	4	2.37	24	5.39	14	5.96	10	4.76	11	6.71	13	4.63	2	9.09	2	3.7	6	5.61	11	6.04
5	Only women	5	1.81	3	1.78	8	1.8	6	2.55	2	0.95	3	1.83	5	1.78	2	9.09	0	0	1	0.93	5	2.75
99	I don't know	42		20		62		27		35		27		35		1		4		10		29	
E.4.5	...represents the village vis-à-vis the government?																						
1	Only men	49	17.44	55	31.25	104	22.76	54	22.98	50	22.52	54	32.93	50	17.06	7	30.43	11	18.97	19	17.43	57	30.16
2	Mostly men	175	62.28	99	56.25	274	59.96	138	58.72	136	61.26	81	49.39	193	65.87	12	52.17	34	58.62	69	63.3	98	51.85

3	Men and women equally	37	13.17	17	9.66	54	11.82	28	11.91	26	11.71	16	9.76	38	12.97	2	8.7	8	13.79	12	11.01	26	13.76
4	Mostly women	16	5.69	4	2.27	20	4.38	12	5.11	8	3.6	10	6.1	10	3.41	1	4.35	5	8.62	9	8.26	4	2.12
5	Only women	4	1.42	1	0.57	5	1.09	3	1.28	2	0.9	3	1.83	2	0.68	1	4.35	0	0	0	0	4	2.12
99	I don't know	37		13		50		27		23		27		23		0		0		8		22	
E.4.6	...controls village funds?																						
1	Only men	45	15.85	34	19.32	79	17.17	47	19.58	32	14.55	24	14.29	55	18.84	7	30.43	7	12.73	11	9.91	30	16.3
2	Mostly men	127	44.72	100	56.82	227	49.35	112	46.67	115	52.27	95	56.55	132	45.21	8	34.78	24	43.64	64	57.66	85	46.2
3	Men and women equally	87	30.63	34	19.32	121	26.3	64	26.67	57	25.91	37	22.02	84	28.77	7	30.43	20	36.36	29	26.13	51	27.72
4	Mostly women	22	7.75	8	4.55	30	6.52	14	5.83	16	7.27	9	5.36	21	7.19	1	4.35	4	7.27	7	6.31	15	8.15
5	Only women	3	1.06	0	0	3	0.65	3	1.25	0	0	3	1.79	0	0	0	0	0	0	0	0	3	1.63
99	I don't know	34		13		47		22		25		23		24		0		3		6		27	
E.4.7	...conducts volunteer work?																						
1	Only men	35	13.83	33	19.3	68	16.04	38	17.19	30	14.78	25	15.92	43	16.1	7	31.82	4	8	12	11.21	39	22.03
2	Mostly men	150	59.29	102	59.65	252	59.43	129	58.37	123	60.59	103	65.61	149	55.81	10	45.45	31	62	71	66.36	87	49.15
3	Men and women equally	59	23.32	31	18.13	90	21.23	44	19.91	46	22.66	21	13.38	69	25.84	3	13.64	15	30	21	19.63	44	24.86
4	Mostly women	7	2.77	5	2.92	12	2.83	8	3.62	4	1.97	6	3.82	6	2.25	2	9.09	0	0	3	2.8	5	2.82
5	Only women	2	0.79	0	0	2	0.47	2	0.9	0	0	2	1.27	0	0	0	0	0	0	0	0	2	1.13
99	I don't know	65		18		83		41		42		34		49		1		8		10		34	
E.5	Which of the following statements best applies to your community?																						
1	Over the past three years, men have gained more influence in	44	15.33	29	16.76	73	15.87	41	17.37	32	14.29	30	17.54	43	14.88	2	8.7	10	18.87	20	18.02	23	12.3
2	Over the past three years, there has been no change in the wa	216	75.26	133	76.88	349	75.87	176	74.58	173	77.23	127	74.27	222	76.82	17	73.91	38	71.7	79	71.17	149	79.68
3	Over the past three years, women have gained more influence	27	9.41	11	6.36	38	8.26	19	8.05	19	8.48	14	8.19	24	8.3	4	17.39	5	9.43	12	10.81	15	8.02
99	I don't know	31		16		47		26		21		20		27		0		5		6		24	
E.5a	What is the main reason for this change?																						
1	Factors related to the CARE project	4	7.14	0	0	4	4.55	1	2.08	3	7.5	2	6.25	2	3.57	1	20	2	15.38	1	3.57	0	0
2	Other factors	52	92.86	32	100	84	95.45	47	97.92	37	92.5	30	93.75	54	96.43	4	80	11	84.62	27	96.43	25	100
99	I don't know	262		157		419		214		205		159		260		18		45		89		186	
F	COMMUNITY CAP{ACITY																						
F.1	Suppose your village were to implement an activity that would benefit the overall welfare and conditions of the village - but that would not bring direct benefits to your household. How likely is it that you would support this activity?																						
1	Very likely	53	17.26	34	18.28	87	17.65	40	16.06	47	19.26	26	14.21	61	19.68	7	30.43	10	17.54	25	21.74	39	19.31
2	Likely	227	73.94	141	75.81	368	74.65	188	75.5	180	73.77	150	81.97	218	70.32	16	69.57	44	77.19	83	72.17	144	71.29
3	Unlikely	24	7.82	9	4.84	33	6.69	18	7.23	15	6.15	6	3.28	27	8.71	0	0	3	5.26	6	5.22	16	7.92
4	Very unlikely	3	0.98	2	1.08	5	1.01	3	1.2	2	0.82	1	0.55	4	1.29	0	0	0	0	1	0.87	3	1.49
99	I don't know	11		3		14		13		1		8		6		0		1		2		9	
F.2	To what extent do people in this village contribute towards making the village a better place to live?																						
1	To a great amount	77	26.28	63	35.59	140	29.79	71	29.96	69	29.61	67	38.95	73	24.5	13	56.52	15	27.78	35	30.97	58	29.74
2	To a considerable amount	166	56.66	91	51.41	257	54.68	126	53.16	131	56.22	88	51.16	169	56.71	10	43.48	31	57.41	58	51.33	105	53.85
3	To a small amount	46	15.7	23	12.99	69	14.68	38	16.03	31	13.3	16	9.3	53	17.79	0	0	8	14.81	19	16.81	29	14.87
4	Not at all	4	1.37	0	0	4	0.85	2	0.84	2	0.86	1	0.58	3	1.01	0	0	0	0	1	0.88	3	1.54
99	I don't know	25		12		37		25		12		19		18		0		4		4		16	
F.3	How often do villagers get together to jointly request government officials or political leaders with requests for action?																						
1	Once a month or more often	55	21.91	31	19.38	86	20.92	48	22.43	38	19.29	40	26.14	46	17.83	8	36.36	14	29.79	16	15.38	39	23.08
2	Several times a year	156	62.15	113	70.62	269	65.45	136	63.55	133	67.51	99	64.71	170	65.89	12	54.55	28	59.57	71	68.27	106	62.72
3	About once a year	20	7.97	6	3.75	26	6.33	14	6.54	12	6.09	11	7.19	15	5.81	1	4.55	3	6.38	11	10.58	5	2.96
4	Less than once a year or never	20	7.97	10	6.25	30	7.3	16	7.48	14	7.11	3	1.96	27	10.47	1	4.55	2	4.26	6	5.77	19	11.24
99	I don't know	67		29		96		48		48		38		58		1		11		13		42	
F.4	Overall, how effective do you feel that engagement of villagers has been in terms of getting the government to take the desired action?																						
1	Hight	58	22.92	37	22.98	95	22.95	52	23.85	43	21.94	36	23.53	59	22.61	7	30.43	11	22.45	26	24.53	42	25.15
2	Moderate	149	58.89	97	60.25	246	59.42	123	56.42	123	62.76	99	64.71	147	56.32	14	60.87	30	61.22	68	64.15	92	55.09
3	Low	46	18.18	27	16.77	73	17.63	43	19.72	30	15.31	18	11.76	55	21.07	2	8.7	8	16.33	12	11.32	33	19.76
99	I don't know	65		28		93		44		49		38		55		0		9		11		44	
F.5	Which of the following statements best applies to your community?																						
1	Villagers here are now working together more than three years	202	65.16	134	72.83	336	68.02	167	64.98	169	71.31	132	70.21	204	66.67	18	78.26	37	68.52	80	68.38	149	72.68
2	Villagers here are now working together less than three years a	7	2.26	8	4.35	15	3.04	7	2.72	8	3.38	9	4.79	6	1.96	0	0	1	1.85	2	1.71	5	2.44
3	Over the past three years, the extent to which villagers work to	101	32.58	42	22.83	143	28.95	83	32.3	60	25.32	47	25	96	31.37	5	21.74	16	29.63	35	29.91	51	24.88
99	I don't know	8		5		13		5		8		3		10		0		4		0		6	
F.5a	What is the main reason for this change?																						
1	Factors related to the CARE project	22	12.5	8	6.45	30	10	13	8.61	17	11.41	9	7.63	21	11.54	5	27.78	9	25.71	15	19.74	1	0.79
2	Other factors	154	87.5	116	93.55	270	90	138	91.39	132	88.59	109	92.37	161	88.46	13	72.22	26	74.29	61	80.26	125	99.21
99	I don't know	142		65		207		111		96		73		134		5		23		41		85	
F.6	Over the past year, did you participate in any community planning meeting?																						
1	Yes	88	30.45	65	36.93	153	32.9	82	34.75	71	31	64	36.99	89	30.48	14	66.67	32	59.26	40	38.1	56	27.32
2	No	201	69.55	111	63.07	312	67.1	154	65.25	158	69	109	63.01	203	69.52	7	33.33	22	40.74	65	61.9	149	72.68
99	I don't know	29		13		42		26		16		18		24		2		4		12		6	
G	PROJECT REVIEW																						
G.1	In your view, who benefitted from the project?																						
1	All households in the village	13	5.91	13	9.77	26	7.37	13	7.18	13	7.56	18	14.17	8	3.54	3	13.64	4	7.84	11	11.46	5	3.38
2	Most households in the village	81	36.82	46	34.59	127	35.98	66	36.46	61	35.47	44	34.65	83	36.73	6	27.27	18	35.29	34	35.42	64	43.24
3	A few households in the village	122	55.45	73	54.89	195	55.24	100	55.25	95	55.23	62	48.82	133	58.85	13	59.09	29	56.86	49	51.04	76	51.35
4	Nobody in the village	4	1.82	1	0.75	5	1.42	2	1.1	3	1.74	3	2.36	2	0.88	0	0	0	0	2	2.08	3	2.03
99	I don't know	98		56		154		81		73		64		90		1		7		21		63	
G.1a	Based on what criteria were households selected?																						
1	Poor households	179	56.29	97	51.32	276	54.44	144	54.96	132	53.88	93	48.69	183	57.91	19	82.61	44	75.86	74	63.25	113	53.55

2	Near-poor households	*74*	**23.27**	*37*	**19.58**	*111*	**21.89**	*59*	**22.52**	*52*	**21.22**	*41*	**21.47**	*70*	**22.15**	*9*	**39.13**	*16*	**27.59**	*33*	**28.21**	*46*	**21.8**
3	Any other criteria	*34*	**10.69**	*27*	**14.29**	*61*	**12.03**	*26*	**9.92**	*35*	**14.29**	*11*	**5.76**	*50*	**15.82**	*6*	**26.09**	*12*	**20.69**	*14*	**11.97**	*21*	**9.95**
99	I don't know	*18*	**5.66**	*19*	**10.05**	*37*	**7.3**	*19*	**7.25**	*18*	**7.35**	*11*	**5.76**	*26*	**8.23**	*0*	**0**	*3*	**5.17**	*4*	**3.42**	*24*	**11.37**
G.1b	**Do you think that these criteria were fair?**																						
1	Yes	*130*	**69.52**	*71*	**71.72**	*201*	**70.28**	*114*	**76.51**	*87*	**63.5**	*74*	**81.32**	*127*	**65.13**	*16*	**84.21**	*34*	**75.56**	*58*	**77.33**	*79*	**67.52**
2	No	*57*	**30.48**	*28*	**28.28**	*85*	**29.72**	*35*	**23.49**	*50*	**36.5**	*17*	**18.68**	*68*	**34.87**	*3*	**15.79**	*11*	**24.44**	*17*	**22.67**	*38*	**32.48**
99	I don't know	*131*		*90*		*221*		*113*		*108*		*100*		*121*		*4*		*13*		*42*		*94*	
G.2	**Over past three years, have you learned anything new from the CARE project?**																						
1	Yes	*94*	**37.75**	*51*	**33.33**	*145*	**36.07**	*79*	**38.16**	*66*	**33.85**	*50*	**33.56**	*95*	**37.55**	*17*	**77.27**	*43*	**78.18**	*69*	**65.09**	*14*	**7.95**
2	No	*155*	**62.25**	*102*	**66.67**	*257*	**63.93**	*128*	**61.84**	*129*	**66.15**	*99*	**66.44**	*158*	**62.45**	*5*	**22.73**	*12*	**21.82**	*37*	**34.91**	*162*	**92.05**
99	I don't know	*69*		*36*		*105*		*55*		*50*		*42*		*63*		*1*		*3*		*11*		*35*	
G.3	**To what extent do you currently apply what you have learned?**																						
1	I apply everything I have learned	*25*	**26.88**	*17*	**33.33**	*42*	**29.17**	*24*	**30.77**	*18*	**27.27**	*13*	**26.53**	*29*	**30.53**	*7*	**41.18**	*14*	**32.56**	*15*	**22.06**	*6*	**42.86**
2	I apply most of what I have learned	*36*	**38.71**	*22*	**43.14**	*58*	**40.28**	*28*	**35.9**	*30*	**45.45**	*18*	**36.73**	*40*	**42.11**	*8*	**47.06**	*19*	**44.19**	*29*	**42.65**	*2*	**14.29**
3	I do not yet apply what I have learned, but plan to do so in the	*18*	**19.35**	*7*	**13.73**	*25*	**17.36**	*15*	**19.23**	*10*	**15.15**	*8*	**16.33**	*17*	**17.89**	*1*	**5.88**	*3*	**6.98**	*15*	**22.06**	*4*	**28.57**
4	I do not apply anything I have learned	*14*	**15.05**	*5*	**9.8**	*19*	**13.19**	*11*	**14.1**	*8*	**12.12**	*10*	**20.41**	*9*	**9.47**	*1*	**5.88**	*7*	**16.28**	*9*	**13.24**	*2*	**14.29**
99	I don't know	*225*		*138*		*363*		*184*		*179*		*142*		*221*		*6*		*15*		*49*		*197*	
G.4	**What are the reasons why you did not apply some of the things you have learned?**																						
1	I do not have the resources to implement the changes	*48*	**15.09**	*27*	**14.29**	*75*	**14.79**	*42*	**16.03**	*33*	**13.47**	*26*	**13.61**	*49*	**15.51**	*7*	**30.43**	*17*	**29.31**	*43*	**36.75**	*6*	**2.84**
2	I do not feel confident in applying new techniques	*3*	**0.94**	*2*	**1.06**	*5*	**0.99**	*1*	**0.38**	*4*	**1.63**	*4*	**2.09**	*1*	**0.32**	*1*	**4.35**	*1*	**1.72**	*1*	**0.85**	*1*	**0.47**
3	I do not want to put my livelihood at risk	*5*	**1.57**	*1*	**0.53**	*6*	**1.18**	*2*	**0.76**	*4*	**1.63**	*3*	**1.57**	*3*	**0.95**	*0*	**0**	*2*	**3.45**	*2*	**1.71**	*1*	**0.47**
4	I do not know who to contact if I have problems with the new t	*3*	**0.94**	*0*	**0**	*3*	**0.59**	*2*	**0.76**	*1*	**0.41**	*0*	**0**	*3*	**0.95**	*0*	**0**	*2*	**3.45**	*1*	**0.85**	*0*	**0**
5	I see no advantage in the new technique(s)	*4*	**1.26**	*2*	**1.06**	*6*	**1.18**	*2*	**0.76**	*4*	**1.63**	*4*	**2.09**	*2*	**0.63**	*1*	**4.35**	*2*	**3.45**	*3*	**2.56**	*0*	**0**
6	Other																						
G.5	**Do you think that the new techniques/strategies that you have learned are worth applying into the future?**																						
1	Yes, all of them	*41*	**45.05**	*31*	**62**	*72*	**51.06**	*36*	**46.15**	*36*	**57.14**	*24*	**50**	*48*	**51.61**	*11*	**73.33**	*17*	**40.48**	*32*	**47.06**	*11*	**78.57**
2	Yes, some of them	*46*	**50.55**	*18*	**36**	*64*	**45.39**	*37*	**47.44**	*27*	**42.86**	*19*	**39.58**	*45*	**48.39**	*4*	**26.67**	*22*	**52.38**	*34*	**50**	*3*	**21.43**
3	No	*4*	**4.4**	*1*	**2**	*5*	**3.55**	*5*	**6.41**	*0*	**0**	*5*	**10.42**	*0*	**0**	*0*	**0**	*3*	**7.14**	*2*	**2.94**	*0*	**0**
99	I don't know	*227*		*139*		*366*		*184*		*182*		*143*		*223*		*8*		*16*		*49*		*197*	
G.6	**Thinking of the most technique/strategy that is most important to you, do you think you will be able to apply it into the future?**																						
1	Yes, on my own	*39*	**43.33**	*27*	**57.45**	*66*	**48.18**	*34*	**45.33**	*32*	**51.61**	*19*	**40.43**	*47*	**52.22**	*8*	**50**	*20*	**51.28**	*26*	**40**	*11*	**73.33**
2	Yes, with support from others	*45*	**50**	*17*	**36.17**	*62*	**45.26**	*34*	**45.33**	*28*	**45.16**	*21*	**44.68**	*41*	**45.56**	*8*	**50**	*15*	**38.46**	*34*	**52.31**	*4*	**26.67**
3	No	*6*	**6.67**	*3*	**6.38**	*9*	**6.57**	*7*	**9.33**	*2*	**3.23**	*7*	**14.89**	*2*	**2.22**	*0*	**0**	*4*	**10.26**	*5*	**7.69**	*0*	**0**
99	I don't know	*228*		*142*		*370*		*187*		*183*		*144*		*226*		*7*		*19*		*52*		*196*	

C. Livelihood analysis charts

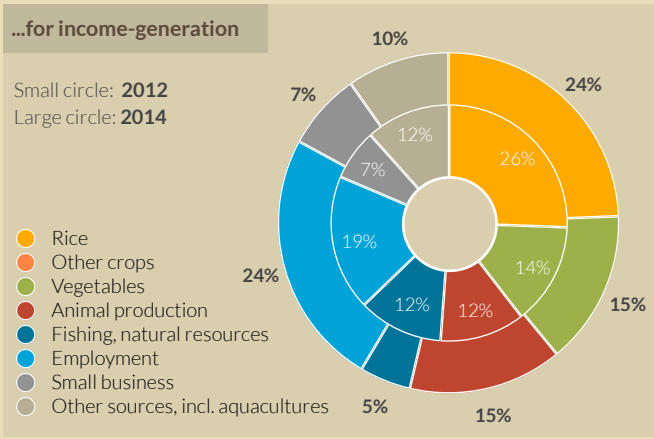
An Giang: Change by food/income source (2014 vs. 2012)

Soc Trang: Change by food/income source (2014 vs. 2012)

An Giang: Perceived roles of livelihood activities...

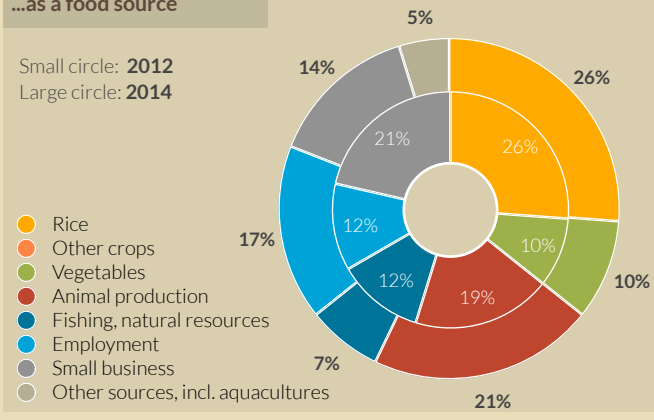
...for income-generation

Small circle: **2012**
Large circle: **2014**



...as a food source

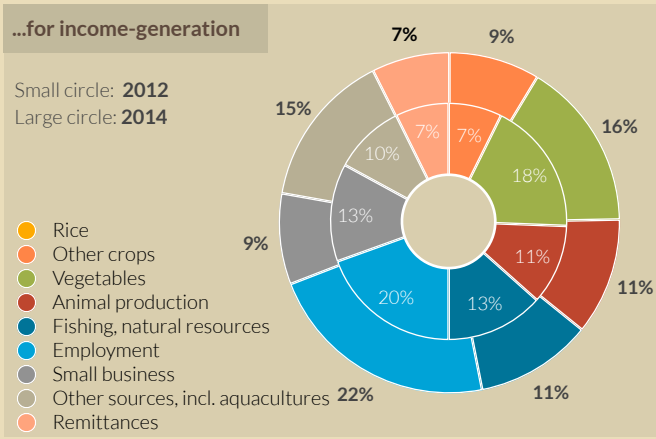
Small circle: **2012**
Large circle: **2014**



Soc Trang: Perceived roles of livelihood activities...

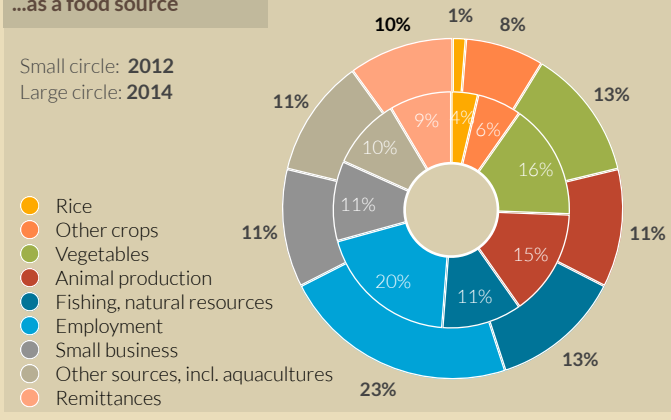
...for income-generation

Small circle: **2012**
Large circle: **2014**



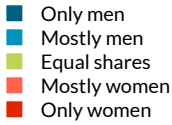
...as a food source

Small circle: **2012**
Large circle: **2014**

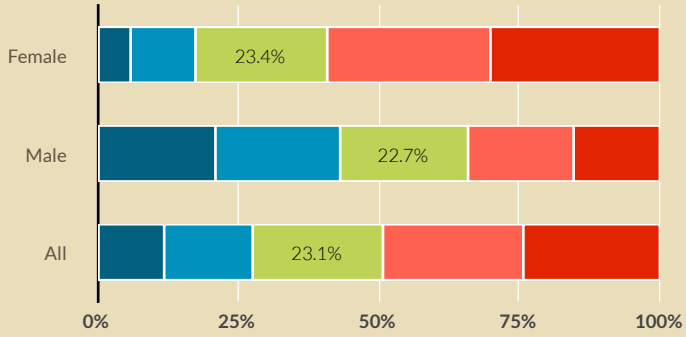


D. Gender analysis charts

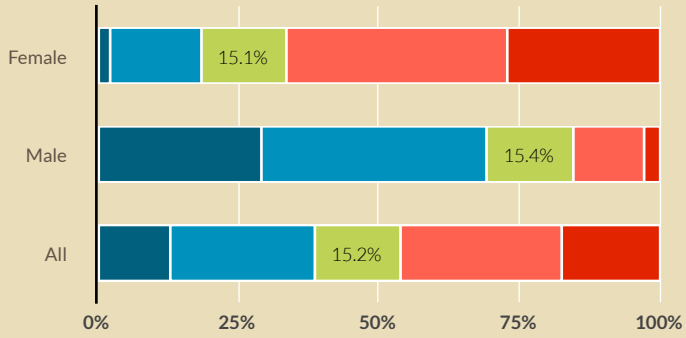
Household roles



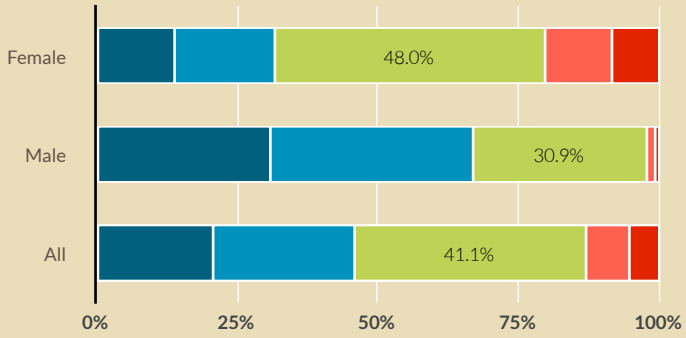
E.1.1 Who in your household decides what to do with family income?



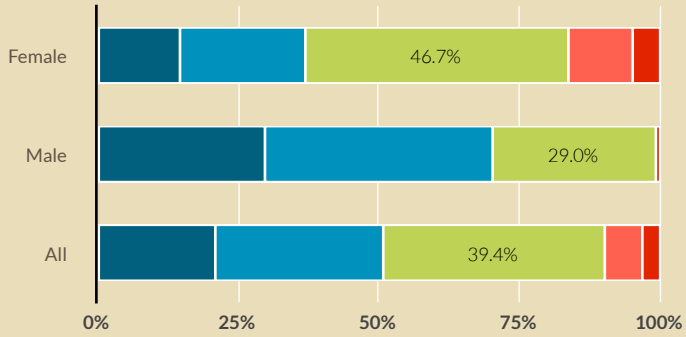
E.1.2 Who in your household attends meetings or activities in the village?



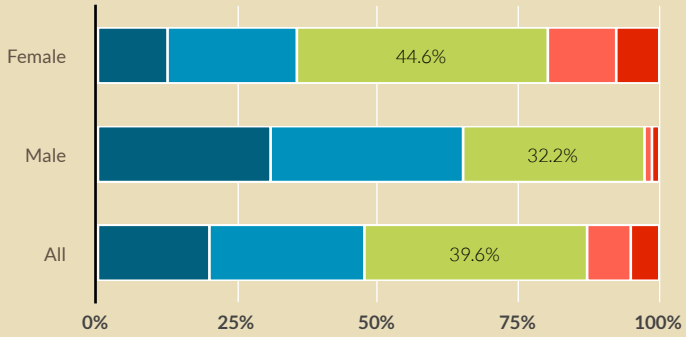
E.1.3 Who... decides what to plant, when and where (food crops)?



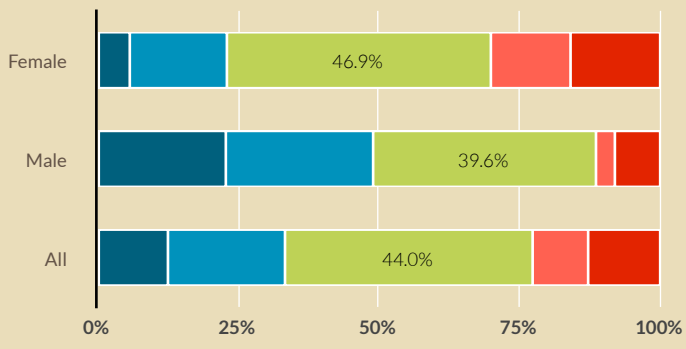
E.1.4 Who...decides what to plant, when and where (cash crops)?



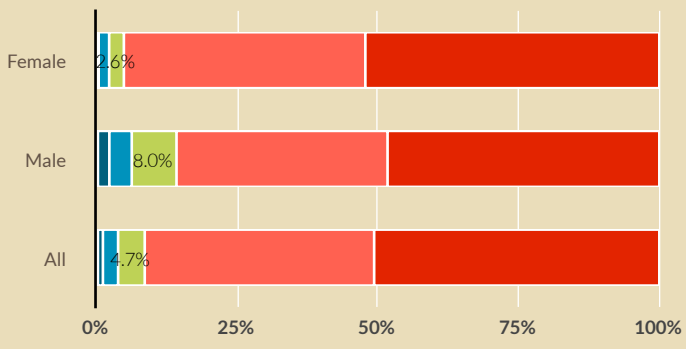
E.1.5 Who...decides on agricultural investments?



E.1.6 Who in your household prepares food?

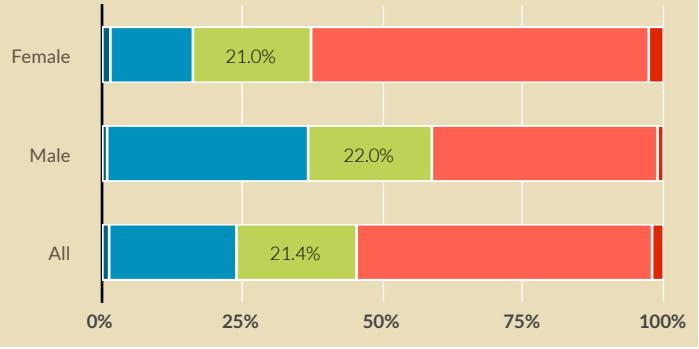


E.1.7 Who in your household cares for children?

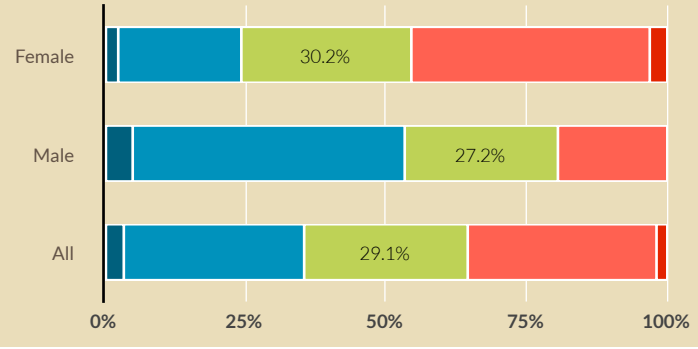


Community roles

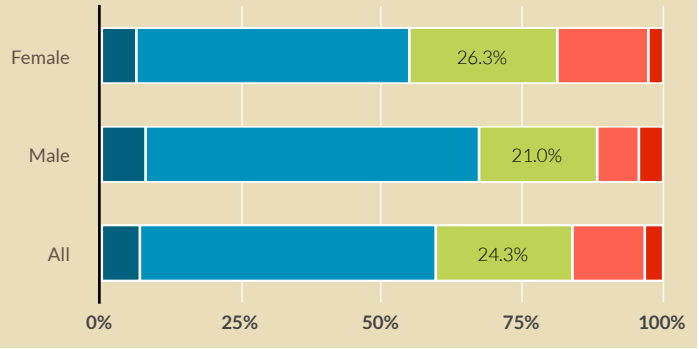
E.4.1 Who in your communitytakes part in village meetings?



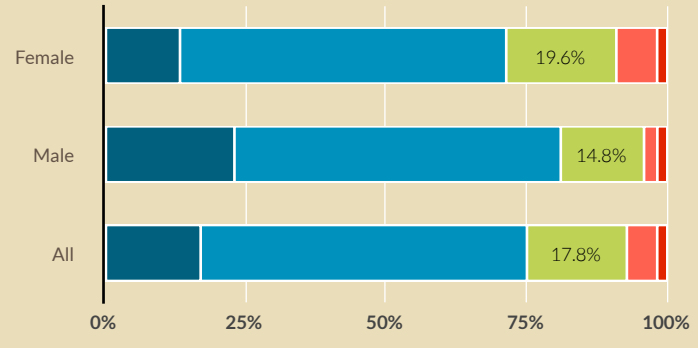
E.4.2 Who...speaks during village meetings?



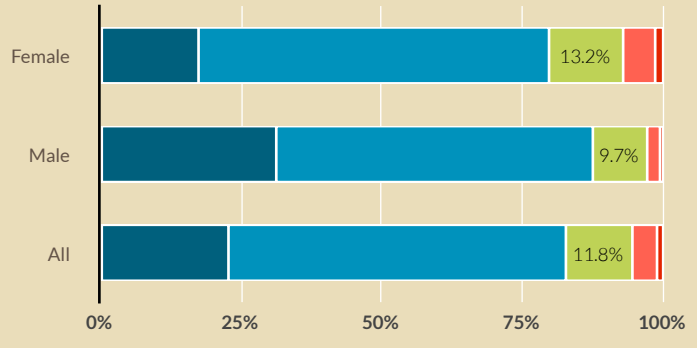
E.4.3 Who...influences decisions about village affairs?



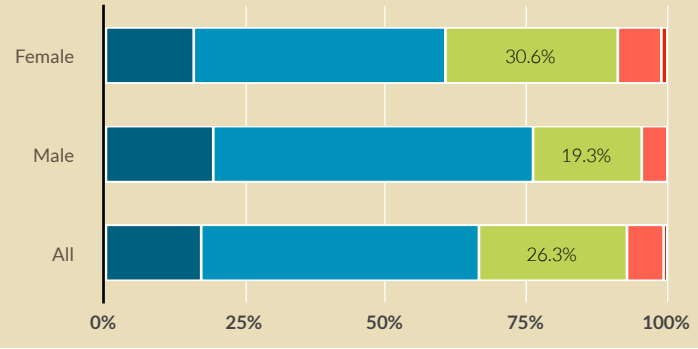
E.4.4 Who...makes decisions about village affairs?



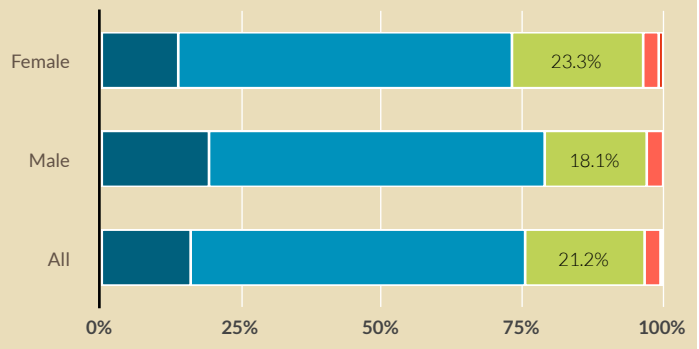
E.4.5 Who...represents the village vis-a-vis the government?



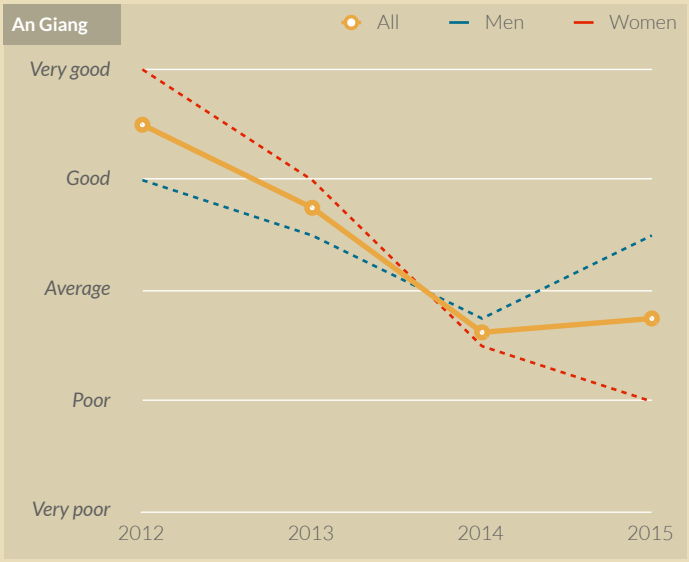
E.4.6 Who in your community controls village funds?

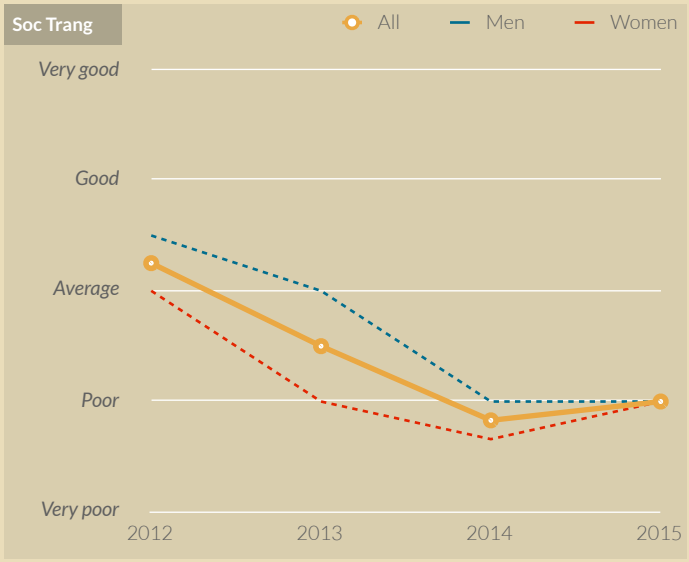


E.4.7 Who in your community conducts volunteer work?

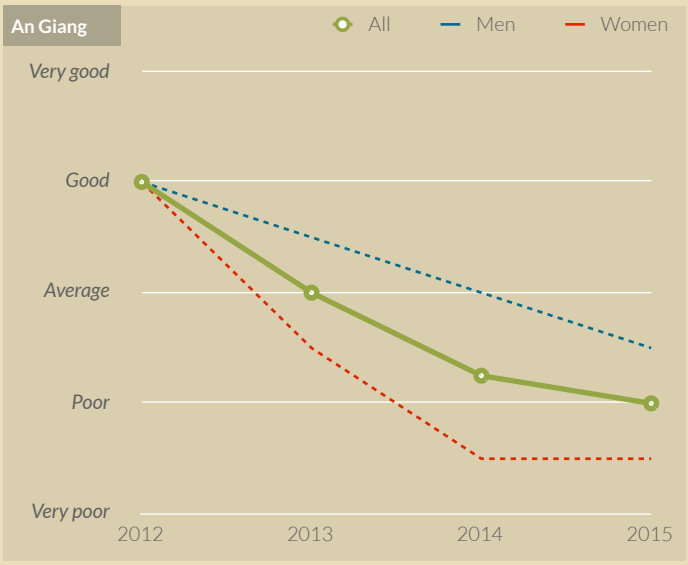


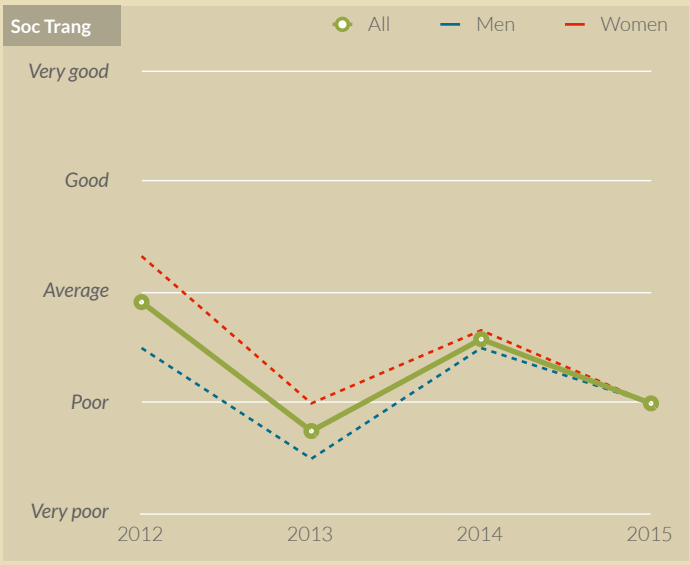
Crop cultivation



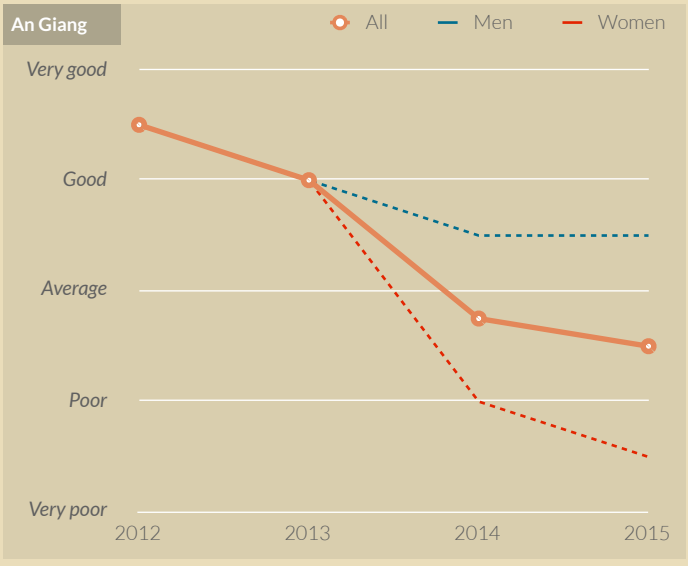


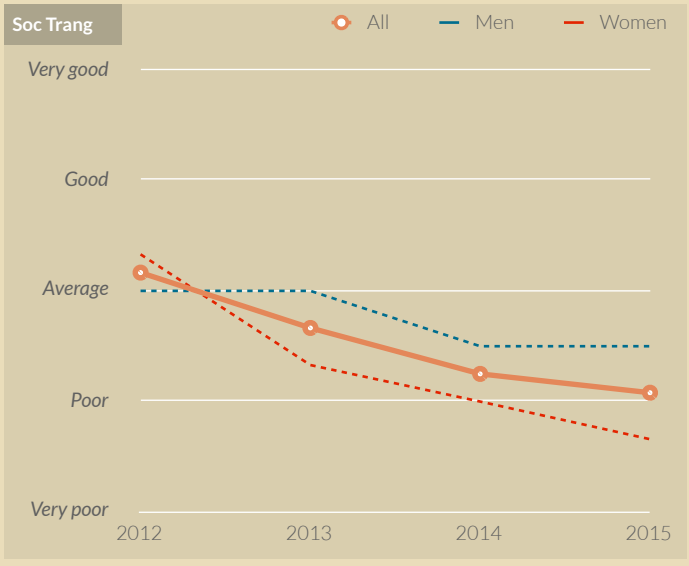
Animal production



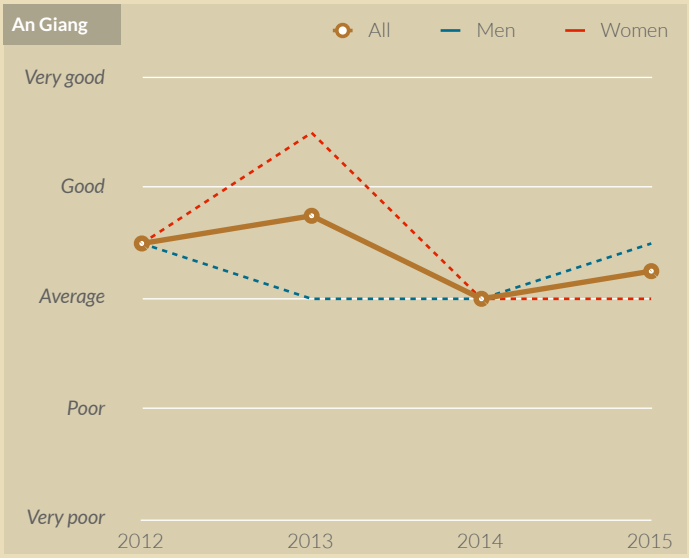


Food security

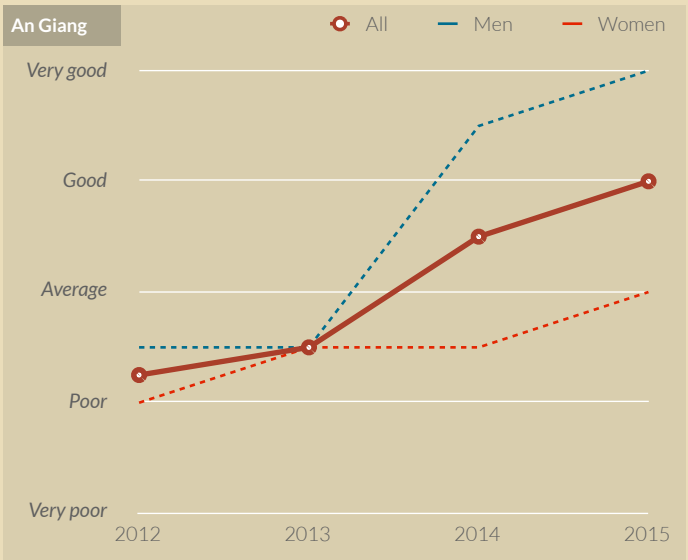




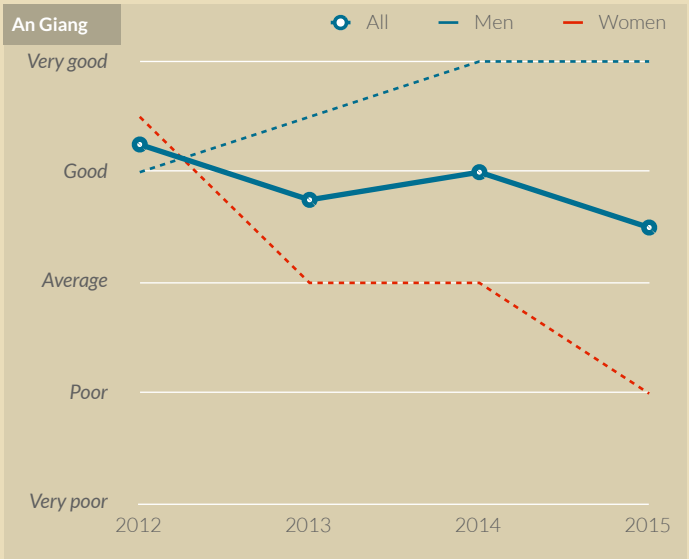
Income

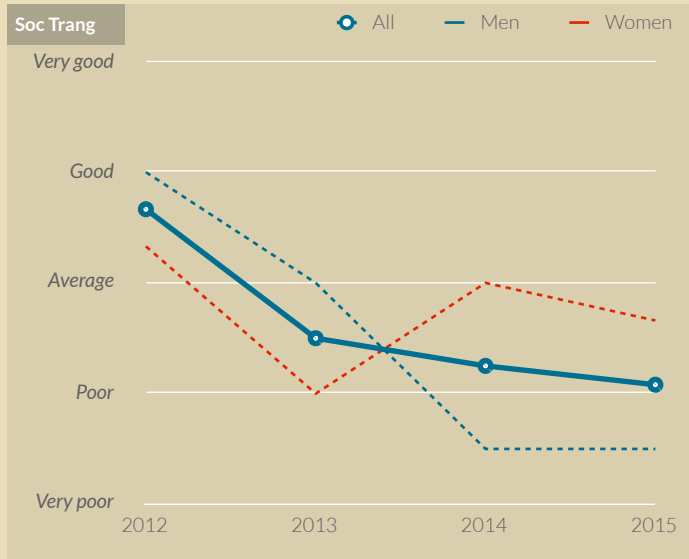


Access to finance

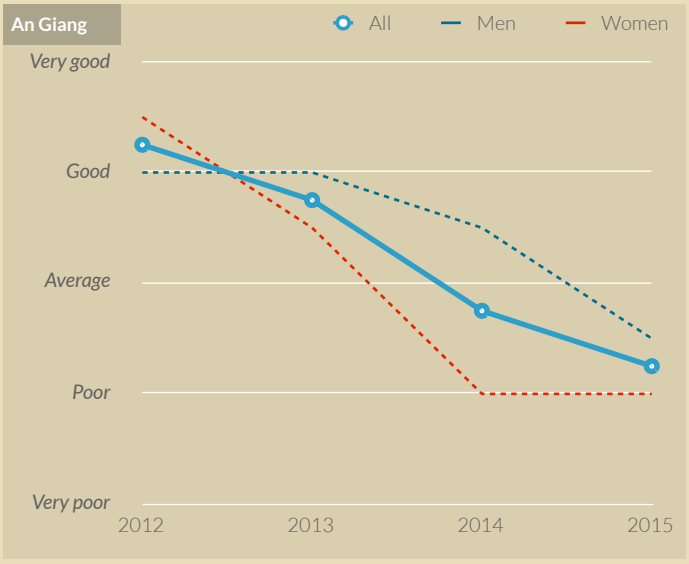


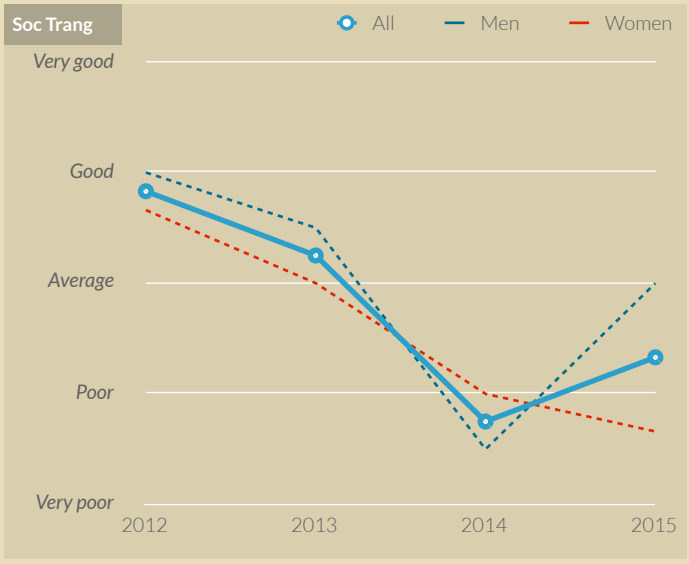
Water for agriculture



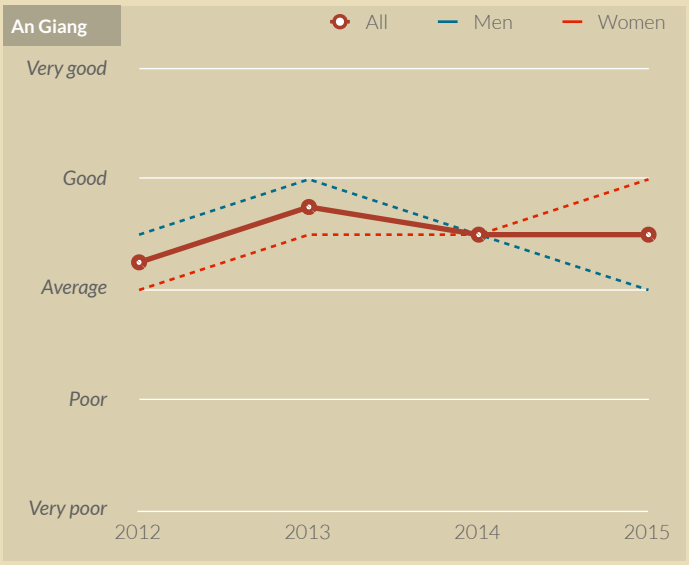


Health

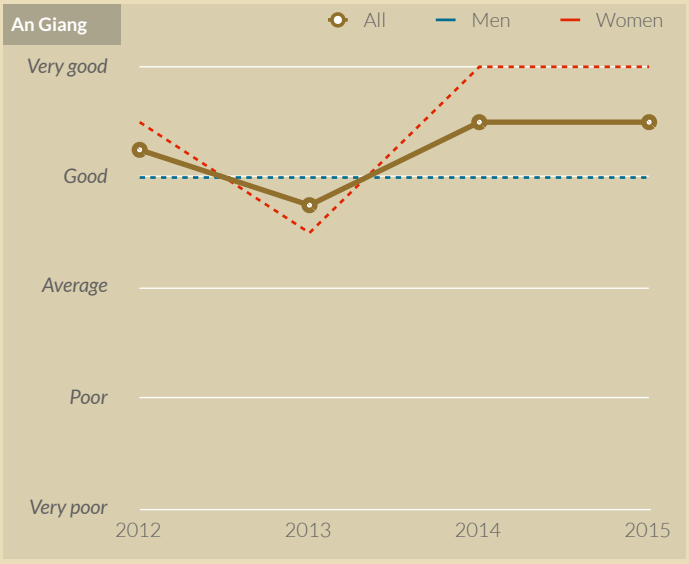


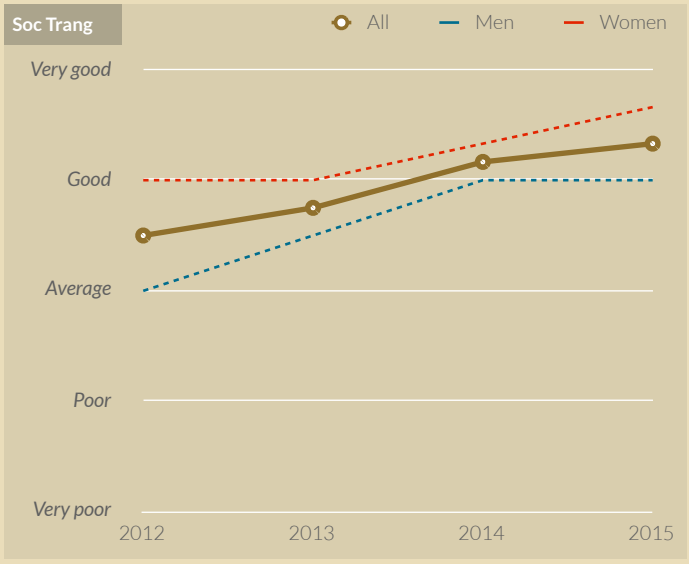


Disaster preparedness

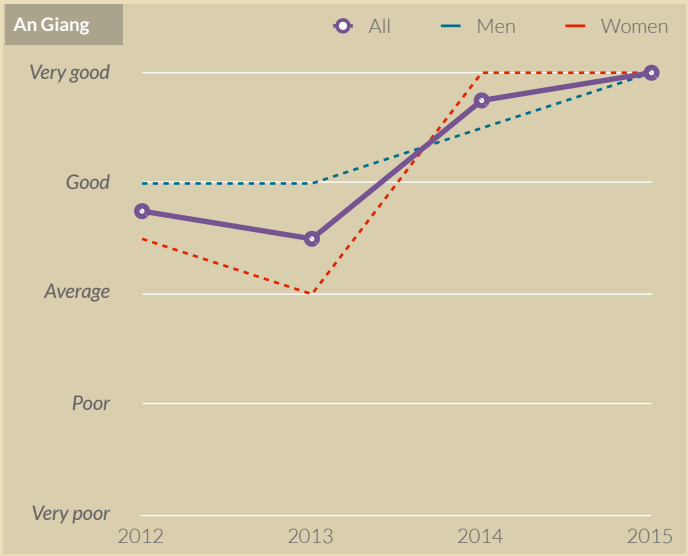


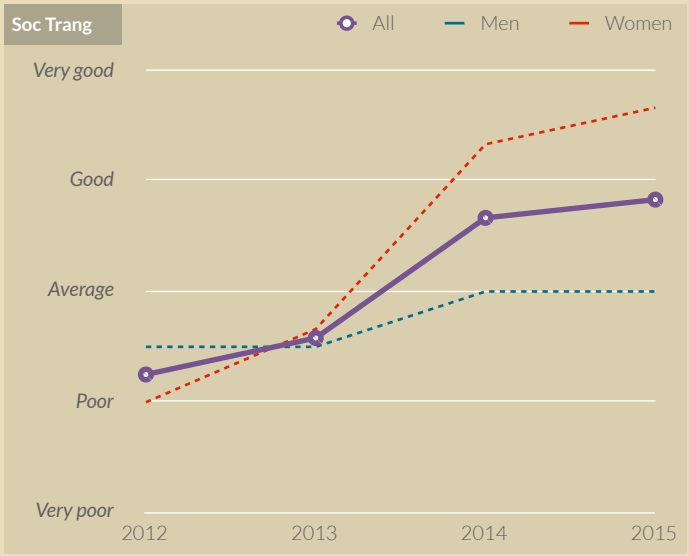
Community cohesion



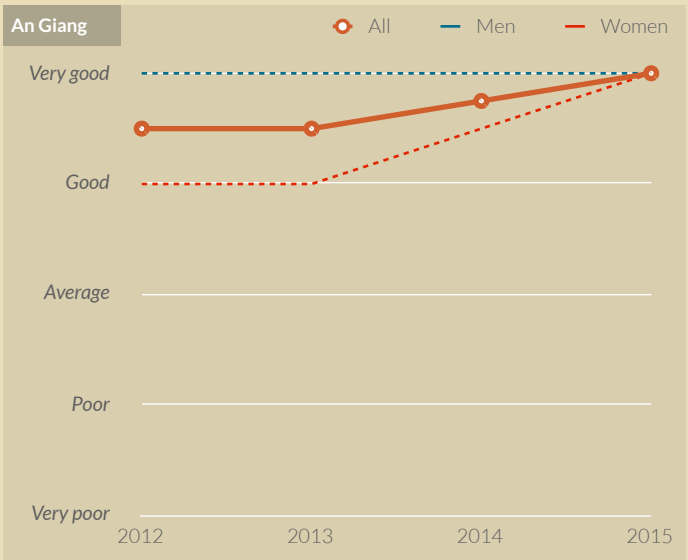


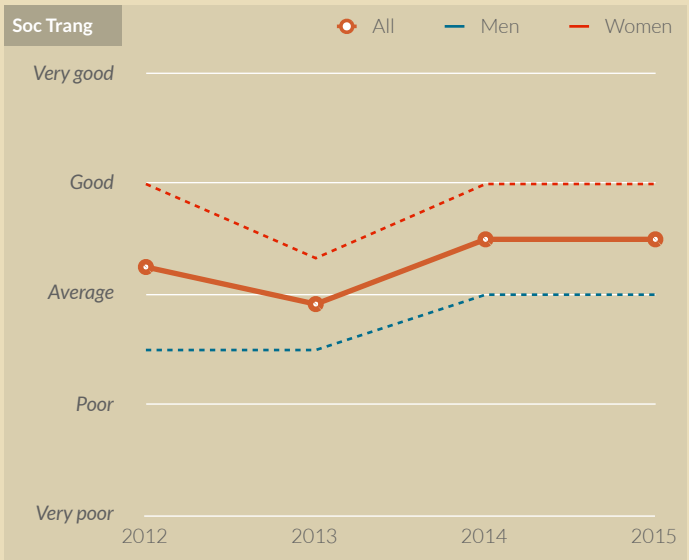
Women's involvement in village affairs





Links to local government





F.1 **Vinh Nghia** village-level results

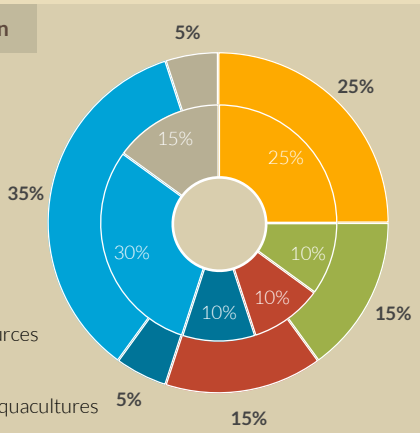
Women						
Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	5	3	1	1	-4	Rice failures, lower market prices for produce; drought
Animal production	5	2	1	1	-4	Drought and unpredictable weather, no enough food for buffalos
Food security	4	4	1	1	-3	Drought; loss of crop production due to conversion of agricultural land; lack of agricultural jobs; no or little food reserves
Income	2	5	3	4	+2	Income increased overall because of remittances from family members in cities
Access to finance	1	1	1	1	0	
Water for agriculture	4	2	3	2	-2	Lack of water due to long dry spells
Health	5	3	1	1	-4	Changes in weather patterns affect people's health negatively
Disaster preparedness	3	3	3	3	0	
Community cohesion	4	2	5	5	+1	People care for each other more than in the past
Women's involvement in village affairs	3	2	5	5	+2	Commune and hamlet leadership encourage women to take part in meetings
Links to local government	3	3	4	5	+2	Change of village leader, who is more proactive.

Men						
Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	5	3	2	2	-3	Lower market prices, less table weather, 'too much sunlight'
Animal production	5	4	3	2	-3	Many sellers pump water into animals before sale - buyers know this and thus pay lower prices
Food security	5	5	5	5	0	
Income	5	4	3	3	-2	Income still very variable since it is based on animal production and crop cultivation
Access to finance	2	2	5	5	+3	Multiple sources (Agriculture bank, Women's Union, Farmers Union etc) for loans
Water for agriculture	5	5	5	5	0	
Health	5	5	4	4	-1	More diseases due to 'unstable weather'
Disaster preparedness	4	5	5	5	+1	Access to finance
Community cohesion	3	3	3	3	0	
Women's involvement in village affairs	5	5	5	5	0	
Links to local government	5	5	5	5	0	

Perceived roles of livelihood activities...

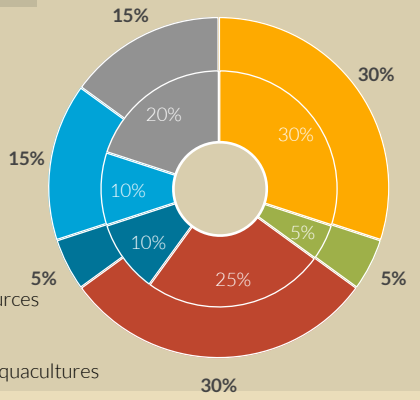
...for income-generation

Small circle: **2012**
Large circle: **2014**

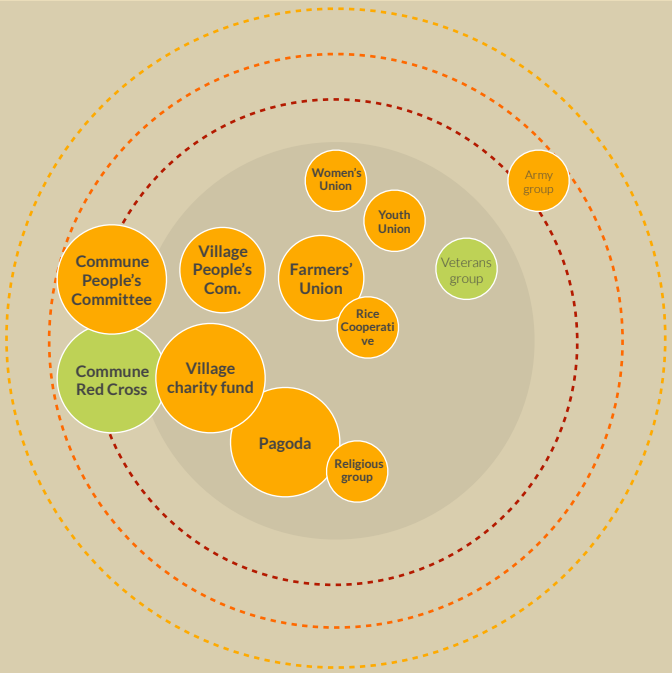


...as a food source

Small circle: **2012**
Large circle: **2014**



Community mapping



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Women: Hazard and coping strategy analysis

Year	Hazard	% affected	Human losses, injuries	Damage to infrastructure and houses	Damage, losses in agricultural production	Coping strategy: What did the villagers do to compensate for the losses?	Recovery: How many months did it take to recover to pre-hazard levels?	Hypothetical 1: If the same hazard happened again, would the losses be the same, more, or less than in the past? Why?	Hypothetical 2: If the same hazard happened again, would the coping strategy be the same or different?
2015	**Drought**	**25%**	**none**	**none**	**50% of crops**	Waiting for instructions from DoNRE	n.a.	Less losses expected as people begin to adapt (fruits trees, greater variety of crops)	It would be the same.
2014	Storm	5%	none	1 house damaged					
2010	Storm	1%	none	some houses damaged					

Men: Hazard and coping strategy analysis

Year	Hazard	% affected	Human losses, injuries	Damage to infrastructure and houses	Damage, losses in agricultural production	Coping strategy: What did the villagers do to compensate for the losses?	Recovery: How many months did it take to recover to pre-hazard levels?	Hypothetical 1: If the same hazard happened again, would the losses be the same, more, or less than in the past? Why?	Hypothetical 2: If the same hazard happened again, would the coping strategy be the same or different?
2015	Drought	50%	none	none	50%	Food relief from government and society; joint community efforts to rebuild road; Red Cross supports reconstruction of houses	Four months	Fewer households will be affected due to higher dams - but the damage will now be greater (more valuable contents)	In the past, we didn't prepare. Now, we have reinforced embankments, preparedness teams and evacuation routes
2014	Drought	40%	none	none	30%				
2006	**Flood**	**90%**	**none**	**Embankments and roads damaged. Some houses collapsed**	**70%**				

F.2 Ha Bao II village-level results

Women

Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	5	5	4	3	-2	Generally high productivity but decreasing price, as well as hot weather damaging vegetables in 2015
Animal production	3	3	2	2	-1	Growing prevalence of chicken diseases over the past two years, in particular during seasonal changes
Food security	5	4	3	2	-3	Drought and other factors above reduce available food; lack of other income. Many seeds did not germinate during the drought/heat
Income	5	4	3	2	-3	The drought damaged cultivation. No jobs. Cannot sell enough produce.
Access to finance	3	4	4	5	+2	In 2015, it is now easy to get loans because many programs offer loans for the poor (for toilets, business, Women's Union and others)
Water for agriculture	5	4	3	2	-3	Due to the drought, lack of water for irrigation
Health	4	4	3	3	-1	During seasonal changes, people are more exposed to diseases (fever, headache, cough)
Disaster preparedness	3	4	4	5	+2	Women's Union/ICAM trained people to cover their skin when they go out and to plant more trees.
Community cohesion	5	5	5	5	0	We hold together - no discrimination against Khmer and Cham.
Women's involvement in village affairs	4	4	5	5	+1	Women's Union encouraged women to get involved in the community
Links to local government	5	5	5	5	0	Government takes good care of the villagers

Men

Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	3	4	3.5	5	+2	Overall good weather conditions. 2012: pest and water shortages while canal system was upgraded. Overall, situation in 2015 better than in 2012
Animal production	3	3	3	3	0	
Food security	4	3	2	2	-2	Reduced water flow in river - which means lower amount of fish catch
Income	2	2	3	4	+2	More and more young villagers go to work in cities and send remittances
Access to finance	3	3	4	5	+2	Multiple sources of finance for poor. Some poor households also received buffalos
Water for agriculture	3	4	5	5	+2	Since the upgrade of the irrigation system, water availability has increased. But during dry spells, paddies far from the water pump still do not have enough water
Health	3	3	3	1	-2	Hot weather is seen as reason for more diseases, especially amongst children and elderly
Disaster preparedness	3	3	2	1	-2	After flood in 2011, the villagers upgraded the embankment. Since the new highway in 2014, which offers better connections, the villagers do not worry about floods and are less proactive.
Community cohesion	5	5	5	5	0	
Women's involvement in village affairs	3	3	4	5	+2	Women are now more involved. No reason provided.
Links to local government	5	5	5	5	0	

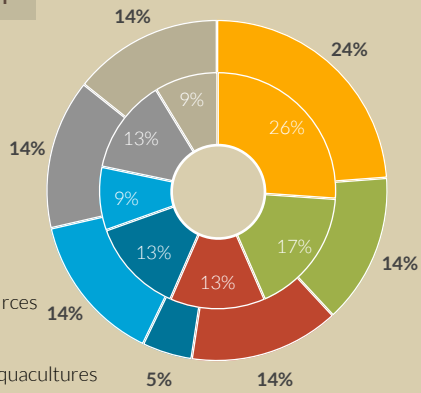
Women: Hazard and coping strategy analysis

Year	Hazard	% affected	Human losses, injuries	Damage to infrastructure and houses	Damage, losses in agricultural production	Coping strategy: What did the villagers do to compensate for the losses?	Recovery: How many months did it take to recover to pre-hazard levels?	Hypothetical 1: If the same hazard happened again, would the losses be the same, more, or less than in the past? Why?	Hypothetical 2: If the same hazard happened again, would the coping strategy be the same or different?
2015	Drought	70%	0	0	50%	We are planting more trees to have more shade. We wear more long-sleeve shirts (to protect the skin). More water pumping onto rice fields (but there is not enough).	Still ongoing - no recovery.	The losses are expected to be more serious due to increasing lack of water and lack of buffers.	We don't know how to cope and recover better.
2014	Drought	70%	0	0	50%				
2014	Storm	60%	0	many houses damaged	50%				
2013	Storm	50%	0	many houses damaged	60%	Elevation of houses where possible (to reduce flood risk) and reinforcement of roofs with steel wires.	One week to rebuild houses. One year to recover from livelihood losses.	Damage will be increased (as there is now more to loose), and there will be more storms.	
2006	Whirlwind	60%	0	houses collapsed	70%				
2005	Storm	70%	0	roofs blown away	70%				

Perceived roles of livelihood activities...

...for income-generation

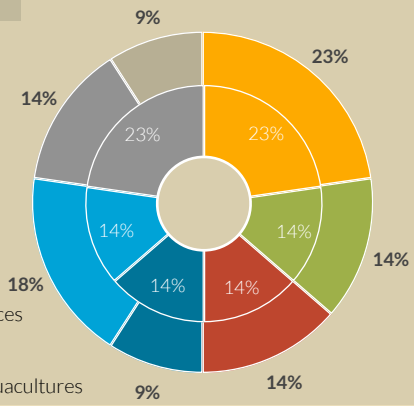
Small circle: **2012**
Large circle: **2014**



- Rice
- Other crops
- Vegetables
- Animal production
- Fishing, natural resources
- Employment
- Small business
- Other sources, incl. aquacultures

...as a food source

Small circle: **2012**
Large circle: **2014**



- Rice
- Other crops
- Vegetables
- Animal production
- Fishing, natural resources
- Employment
- Small business
- Other sources, incl. aquacultures

Community mapping

Key: The shaded **large central circle** represents the community, while the **dotted outer rings** indicate the strength of links to external actors.

The **size of the the actor circles** indicates perceived importance (the bigger, the more important), while the **colour** illustrates change (green: more important now; yellow: no change; red: less important now).

F.3 **Bien Tren** village-level results

Women						
Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	5	2	2	3	-2	We cultivate less vegetable. High costs to power the water/irrigation pump
Animal production	2	3	5	2	0	Prices fluctuate (very low in 2012). In 2015, many animals died from diseases
Food security	5	2	3	2	-3	Many sources of crops and vegetables fail - negative indirect impact on animal production
Income	5	2	3	3	-2	Due to cultivation losses and animal deaths; difficult to find alternative jobs
Access to finance	1	1	5	5	+4	Women's Union and Agricultural Development Bank provide more loans
Drinking water	5	5	3	3	-2	In 2012-13, we drank rainwater. But then we learned from the TV that rainwater is unhealthy - so now we drink bottled water
Water for agriculture	2	2	5	5	+3	More wells available after government support.
Health	4	4	3	2	-2	Because of more sunlight and hotter days, our health is negatively affected
Disaster preparedness	2	4	4	4	+2	We learned from TV how to reinforce our houses and are also warned ahead of storms
Community cohesion	5	5	5	5	0	It is in our tradition to support each other and hold together
Women's involvement in village affairs	2	2	5	5	+3	Due to Women's Union. In the past, we didn't receive any money for attending meetings. But now we receive VND 50,000 when attending meetings
Links to local government	5	5	5	5	0	The local government understands and supports us well.

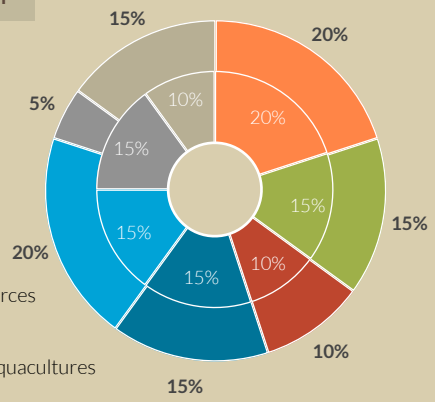
Women: Hazard and coping strategy analysis

Year	**Hazard**	**% affected**	**Human losses, injuries**	**Damage to infrastructure and houses**	**Damage, losses in agricultural production**	**Coping strategy:** What did the villagers do to compensate for the losses?	**Recovery:** How many months did it take to recover to pre-hazard levels?	**Hypothetical 1:** If the same hazard happened again, would the losses be the same, more, or less than in the past? Why?	**Hypothetical 2:** If the same hazard happened again, would the coping strategy be the same or different?
2015	Drought	80%	0	0	70%	Drought still ongoing, casual labour	Not yet recovered	There will be the greater losses as there will be even more to lose	No
2014	Storm	0	0	0	0				
2012	Whirlwind	20%	0	10%	0	We evacuated to the commune. No compensation	One year	Less damage because we have reinforced our houses	No
2012	Strong rain	80%	0	70%	100%	We waited for the water to recede.	Three months	Less damage because we have new rainwater drainages	No

Perceived roles of livelihood activities...

...for income-generation

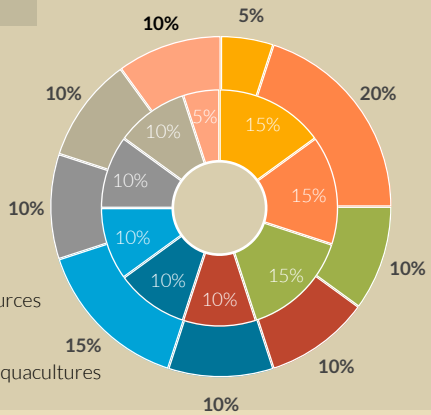
Small circle: **2012**
Large circle: **2014**



- Rice
- Other crops
- Vegetables
- Animal production
- Fishing, natural resources
- Employment
- Small business
- Other sources, incl. aquacultures
- Remittances

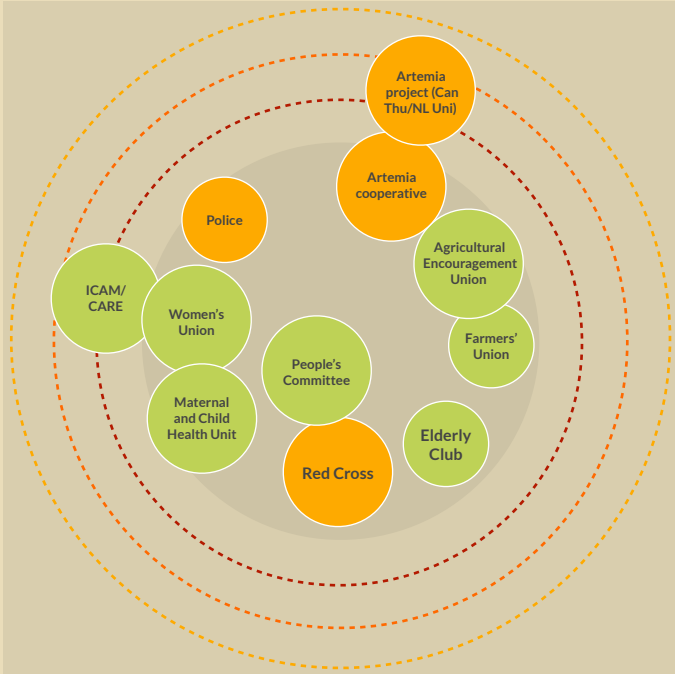
...as a food source

Small circle: **2012**
Large circle: **2014**



- Rice
- Other crops
- Vegetables
- Animal production
- Fishing, natural resources
- Employment
- Small business
- Other sources, incl. aquacultures
- Remittances

Community mapping



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F.4 **No Puol** village-level results

Women

Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	3	1	2	1	-2	Lower prices for main produce, unstable weather, lack of rain in 2015
Animal production	4	2	1	1	-3	Good conditions in 2012. Since 2013, many shrimps and chickens died. Hotter weather suspected as one reason.
Food security	2	3	2	2	0	We are poor and often do not have enough food to eat. We get some remittances to get by.
Income	3	2	3	3	0	As above. Nowadays we do more work as casual labourers in the city.
Access to finance	3	2	5	3	0	2014: some households got loans or assets (pigs) from the Women's Union and from banks
Drinking water	2	5	5	5	+3	We now have tap water, and it is cheap.
Water for agriculture	3	2	2	2	-1	In 2012 there was enough water. Now we have drought, and there is not enough water around. Some households have wells and tanks - difficult for those without tanks
Health	4	3	2	2	-2	Hotter weather leads to more diseases and exhaustion
Disaster preparedness	3	1	1	2	-1	Disasters are more frequent. We do not know how to prepare for them.
Community cohesion	5	5	5	5	0	Very good - poor people support each other in this village
Women's involvement in village affairs	3	5	5	5	+2	Women's Union has invited us many times. Men leave to work, women participate in the community
Links to local government	4	2	3	3	-1	Official procedures are getting more complex and difficult to understand. Many members of ethnic minority groups cannot read Vietnamese documents.

Men

Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	5	1	1	1	-4	High prices for onion, longan in 2012, then collapse of price and low yield
Animal production	4	1	1	2	-2	(Shrimps only): 2013 disaster severely damaged ponds; slow recovery; many shrimps die. 2015: slightly higher prices for shrimps
Food security	3	1	2	1	-2	2012: with lots of work at shrimp farms, enough income to buy food. But since the 2013 disaster, many shrimp farmers closed, and people lost their jobs - no alternatives yet
Income	3	2	2	1	-2	Back in 2012, we had enough for the family. But since 2013, we haven't - no more family celebrations because of lack of funds.
Access to finance	2	2	2	2	0	People can borrow many times, but many poor households never get micro-finance. WU has a program (ICAM) with pigs but poor households don't get this, only those with good links to the WU. Some non-poor households also get pigs
Drinking water	4	4	4	4	0	We use tap water, there are no problems
Water for agriculture	3	3	1	1	-2	Ground water ok up to 2013; declining ground water since 2014 - this requires that we deepen our wells
Health	3	3	1	4	+1	Spike in diarrhoea cases in 2014
Disaster preparedness	2	2	2	2	0	We are affected by many typhoons; roofs blow away. Yet, we are little prepared, and there is no support from agencies. We would need training and evacuation systems
Community cohesion	3	3	3	3	0	The poor and the rich do not help each other. Poor people however know and support each other.
Women's involvement in village affairs	2	2	2	2	0	Women's Union doesn't encourage or educate households, drive empowerment, or improve activities related to women.
Links to local government	2	2	2	2	0	We had proposals and shared them with the government (water, power issues), but the government has not responded. We don't know about the links between the rich and the government.

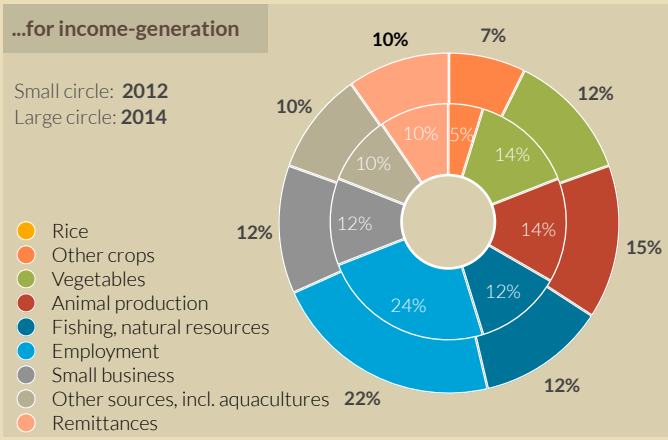
Women: Hazard and coping strategy analysis

Year	Hazard	% affected	Human losses, injuries	Damage to infrastructure and houses	Damage, losses in agricultural production	**Coping strategy:** What did the villagers do to compensate for the losses?	**Recovery:** How many months did it take to recover to pre-hazard levels?	**Hypothetical 1:** If the same hazard happened again, would the losses be the same, more, or less than in the past? Why?	**Hypothetical 2:** If the same hazard happened again, would the coping strategy be the same or different?
2015	Drought	70%	0	0	All shrimps farms affected (about 50% of HHs involved in shrimp farming)	Upgrades to shrimp ponds. Also, people deepen wells to get more water for agriculture	One month recovery for onion	More losses likely because the people here already lost lots of capital (less buffers). We need to continuously deepen the wells.	No solution.
2014	Tornado	30%	3 injured	Roofs of several houses blown away	0%	Temporary house fixes	One month for rich people, one year for poor people	Less damage likely because people reinforced their houses	No solution.
2014	Drought	70%	0	0	80%	Upgrade to ponds, exchange of water	2 months	More losses (see above)	No solution.
2013	Heavy rain	100%	0	0	100%	None	5 months	No change	No solution.
1997	Typhoon	100%	0	100 houses destroyed	100%	Back then, there had been no warning at all - so the damage was substantial. This meant also that people took longer to recover.	Two years to rebuild houses. Back then, we also grew rice here - it took six months to recover paddies	Less damage - stronger houses. Warning system in place	Reinforced houses.

Perceived roles of livelihood activities...

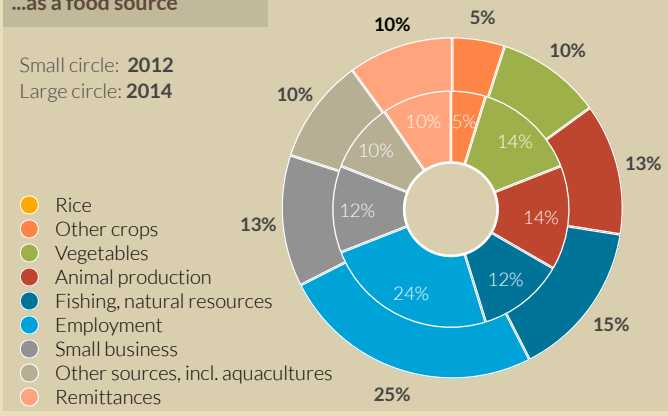
...for income-generation

Small circle: **2012**
Large circle: **2014**

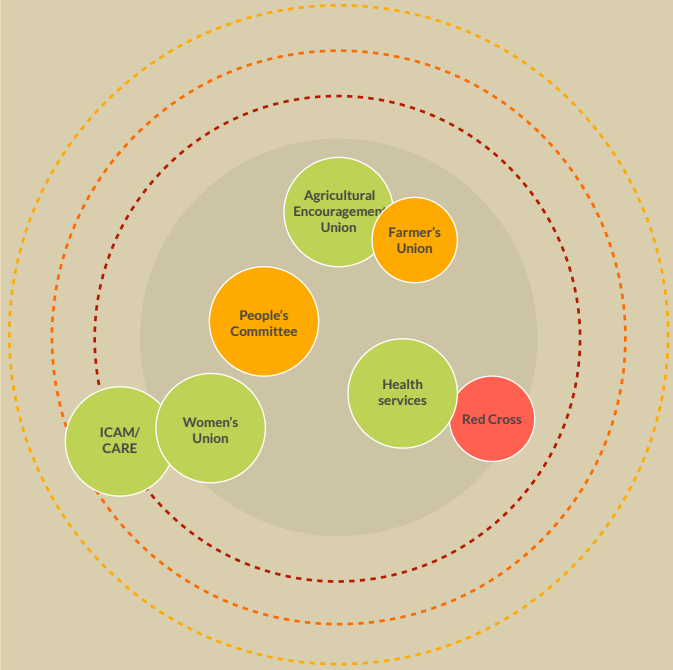


...as a food source

Small circle: **2012**
Large circle: **2014**



Community mapping



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F.5 **No Thum** village-level results

Women						
Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	1	3	1	2	+1	2012 and 2014: major crop losses. 2015: higher price for chili
Animal production	4	1	2	3	-1	Shrimps: very sensitive; die in hotter weather. Other animal diseases have major impacts on pigs and chicken.
Food security	3	2	1	1	-2	We grow food but nobody comes to buy. Some 26% poor in 2015, some have not enough rice to eat. Some receive remittances, Some moved to the cities to find jobs -but difficult there too.
Income	3	2	2	2	-1	Nobody hires us. Most only make 80,000 VND/day. There were better jobs in 2012.
Access to finance	3	2	2	2	-1	It was easier to borrow in 2012. Now we don't make enough money to pay loans off. Women's Union gave VND 5 million to 10-20 households. We don't know the selection criteria.
Drinking water	2	2	3	3	+1	Some households now have tap water, however, tap water is smelly.
Water for agriculture	5	2	2	1	-4	In 2012 we could pump water. But now there is no water for trees/crops. Maybe hotter weather at fault. Water is also salty now in lakes and rivers.
Health	3	2	1	1	-2	
Disaster preparedness	1	2	2	4	+3	We are better prepared and are warned by TV if there is a storm. Last year, ICAM came and taught us how to prepare.
Community cohesion	2	2	3	4	+2	Slightly improved - but there is not so much help between the rich and the poor in the village. Rich people do not lend money to the poor, fearing that loans cannot be repaid.
Women's involvement in village affairs	1	1	3	4	+3	The Women's Union invited us more to attend meetings (on hygiene, childcare, energy-saving)
Links to local government	3	3	4	4	+1	

Men						
Aspect	2012	2013	2014	2015	Trend	Underlying reasons for trends
Crop and vegetable production	2	5	3	3	+1	Good harvests, especially of onions, in 2013 and 2014. 2015 saw weather-related loss of 50% of harvest - but higher prices compensated for this loss.
Animal production	1	2	4	2	+1	Shrimp production increased, boom in 2014. 2015 has been not too well thus far.
Food security	3	5	3	4	+1	Increased income (higher chili price mentioned) - greater ability to buy food.
Income	2	5	4	4	+2	More and better jobs available compared to 2012, good prices for produce
Access to finance	3	4	4	5	+2	Many organizations lend money, easier procedures and wider eligibility than in the past
Drinking water	1	3	5	5	+4	Clean water now provided through piping system
Water for agriculture	5	3	2	2	-3	In 2012 not many households had wells and there was enough groundwater. Now there are many wells but less groundwater
Health	5	4	2	2	-3	Greater use of pesticides impacts our health. Hot weather. More diseases
Disaster preparedness	1	2	3	4	+3	Two workshops through ICAM. We now have sturdier houses and are better prepared than in 2012
Community cohesion	3	4	5	5	+2	We cooperate well because there are many activities from organizations. The sense of community has improved.
Women's involvement in village affairs	3	3	4	4	+1	
Links to local government	3	3	4	4	+1	Improved support, easier to work with, better understanding of official procedures

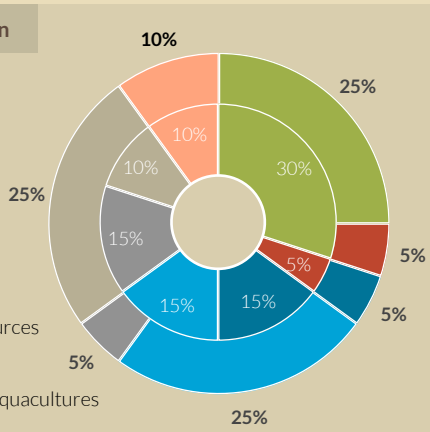
Women: Hazard and coping strategy analysis

Year	**Hazard**	**% affected**	**Human losses, injuries**	**Damage to infrastructure and houses**	**Damage, losses in agricultural production**	**Coping strategy:** What did the villagers do to compensate for the losses?	**Recovery:** How many months did it take to recover to pre-hazard levels?	**Hypothetical 1:** If the same hazard happened again, would the losses be the same, more, or less than in the past? Why?	**Hypothetical 2:** If the same hazard happened again, would the coping strategy be the same or different?
2015	Drought	50%	30 people with diseases	Some house material damaged "due to greater heat"	90% of shrimps lost	Keep children inside, more food and water; no strategy for shrimps production	Two months if sunny; if it starts to rain, we cannot determine a recovery	Unchanged	No solution
2012-2014	Floods	40%	none		100% of shrimps	Higher embankment at coast line	1 year	Unchanged	No solution
1997	Typhoon	10%	none	Houses collapsed	70%	No solution	1 week for housing repairs (very simple back then)	Less damage, because houses stronger today, and early warning	We would reinforce houses if we receive early warning

Perceived roles of livelihood activities...

...for income-generation

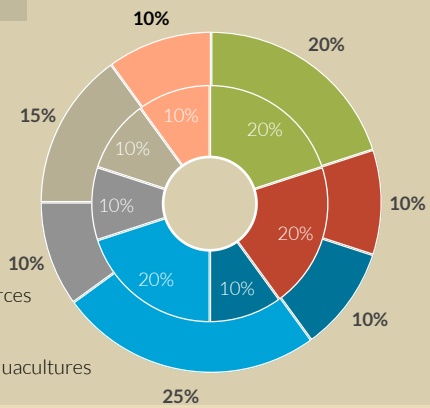
Small circle: **2012**
Large circle: **2014**



- Rice
- Other crops
- Vegetables
- Animal production
- Fishing, natural resources
- Employment
- Small business
- Other sources, incl. aquacultures
- Remittances

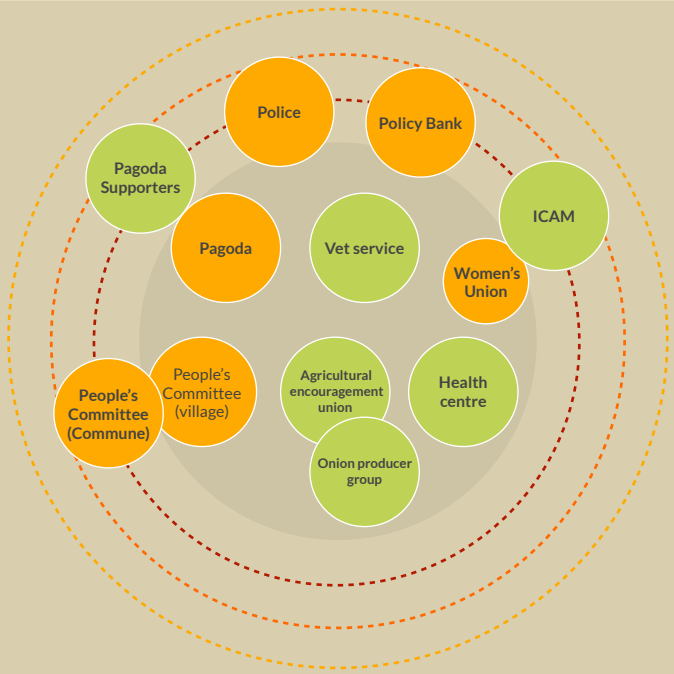
...as a food source

Small circle: **2012**
Large circle: **2014**



- Rice
- Other crops
- Vegetables
- Animal production
- Fishing, natural resources
- Employment
- Small business
- Other sources, incl. aquacultures
- Remittances

Community mapping



Key: The shaded **large central circle** represents the community, while the **dotted outer rings** indicate the strength of links to external actors.

The **size of the the actor circles** indicates perceived importance (the bigger, the more important), while the **colour** illustrates change (green: more important now; yellow: no change; red: less important now).

PHIẾU KHẢO SÁT HỘ GIA ĐÌNH	**SỐ THỨ TỰ** (ĐIỀU TRA VIÊN KHÔNG TỰ ĐIỀN VÀO) **:** ____
ĐÁNH GIÁ CUỐI KÌ DỰ ÁN ICAM	**Lưu ý:** *Những câu hỏi in nghiêng/gạch chân* được chọn nhiều đáp án

PART O | XÁC ĐỊNH - IDENTIFICATION

0.1 In đậm câu hỏi bằng tiếng địa phương và câu hỏi bằng tiếng Anh đánh bên dưới.
Mã số điều tra viên của anh/chị? What is your enumerator code?

A ☐	D ☐	G ☐	K ☐
B ☐	E ☐	H ☐	L ☐
C ☐	F ☐	J ☐	M ☐

0.2	*Phỏng vấn đang thực hiện tại ấp nào?*	*In which village is this interview being conducted?*	
1)	**Hà Bao II** (A.1.2 – An Giang)	**Hà Bao II** (A.1.2 – An Giang)	☐
2)	**Vĩnh Nghĩa** (A.2.2 – An Giang)	**Vĩnh Nghĩa** (A.2.2 – An Giang)	☐
3)	**Vĩnh Bình** (A.2.3 – An Giang)	**Vĩnh Bình** (A.2.3 – An Giang)	☐
4)	**Tân Nam** (B.1.1 – Soc Trang)	**Tân Nam** (B.1.1 – Soc Trang)	☐
5)	**Nô Thum** (B.1.2 – Soc Trang)	**Nô Thum** (B.1.2 – Soc Trang)	☐
6)	**Nô Puôl** (B.1.3 – Soc Trang)	**Nô Puôl** (B.1.3 – Soc Trang)	☐
7)	**Trà Vôn A** (B.1.10 – Soc Trang)	**Trà Vôn A** (B.1.10 – Soc Trang)	☐
8)	**Biển Trên** (B.2.2 – Soc Trang)	**Biển Trên** (B.2.2 – Soc Trang)	☐
9)	Phỏng vấn thử	Test run	☐

PHẦN A | THÔNG TIN CƠ BẢN - BASIC INFORMATION

HÃY ĐỌC ĐOẠN NÀY CHO NGƯỜI ĐƯỢC PHỎNG VẤN TRƯỚC KHI TIẾN HÀNH. *Xin chào, tôi tên là _____. Tôi đang làm việc cho tổ chức CARE và mong muốn được hiểu hơn về các điều kiện tại cộng đồng anh/chị đang sinh sống. Đây là một phần của đánh giá kết quả dự án ICAM được thực hiện ở đây. Tôi muốn được hỏi anh/chị một số câu hỏi về gia đình, sinh kế làm ăn, cách anh/chị chuẩn bị trong trường hợp thiên tai xảy ra và các mối quan hệ trong xóm/ấp của anh/chị. Khảo sát sẽ mất khoảng 45 phút để hoàn thành và mang tính ẩn danh – nghĩa là không ghi lại tên và địa chỉ của người trả lời. Nếu tham gia, anh/chị có thể quyết định không trả lời một hay một số câu hỏi hoặc dừng cuộc phỏng vấn bất cứ lúc nào. Nếu anh/chị không thể hiểu được ngôn ngữ đang dùng trong khảo sát này, chúng tôi sẽ bố trí cho anh/chị người phiên dịch ngôn ngữ địa phương.* ***Anh/chị có đồng ý tham gia phỏng vấn không?***
_____ *Có* _____ *Không (→NẾU CHỌN "KHÔNG", KẾT THÚC PHỎNG VẤN)*

STATEMENT TO BE READ TO POTENTIAL RESPONDENTS. *Hello, my name is _____ . I am working with CARE to learn more about the conditions in your community. This is part of a review of the ICAM project that was implemented here. I would like to ask you questions about your family, your livelihoods, disaster preparedness, and village affairs. The survey will take about 45 minutes to complete and is anonymous - which means that your name and address will not be recorded. If you participate, you can decide not to answer a question or to stop the interview at any time. If you are unable to understand the language, local language translators will be arranged for you.* ***Do you agree to be interviewed?***
_____ *Yes* _____ *No (→TERMINATE INTERVIEW)*

A.1	*Giới tính của người được phỏng vấn?*	*What is the gender of the respondent?*	
1)	Nữ	Female	☐
2)	Nam	Male	☐

A.2	*Có bao nhiêu người trong hộ gia đình anh/chị?*	*How many people live in your household?*	
1)	Viết số	Write number	___

A.3	*Giới tính của chủ hộ?*	*What is the gender of the head of the household?*	
1)	Nữ	Female	☐
2)	Nam	Male	☐

A.4	*Anh/chị thuộc dân tộc nào?*	*What ethnic group does your household belong to?*	
1)	Kinh	Kinh	☐
2)	Khmer	Khmer	☐
3)	Người Hoa	Chinese	☐
4)	Chăm	Cham	☐
5)	Khác	Other	☐

A.5	*Anh/chị thuộc độ tuổi nào?*	*How old are you?*	
1)	18 – 25 tuổi	18 – 25 years	☐
2)	26 – 40 tuổi	26 – 40 years	☐
3)	41 – 55 tuổi	41 – 55 years	☐
4)	Trên 55 tuổi	56 years or older	☐

A.6	*Tình hình kinh tế của gia đình anh/chị hiện nay?*	*What is your household's economic status?*	
1)	Hộ nghèo (đã có sổ hộ nghèo)	Poor (officially registered, with book)	☐
2)	Không thuộc hộ nghèo	Non-poor	☐

A.7	*Tình hình kinh tế của gia đình anh/chị* ***tại thời điểm 2012****?*	*And* ***in 2012****, what was your household's economic status?*	
1)	Hộ nghèo (đã có sổ hộ nghèo)	Poor (officially registered, with book)	☐
2)	Không thuộc hộ nghèo	Non-poor	☐

PHẦN B | THAM GIA DỰ ÁN - INVOLVEMENT IN THE PROJECT

B.1	*Anh/chị đã từng nghe về dự án ICAM được thực hiện bởi Hội Liên hiệp Phụ nữ và tổ chức CARE Việt Nam chưa?*	*Have you heard of the ICAM project implemented by the Women's Union and CARE?*	
1)	Có nghe	Yes	☐
2)	Chưa từng	No	☐

B.2	*Anh/chị, hoặc có bất kì người nào trong hộ gia đình anh/chị là thành viên của **Hội Phụ nữ không**?*	*Are you, or is any member of your household, a member of the **Women's Union**?*	
1)	Có	Yes	☐
2)	Không	No	☐
99)	Tôi không biết	I don't know	☐

B.3	*Anh/chị, hoặc bất kì người nào trong hộ gia đình là thành viên của nhóm sinh kế thích ứng biến đổi khí hậu do CARE hỗ trợ thành lập (ví dụ dự án trồng nấm trong nhà, nuôi heo/gà) không?*	*Are you, or is any member of your household, a member of a climate-resilient livelihoods group established with CARE support (e.g. indoor mushroom, chicken- or pig-raising)?*	
1)	Có	Yes	☐
2)	Không	No	☐
99)	Tôi không biết	I don't know	☐

B.3a	*Anh/chị hay có bất kỳ người nào trong gia đình là thành viên của nhóm nâng cao nhận thức/giảm thiểu rủi ro thiên tai do CARE hỗ trợ thành lập không?*	*Are you, or is any member of your household, a member of awareness raising groups/ DRR groups established with CARE support?*	
1)	Có	Yes	☐
2)	Không	No	☐
99)	Tôi không biết	I don't know	☐

B.4	*Hơn 3 năm vừa qua, anh/chị hay bất kỳ thành viên khác trong hộ gia đình có tham gia khóa tập huấn nào của dự án ICAM không?*	*Over the past three years, have you received any training through the ICAM project?*		
1)	Có	Yes	☐	→ *B.4a*
2)	Không	No	☐	→ *B.5*
99)	Tôi không biết	I don't know	☐	→ *B.5*

B.4a	Nếu có, anh chị có biết từ ai hoặc tổ chức nào không?	*Who provided this training?*	
1)	Hội LHPN	Women's Union	☐
2)	Nông nghiệp & phát triển nông thôn	DARD	☐
3)	Tài nguyên môi trường	DoNRE	☐
4)	Phòng chống lụt bão	CFSC	☐
5)	Trung tâm nghiên cứu phát triển cộng đồng (CCRD)	CCRD	☐
99)	Tôi không biết	I don't know	☐

B.5	*Tính từ lúc bắt đầu có dự án ICAM (bao gồm tổ chức CARE, Hội Liên hiệp Phụ nữ, Sở NN&PTNT, Sở TNMT, PCLB), câu nào dưới đây mô tả tốt nhất mức độ tham gia của anh/chị?*	*Considering the beginning of the ICAM project (which included Care WU, DARD, DONRE, CCRD), which of the following statements best describes your involvement?*		**Chuyển sang câu**
1)	Tôi chưa từng tham gia vào bất cứ đánh giá hoặc cuộc họp lập kế hoạch nào.	I have not been involved in any assessments or planning meetings	☐	→ *B.6*
2)	Tôi đã từng tham gia họp nhưng không có đóng góp nào.	I participated in meetings but did not contribute	☐	→ *B.5a*
3)	Tôi đã từng tham gia họp và có đóng góp vào các kế hoạch.	I participated in meetings and contributed to planning	☐	→ *B.5a*
99)	Tôi không biết	I don't know	☐	→ *B.6*

B.5a	*Mức độ hài lòng của anh/chị về quá trình lập kế hoạch?*	*How satisfied were you with the planning process?*	
1)	Rất hài lòng	Very satisfied	☐
2)	Khá hài lòng	Rather satisfied	☐
3)	Tương đối không hài lòng	Rather dissatisfied	☐
4)	Rất không hài lòng	Very dissatisfied	☐
99)	Tôi không biết	I don't know	☐

B.6	*Trong 2 năm vừa qua, anh/chị đã tham gia thảo luận về các việc liên quan đến ICAM với các đối tác trực tiếp thực hiện (CARE, Hội Liên hiệp Phụ nữ, NN&PTNT, TNMT, PCLB) được bao nhiêu lần?*	*How often in the past two years have you discussed any issues around the ICAM project with implementing partners (CARE, Women's Union, DARD, DONRE, CFSC)?*	
1)	Từ 1 đến 2 lần	1-2 times	☐
2)	Từ 3 đến 4 lần	3-4 times	☐
3)	Từ 5 lần trở lên	5 times or more often	☐
4)	Không có lần nào	Not at all	☐
99)	Tôi không biết	I don't know	☐

PHẦN C | SINH KẾ THÍCH ỨNG BIẾN ĐỔI KHÍ HẬU - CLIMATE-RESILIENT LIVELIHOODS

PHẦN C-I **KIẾN THỨC**

C.1	*Anh/chị vui lòng cho biết mức độ hiểu biết của anh/chị về biến đổi khí hậu. Mô tả nào dưới đây phù hợp nhất đối với anh/chị? [O.1]*	*I would like to ask you about your knowledge of climate change. Which of the following statements best applies to you? [O.1]*		
1)	Tôi không biết biến đổi khí hậu là gì	I don't know what the term climate change means	☐	→ *C.6*
2)	Tôi biết về biến đổi khí hậu nhưng không rõ về sự ảnh hưởng của nó tới xóm/ ấp của tôi	I understand what climate change means but do not know how it may affect our village.	☐	→ *C.2*
3)	Tôi biết biến đổi khí hậu là gì và ảnh hưởng của nó tới xóm/ ấp trong hiện tại cũng như sự ảnh hưởng có thể xảy ra trong tương lai.	I understand what climate change means and the way in which it affects our village now and how it might affect our village in future.	☐	

C.2	*Vui lòng cho biết mức độ hiểu biết của anh/chị về biến đổi khí hậu thay đổi như thế nào trong 3 năm vừa qua? [O.1]*	*And would you say that your understanding of climate change has changed over the past four years? [O.1]*		**Chuyển sang câu**
1)	Vâng, tôi biết nhiều hơn về biến đổi khí hậu so với trước đây	Yes, I know more about climate change than I did before.	☐	→ *C.2a*
2)	Không, mức đô hiểu biết của tôi về biến đổi khí hậu không thay đổi.	No, my understanding of climate change hasn't changed	☐	→ *C.3*
99)	Tôi không biết	I don't know	☐	→ *C.3*

C.2a	*Dự án ICAM (bao gồm tổ chức CARE, Hội Liên hiệp Phụ nữ, Sở NN&PTNT, Sở TNMT, PCLB) có đóng góp vào sự thay đổi này không? [O.1]*	*Has the ICAM project (which included Care WU, DARD, DONRE, CCRD) played any role behind this change? [O.1]*		Chuyển sang câu
1)	Không có đóng vai trò nào.	No, it did not play a role	☐	
2)	Có, ICAM đóng vai trò tích cực ngang với các yếu tố/tổ chức khác.	Yes, it played a positive role amongst others	☐	→ C.3
3)	Có, ICAM đóng vai trò chính	Yes, it played the main role	☐	
99)	Tôi không biết	I don't know	☐	

Nhóm C.3	*Anh/chị biết thêm những gì về biến đổi khí hậu hơn 3 năm qua?* *Đối với từng câu hỏi, vui lòng chọn:* *KHÔNG nếu anh/chị không có tìm hiểu về vấn đề biến đổi khí hậu* ***Hoặc*** *Có thể chọn nhiều đáp án CÓ nếu cần kết hợp nhiều câu trả lời.* *[O.1]*	*What have you learned over the past four years regarding climate change?* *For each of the following aspects, please select* ***either*** *NO if you have not learned about this aspect* ***or*** *any combination of YES options with the source of information. You may select multiple YES options.* *[O.1]*	**1) KHÔNG**, tôi không biết thêm bất kì thông tin nào về khía cạnh này.	**2) CÓ**, từ TV, radio hoặc báo chí	**3) CÓ**, từ những tờ áp phích, tờ rơi đến loa phát thanh.	**4) CÓ**, thông qua những buổi họp (làng xã, địa phương, nhóm)	**5) CÓ**, thông qua thảo luận với bạn bè, hàng xóm
C.3.1	Nguyên nhân gây ra biến đổi khí hậu	The causes of climate change	☐	☐	☐	☐	☐
C.3.2	Tác động chung của biến đổi khí hậu	The general impact of climate change	☐	☐	☐	☐	☐
C.3.3	Tác động (có thể có) của biến đổi khí hậu đối với khu vực Đồng bằng Sông Cửu Long	The (likely) impact of climate change on the Mekong Delta region	☐	☐	☐	☐	☐
C.3.4	Tác động khác nhau của biến đổi khí hậu đối với nam giới, nữ giới và người dân tộc	The different impact on men and women, and on ethnic minorities	☐	☐	☐	☐	☐
C.3.5	Hành động tôi có thể làm để thích ứng tốt hơn với tác động của biến đổi khí hậu	Actions I can take to better adapt to the effects of climate change	☐	☐	☐	☐	☐
C.3.6	Hành động mà xóm/ấp của chúng tôi có thể làm để thích ứng tốt hơn với tác động của biến đổi khí hậu	Actions our community can take to better adapt to the effects of climate change	☐	☐	☐	☐	☐
C.3.7	Khả năng thích ứng của nam giới và nữ giới trước tác động của biến đổi khí hậu	Capacity of men and women to better adapt to climate change	☐	☐	☐	☐	☐

C.4	*Trong 3 năm qua, có bất kì ai trong gia đình anh/chị* ***đã tham gia*** *các hoạt động nâng cao nhận thức về biến đổi khí hậu và thích ứng với biến đổi khí hậu không? [OP2.4.1]*	*Over the past three years, has anybody in your household* ***participated*** *in an awareness –raising activities on climate change and adaptation? [OP2.4.1]*	
1)	Có	Yes	☐
2)	Không	No	☐
99)	Tôi không biết	I don't know	☐

C.5	*Trong 3 năm qua, có ai trong gia đình anh/chị* ***có nhận*** *bất kì thông tin nào thông qua hoạt động nâng cao nhận thức về biến đổi khí hậu của dự án (ví dụ áp phích, tờ rơi)? [OP2.4.2]*	*Over the past three years, has your household* ***received*** *any information through a project-related climate change awareness-raising activities (e.g. posters, leaflets? [OP2.4.2]*		Chuyển sang câu
1)	Có	Yes	☐	→ C.5a
2)	Không	No	☐	→ C.6
99)	Tôi không rõ	I don't know	☐	→ C.6

C.5a	*Các thông tin được cung cấp trong hoạt động nâng cao nhận thức này hữu ích ở mức độ nào? [OP2.4.2]*	*To what extent was the information provided by these awareness-raising activities useful? [OP2.4.2]*		Chuyển sang câu
1)	Rất hữu ích	Very useful	☐	
2)	Tương đối hữu ích	Somewhat useful	☐	→ C.6
3)	Không hữu ích	Not useful	☐	
99)	Tôi không biết	I don't know	☐	

PHẦN C-II NHẬN THỨC VÀ THÁI ĐỘ

C.6	*Trong 10 năm qua, anh/chị đã nhận thấy bất kỳ sự thay đổi nào của khí hậu, như là sự khác biệt về mùa mưa, thay đổi nhiệt độ, hạn hán v.v)*	*Over the past ten years, have you experienced any changes in the climate, such as different times of rain, changes in temperature, drought etc)*	
1)	Có	Yes	☐
2)	Không	No	☐
99)	Tôi không biết	I don't know	☐

Nhóm C.7	*Trong 10 năm qua, gia đình của anh/chị bị tác động bởi các loại hình thiên tai nào sau đây? Ở mức độ?*	*Over the past ten years, to what extent has your household been affected by the following hazards?*	**1) Gây ra nhiều tổn thất**	**2) Gây ra ít tổn thất**	**3) Không gây ra tổn thất**	**99) Tôi không biết**
C.7.1	Bão/ Giông lốc	Storms/ whirlwind	☐	☐	☐	☐
C.7.2	Lũ lụt	Floods	☐	☐	☐	☐
C.7.3	Hạn hán	Droughts	☐	☐	☐	☐
C.7.4	Sạt lở đất (bờ sông và bờ biển)	Land erosion (river and sea)	☐	☐	☐	☐
C.7.5	Xâm nhập mặn	Saline intrusion	☐	☐	☐	☐
C.7.6	Sâu bệnh	Pests	☐	☐	☐	☐
C.7.7	Bệnh trên vật nuôi	Animal diseases	☐	☐	☐	☐

Nhóm C.8			1) Có	2) Không	99) Tôi không biết
C.8.1	Trong 10 năm qua, thiên tai xuất hiện thường xuyên và tàn phá nhiều hơn không?	Over the past ten years, have hazards become more frequent or more damaging?	☐	☐	☐
C.8.2	Trong tương lai, anh/chị nghĩ các thiên tai này có khả năng gây ra những thiệt hại hoặc tổn thất đối với gia đình bạn không?	In future, do you think that hazards are likely to cause damages or losses to your household?	☐	☐	☐
C.8.3	Trong 3 năm qua, anh/chị có làm bất kỳ điều gì để phòng ngừa tốt hơn trong trường hợp thiên tai xảy ra không?	Over the past four years, have you done anything to be better prepared for these hazards?	☐	☐	☐
C.8.4	Anh/chị có kế hoạch (hoặc có thêm) hành động để phòng ngừa và thích ứng với thiên tai trong tương lai không?	Do you plan to take (further) action to be better prepared for and adapted to hazards in future?	☐	☐	☐

PHẦN C-III SỰ THÍCH ỨNG VÀ KẾT QUẢ

C.9	Hoạt động nông nghiệp và phi nông nghiệp đóng góp vào sinh kế của anh\chị (thực phẩm và thu nhập) ở mức độ nào?	*To what extent does on-farm and off-farm work contribute to your livelihood (food and income)?*
1)	Sử dụng chức năng thanh trượt trong iSurvey tại góc bên trái chỉ 100% làm nông nghiệp và bên phải chỉ 100% làm phi nông nghiệp	Use slider function in iSurvey, where the left side indicates 100% on-farm and the right 100% off-farm work

C.9a	*Nhớ lại năm 2012, tỷ lệ đóng góp của hoạt động nông nghiệp và phi nông nghiệp có thay đổi so với tỷ lệ của năm 2014 không?*	*Back in 2012, was this mix different?*		Chuyển sang câu
1)	Có	Yes	☐	→ *C.9b*
2)	Không	No	☐	→ *C.10*
99)	Tôi không biết	I don't know	☐	→ *C.10*

C.9b	Nhớ lại 2012, việc làm nông nghiệp và phi nông nghiệp đóng góp bao nhiêu vào sinh kế của anh/chị (sản xuất lương thực và thu nhập)?	*So thinking of 2012, how much did on-farm and off-farm work contribute to your livelihood (food production and income) back then?*
1)	Sử dụng chức năng thanh trượt trong iSurvey tại góc bên trái chỉ 100% làm nông nghiệp và bên phải chỉ 100% làm phi nông nghiệp	Use slider function in iSurvey, where the left side indicates 100% on-farm and the right 100% off-farm work

C.9c	*Dự án ICAM (trong đó có tổ chức CARE, Hội Liên hiệp Phụ nữ, Sở NN&PTNT, Sở TNMT, PCLB) có đóng góp vào sự thay đổi này không?*	*Has the ICAM project (which included Care WU, DARD, DONRE, CCRD) played any role behind this change?*		Chuyển sang câu
1)	Không, ICAM không đóng vai trò quan trọng	No, it did not play a role	☐	→ *C.10*
2)	Có, ICAM đóng vai trò quan trọng tích cực ngang với các yếu tố/tổ chức khác	Yes, it played a positive role amongst others	☐	
3)	Có, ICAM đóng vai trò chính	Yes, it played the main role	☐	
99)	Tôi không biết	I don't know	☐	

C.10	*Từ năm 2012 đến nay, tình trạng sinh kế chung của gia đình anh/chị (sản xuất lương thực và thu nhập) có thay đổi gì không? [O.3, OC2.5]*	*Since 2012, has your household's overall livelihood situation (food production and income) changed? [O.3, OC2.5]*		Chuyển sang câu
1)	Có, bây giờ chúng tôi trở nên **tốt hơn** so với năm 2012.	Yes, we are now **better** off than in 2012.	☐	→ *C.10a*
2)	Không, sinh kế không thay đổi	No, it hasn't changed.	☐	→ *C.11*
3)	Vâng, bây giờ chúng tôi trở nên **tệ hơn** năm 2012	Yes, we are now **worse** off than in 2012.	☐	→ *C.10a*
99)	Tôi không biết	I don't know	☐	→ *C.11*

C. 10a	*Dự án ICAM (bao gồm tổ chức CARE, Hội Liên hiệp Phụ nữ, Sở NN&PTNT, Sở TNMT, PCLB) có đóng góp vào sự thay đổi này không?*	*Has the ICAM project (which included Care WU, DARD, DONRE, CCRD) played any role behind this change?*		Chuyển sang câu
1)	Không, ICAM không đóng vai trò quan trọng	No, it did not play a role	☐	→ *C.11*
2)	Có, ICAM đóng vai trò quan trọng tích cực ngang với các yếu tố/tổ chức khác	Yes, it played a positive role amongst others	☐	
3)	Có, ICAM đóng vai trò chính	Yes, it played the main role	☐	
99)	Tôi không biết	I don't know	☐	

C. 11	*Những vấn đề bất kỳ sau đây ảnh hưởng đến sinh kế của anh/chị trong 3 năm qua như thế nào?* ***Lưu ý quan trọng: các điều tra viên cần hiểu sự khác biệt giữa "không ảnh hưởng" và "không áp dụng"***	*In what way did any of the following factors have an effect on your livelihood over the past four years?* ***NOTE: It is CRUCIAL that enumerators understand the difference between 'no effect' and 'not applicable'.***	1) Không áp dụng	2) Ảnh hưởng tích cực	3) Không ảnh hưởng	4) Ảnh hưởng tiêu cực
C.11.1	Bất kỳ sự thay đổi về thời tiết	Any changes in the weather	☐	☐	☐	☐
C.11.2	Bất kỳ sự thay đổi về thị trường (cách tiếp cận/giá cả)	Any changes in the market (access/prices)	☐	☐	☐	☐
C.11.3	Bất kỳ sự thay đổi về kỹ thuật canh tác	Any changes in cultivation techniques	☐	☐	☐	☐
C.11.4	Áp dụng mùa vụ có khả năng chống chịu với thời tiết	Adoption of climate-resilient crops	☐	☐	☐	☐
C.11.5	Bất kỳ yếu tố khác (liên quan đến dự án)	Any other factors (related to the project)	☐	☐	☐	☐
C.11.6	Bất kỳ yếu tố khác (không liên quan đến dự án, ví dụ chính sách)	Any other factors (unrelated to the project)	☐	☐	☐	☐

C. 12	Gia đình của anh/chị có tiếp cận các thông tin dự báo thời tiết mùa vụ không? *[O.2]*	*Does your household have access to seasonal weather forecasts? [O.2]*		Chuyển sang câu
1)	Có	Yes	☐	→ *C.12a*
2)	Không	No	☐	→ *C.13*
99)	Tôi không biết	I don't know	☐	→ *C.13*

C. 12a	*Gia đình anh/chị có sử dụng các thông tin dự báo thời tiết mùa vụ này không? [O.2]*	*Does your household use this climate information? [O.2]*		Chuyển sang câu
1)	Có	Yes	☐	→ *C.12b*
2)	Không	No	☐	→ *C.13*
99)	Tôi không biết	I don't know	☐	

C. 12b	*Anh/chị sử dụng các thông tin dự báo thời tiết mùa vụ để làm gì? [Nhiều lựa chọn]*	*In what way do you use these seasonal weather forecasts? [Select all that apply]*	
1)	Chọn các loại cây trồng mà tôi canh tác	To select the types of crops that I plant	☐
2)	Quyết định thời gian trồng trọt và thu hoạch	To decide on the timing of planting and harvesting	☐
3)	Quyết định kỹ thuật canh tác phù hợp nhất	To decide on the most suitable cultivation technique	☐
4)	Đưa ra các kế hoạch chuẩn bị khác	To make other preparations	☐
99)	Tôi không biết	I don't know	☐

Nhóm C.13/ C.14	*Tôi muốn biết thêm về cách làm sinh kế của anh/chị, tôi sẽ liệt kê các kế hoạch khác nhau và sau đó anh/chị sẽ cho biết là đã thực hiện kế hoạch nào trong năm 2014 và 2012*	*I would like to ask you about your livelihood strategies. I will list various strategies and then ask whether you applied the strategy in 2014, and in 2012.*	C.13 Gia đình anh/chị đã thực hiện công việc này năm 2014 chưa?	C.14 Gia đình anh/chị đã thực hiện công việc này năm 2012 chưa?
Hoạt động nông nghiệp - On-farm work				
1)	Vụ mùa sản xuất để tiêu thụ gia đình	Crop production for household consumption	☐	☐
2)	Vụ mùa sản xuất để bán/tạo ra thu nhập	Crop production for sales/income-generation	☐	☐
3)	Sản xuất chăn nuôi và sản phẩm chăn nuôi	Production of animals and animal products	☐	☐
4)	Lao động nông nghiệp (tạm thời, theo mùa, thường xuyên)	Agricultural worker (casual, seasonal, permanent)	☐	☐
5)	Công việc nông nghiệp khác	Other on-farm work	☐	☐

Hoạt động phi nông nghiệp - Off-farm work				
6)	Lao động có kỹ năng (thợ mộc, cơ khí v.v)	Skilled labour (carpentry, metal work etc)	☐	☐
7)	Đánh bắt cá	Fishing	☐	☐
8)	Hoạt động buôn bán nhỏ (bán hàng rong, bán lẻ)	Small business activities (street vending, shop keeping)	☐	☐
9)	Công chức (chính phủ, NGO, khu vực tư nhân)	Formal employee (government, NGO, private sector)	☐	☐
10)	Sản xuất hàng thủ công	Handicraft production	☐	☐
11)	Kiều hối (ngoại kiều, Việt kiều, người Việt trong nước gửi về)	Remittances (foreign, domestic)	☐	☐
12)	Những sản phẩm từ rừng nhưng không phải gỗ	Non-timber forest products	☐	☐
13)	Việc làm phi nông nghiệp khác (bao gồm dệt may, thợ xây dựng, lao động di cư thường xuyên và theo mùa vụ)	Other off-farm work (such as garment production, construction, seasonal or permanent migration)	☐	☐

Nhóm C.15/ C.16	*Tôi muốn biết thêm về các kế hoạch thích ứng của anh/chị, tôi sẽ liệt kê các kế hoạch và sau đó anh/chị cho biết là đã thực hiện kế hoạch nào trong năm 2014 và cho biết rằng anh/chị có thực hiện các chiến lược này trong 3 năm qua chưa.*	*I would like to ask you about your adaptation strategies. I will list various strategies. I will then ask whether you applied the strategy in 2014, and whether you introduced it over the past three years.*	**C.15. Gia đình anh/chị có áp dụng chiến lược này trong năm 2014 không?**	**C.16. Gia đình bạn có áp dụng chiến lược này trong 3 năm qua không?**
Thích ứng biến đổi khí hậu - Climate adaptation				
1)	Thay đổi cây trồng có khả năng thích ứng với biến đổi khí hậu	Adoption of climate-resilient crops	☐	☐
2)	Điều chỉnh thời gian canh tác	Adjustment of planting times	☐	☐
3)	Tiết kiệm và dự trữ hạt giống	Seed saving and storage	☐	☐
4)	Đi làm thuê	Casual labour (e.g. seasonal migration)	☐	☐
5)	Làm vườn	Home gardening	☐	☐
6)	Thủy lợi	Irrigation	☐	☐
7)	Ứng dụng phương pháp canh tác mới	New agricultural practices	☐	☐
8)	Trồng thêm/lại cây xanh	Tree replanting	☐	☐
9)	Hứng và trữ nước mưa	Rainwater harvesting/impounding	☐	☐
10)	Dự trữ nước	Water storage	☐	☐
11)	Tạm thời không cho trẻ em đi học	Removing children from school	☐	☐
12)	Sử dụng vốn vay để đa dạng hóa thu nhập	Use of loans for income diversification	☐	☐
13)	Tiết kiệm lương thực thực phẩm	Rationing food	☐	☐

Nhóm C.17/ C.18	*Tôi muốn biết thêm về cách làm sinh kế của anh/chị, tôi sẽ liệt kê một vài cách làm và sau đó anh/chị cho biết là đã thực hiện kế hoạch nào trong năm 2014 và 2012*	*I would like to ask you about your livelihood strategies. I will list various strategies and then ask whether you applied the strategy in 2014, and in 2012.*	**C.17. Gia đình anh/chị có áp dụng cách làm này trong năm 2014 không?**	**C.18. Gia đình anh/chị có áp dụng cách làm này trong năm 2012?**
Thực hiện thích ứng biến đổi khí hậu - Climate-resilient practices				
1)	Sản xuất nấm rơm trong nhà	Indoor mushroom production	☐	☐
2)	Trồng rau mầm	Sprout vegetables	☐	☐
3)	Nuôi lợn thảm lót sinh học	Pig-raising with bio-bedding	☐	☐
4)	Nuôi gà thảm lót sinh học	Chicken-raising with bio-bedding	☐	☐
5)	Quản lý dịch bệnh tổng hợp	Integrated pest management	☐	☐
6)	Sản xuất hoặc/và sử dụng phân bón sinh học/ hữu cơ	Production and use of bio-fertilizer	☐	☐

C.19/ C.20	*Gia đình anh/chị đã trồng bao nhiêu loại cây trồng và hoa màu khác nhau*	*How many different crops and vegetables did your household plant…*	**C.19 … năm 2014?**	**C.20 …năm 2012?**
1)	Số loại cây trồng/hoa màu_____-	Number of different crops/vegetables	____	____

C. 21	*Trong vòng 3 năm qua, có bất kỳ ai trong gia đình anh/chị đi vay không?*	*Over the past three years, have anyone in your household held any loan?*		**Chuyển sang câu**
1)	Có vay	Yes	☐	→ *C.21a*
2)	Không vay	No	☐	→ *C.22*
99)	Tôi không biết	I don't know	☐	→ *C.22*

C. 21a	*Ai cung cấp các khoản vay này?*	*Who provided these loans?*		**Chuyển sang câu**
1)	Ngân hàng	A bank	☐	
2)	Hội Liên hiệp Phụ nữ	The Women's Union	☐	→ *C.21b*
3)	Những người cho vay (lấy lãi)	A money lender (with interest)	☐	
4)	Họ hàng, bạn bè hay hàng xóm (không lấy lãi)	Relatives, friends or neighbours (no interest)	☐	→ *C.21b*
99)	Tôi không biết	I don't know	☐	

C. 21b	*Mục đích chính của khoản vay là gì?*	*What was the main use of these loans?*		**Chuyển sang câu**
1)	Đầu tư vào các hoạt động nông nghiệp có khả năng thích ứng biến đổi khí hậu	Investment in climate-resilient agriculture	☐	→ *C.21c*
2)	Đầu tư vào hoạt độngnông nghiệp khác	Investment in other agriculture	☐	
3)	Đầu tư vào hoạt động phi nông nghiệp (ví dụ, buôn bán nhỏ)	Investment in off-farm activities (small business)	☐	
4)	Gia cố nhà/ mua tài sản đồ đạc	Enhancing house/property	☐	→ *C.22*
5)	Khám chữa bệnh/ tình huống khẩn cấp	Medical care/emergencies	☐	
6)	Đám tiệc, sử dụng mục đích cá nhân khác	Ceremonies, other personal use	☐	
99)	Tôi không biết	I don't know	☐	

C. 21c	*Về kết quả sau khi vay vốn, câu nào sau đây có thể được áp dụng cho trường hợp của anh/chị? (Nhiều lựa chọn)*	*Concerning the outcomes of having this loan, which of the following statements applies to you? (Multiple selections)*		**Chuyển sang câu**
1)	Tôi đã có khả năng kiếm tiền nhiều hơn	I have been able to earn more money.	☐	
2)	Tôi đã có khả năng đa dạng hóa nguồn thu nhập	I have been able to diversify income.	☐	
3)	Tôi đã có khả năng thực hiện các hoạt động thích ứng với biến đổi khí hậu	I have been able to adopt climate-resilient activities.	☐	→ *C.22*
4)	Tôi không có khả năng trả khoản vay khi đến hạn.	I have not been able to repay my loan on schedule.	☐	

C. 22	*Bạn có thể mô tả mức độ giải quyết rủi ro của biến đổi khí hậu của gia đình anh/chị chẳng hạn như mưa bất thường, khó đoán trước hay mưa quá nhiều thế nào?*	*How would you describe your household's ability to address climate risks such as irregular and unpredictable or extreme rainfall?*		Chuyển sang câu
1)	Cao	High	☐	→ *C.23*
2)	Trung bình	Moderate	☐	
3)	Thấp	Low	☐	
99)	Tôi không biết	I don't know	☐	

C. 23	*Câu nào sau đây mô tả tốt nhất về gia đình anh/chị?*	*Which of the following statements best describes your household?*		Chuyển sang câu
1)	↗ Bây giờ chúng tôi **thích ứng tốt hơn** và chuẩn bị cẩn thận hơn cho biến đổi khí hậu so với cách đây 3 năm	↗ We are **now better-adapted** and more prepared for climate change than four years ago.	☐	→ *C.23a*
2)	→ Chúng tôi **không có sự thay đổi nào** về khả năng ứng phó với biến đổi khí hậu so với cách đây 3 năm.	→ Over the past four years, there has been **no change** in our ability to face climate change.	☐	→ *D.1*
3)	↘ Chúng tôi bây giờ **chuẩn bị kém hơn** với thay đổi của biến đổi khí hậu so với cách đây 3 năm	↘ We are **now less prepared** for climate change than we were four years ago.	☐	→ *D.1*
99)	Tôi không biết	I don't know	☐	→ *D.1*

C. 23a	*Theo quan điểm của anh/chị, dự án ICAM (bao gồm tổ chức CARE, Hội Liên hiệp Phụ nữ, Sở NN&PTNT, Sở TNMT, PCLB) đóng vai trò gì trong sự cải thiện này?*	*In your view, to what extent has the ICAM project (which included Care WU, DARD, DONRE, CCRD) played a role behind this improvement?*		Chuyển sang câu
1)	Vai trò chính	Main positive role	☐	→ *D.1*
2)	Vai trò tích cực ngang với các yếu tố/tổ chức khác	Positive role amongst others	☐	
3)	Không đóng vai trò nào	No role	☐	
99)	Tôi không biết	I don't know	☐	

PHẦN D | GIẢM THIỂU RỦI RO THIÊN TAI – DISASTER RISK REDUCTION

D.1	*Gia đình anh/chị chuẩn bị ứng phó với thiên tai như thế nào?*	*How prepared is your **household** to handle a disaster?*		Chuyển sang câu
1)	**[++]** Chuẩn bị rất tốt	**[++]** Very prepared	☐	→ *D.2*
2)	**[+]** Chuẩn bị tương đối tốt	**[+]** Somewhat prepared	☐	
3)	**[−]** Gần như không chuẩn bị	**[−]** Somewhat unprepared	☐	
4)	**[−−]**Hoàn toàn không chuẩn bị	**[−−]** Very unprepared	☐	
99)	Tôi không biết	I don't know	☐	

D.2	*So với cách đây 3 năm, **hộ gia đình** anh/chị ngày hôm nay có thể ứng phó với thiên tai nhiều hay ít hơn?*	*Compared to four years ago, is your **household** today more or less able to handle a disaster?*		Chuyển sang câu
1)	↗ Nhiều hơn	↗ More able	☐	→ *D.2a*
2)	→ Không thay đổi	→ No change	☐	→ *D.3*
3)	↘ Ít hơn	↘ Less able	☐	→ *D.3*
99)	Tôi không biết	I don't know	☐	→ *D.3*

D.2a	*Theo quan điểm của anh/chị, dự án ICAM đóng vai trò như thế nào trong sự thay đổi này?*	*In your view, to what extent has the ICAM project played a role behind this improvement?*		Chuyển sang câu
1)	Vai trò chính	Main positive role	☐	→ *D.3*
2)	Vai trò tích cực ngang với các yếu tố/tổ chức khác	Positive role amongst others	☐	
3)	Không đóng vai trò nào	No role	☐	
99)	Tôi không biết	I don't know	☐	

D.3	*Câu nào câu đây mô tả tốt nhất về gia đình anh/chị?*	*Which of the following statements best describes your household?*		Chuyển sang câu
1)	Chúng tôi không có bất kỳ sự chuẩn bị cho thiên tai hoặc tình huống khẩn cấp nào ***và chúng tôi không có kế hoạch đó***	We have not done anything to prepare for a disaster or emergency ***and we do not plan to***	☐	→ *D.4*
2)	Chúng tôi không có bất kỳ sự chuẩn bị cho thiên tai hoặc tình huống khẩn cấp nào ***nhưng chúng tôi có kế hoạch những tháng sắp tới***	We have not done anything to prepare for a disaster or emergency ***but we plan to in the coming months***	☐	
3)	Chỉ gần đây chúng tôi đã bắt đầu chuẩn bị cho thiên tai hoặc các tình huống khẩn cấp	We just recently began preparing for a disaster or emergency	☐	
4)	Chúng tôi đã chuẩn bị cho thiên tai và tình huống khẩn cấp	We are prepared for a disaster or emergency	☐	

Nhóm D.4			1) Có	2) Không	99) Tôi không biết
D.4.1	Người dân trong ấp có thường xuyên nhận được cảnh báo trước về bão không?	Are villagers usually warned ahead of a storm?	☐	☐	☐
D.4.2	Ấp của anh/chị có kế hoạch phòng chống thiên tai hay tình huống khẩn cấp không?	Does your village have a disaster response or emergency plan?	☐	☐	☐
D.4.3	Ấp của anh/chị có thành lập một đội trong xóm/ấp (ví dụ đội Cứu hộ cứu nạn) để quyết định những việc cần làm khi có thiên tai và tình huống khẩn cấp không?	Does your village have an organized group (such as a rescue team) that decides what to do in disasters or emergencies?	☐	☐	☐
D.4.4	Người dân trong ấp có được tập huấn trợ giúp lẫn nhau trong tình huống có thiên tai không?	Have villagers been trained to assist others in the event of a disaster?	☐	☐	☐
D.4.5	Xóm/ấp của anh/chị có tuyến đường sơ tán dân khi thiên tai không?	Does your community have evacuation routes?	☐	☐	☐
D.4.6	Xóm/ấp của anh/chị có nơi trú ẩn cho người dân khi có thiên tai không?	Does your community have a shelter identified where people can go in the event of a disaster?	☐	☐	☐

D.5	*Nói chung, **xóm/ấp** của anh/chị ứng phó với thiên tai như thế nào?*	*Overall, how prepared is your **community** to handle a disaster?*		Chuyển sang câu
1)	**[++]** Chuẩn bị rất tốt	**[++]** Very prepared	☐	
2)	**[+]** Chuẩn bị tương đối tốt	**[+]** Somewhat prepared	☐	
3)	**[−]** Gần như không chuẩn bị	**[−]** Somewhat unprepared	☐	→ D.6
4)	**[−−]**Hoàn toàn không chuẩn bị	**[−−]** Very unprepared	☐	
99)	Tôi không biết	I don't know	☐	

D.6	*So với cách đây 3 năm, **xóm/ấp** của anh/chị ngày nay có thể ứng phó với thiên tai tốt hơn hay kém hơn*	*Compared to four years ago, is your **community** today more or less able to handle a disaster?*		Chuyển sang câu
1)	↗ Có thể tốt hơn	↗ More able	☐	→D.6a
2)	→ Không thay đổi	→ No change	☐	→ E.0
3)	↘ Có thể kém hơn	↘ Less able	☐	→ E.0
99)	Tôi không biết	I don't know	☐	→ E.0

D.6a	*Theo quan điểm của anh/chị, dự án ICAM (bao gồm tổ chức CARE, Hội Liên hiệp Phụ nữ, Sở NN&PTNT, Sở TNMT, PCLB) đóng vai trò như thế nào trong sự thay đổi này?*	*In your view, to what extent has the ICAM project (which included Care, WU, DARD, DONRE, CCRD) played a role behind this improvement?*		Chuyển sang câu
1)	Vai trò chính	Main positive role	☐	
2)	Vai trò tích cực ngang với các yếu tố/tổ chức khác	Positive role amongst others	☐	→ E.0
3)	Không đóng vai trò nào	No role	☐	
99)	Tôi không biết	I don't know	☐	

PHẦN E | VẤN ĐỀ GIỚI - GENDER

E.0	*Tình trạng hôn nhân của anh/chị?*	*What is your civil status?*		Chuyển sang câu
1)	Đã kết hôn	Married	☐	→ E.1
2)	Độc thân, ở góa, li thân hay đã li dị	Single, widowed or divorced	☐	→ E.4

Nhóm E.1	*Ai trong **hộ gia đình** anh/chị...*	*Who in your **household**…*	1) Chỉ có nam	2) Phần lớn là nam	3) Nam và nữ như nhau	4) Phần lớn là nữ	5) Chỉ có nữ	99) Tôi không biết
E.1.1	…quyết định cách chi tiêu nguồn thu nhập của gia đình?	…decides what to do with family income?	☐	☐	☐	☐	☐	☐
E.1.2	…tham dự các cuộc họp hay hoạt động của xóm ấp?	…attends meetings or activities in the village?	☐	☐	☐	☐	☐	☐
E.1.3	…quyết định gia đình sẽ trồng cái gì, khi nào và ở đâu (cây trồng để ăn)	…decides what to plant, when and where (food crops)?	☐	☐	☐	☐	☐	☐
E.1.4	…quyết định gia đình sẽ trồng cái gì, khi nào và ở đâu (cây trồng mang lại thu nhập)	…decides what to plant, when and where (cash crops)?	☐	☐	☐	☐	☐	☐
E.1.5	…quyết định các hình thức đầu tư nông nghiệp?	…decides on agricultural investments?	☐	☐	☐	☐	☐	☐
E.1.6	…quyết định các hình thức đầu tư phi nông nghiệp?	…decides on non-agricultural investments?	☐	☐	☐	☐	☐	☐
E.1.7	…chăm lo cho bữa ăn?	…prepares food?	☐	☐	☐	☐	☐	☐
E.1.8	…chăm sóc cho con nhỏ?	…cares for children?	☐	☐	☐	☐	☐	☐

E.2	*Mô tả nào dưới đây phù hợp nhất với gia đình của anh/chị?*	*Which of the following statements best applies to your household?*		Chuyển sang câu
1)	Trong 3 năm vừa qua, **nam giới có ảnh hưởng lớn hơn** trong việc ra quyết định của hộ gia đình.	Over the past three years, **men have gained more influence** in household decisions.	☐	→ E.2a
2)	Trong 3 năm vừa qua, **không có thay đổi** nào về vai trò nam giới và nữ giới trong việc ra quyết định của hộ gia đình.	Over the past three years, there has been **no change** in the way men and women make household decisions	☐	→ E.3
3)	Trong 3 năm vừa qua, **nữ giới có ảnh hưởng lớn hơn** trong việc ra quyết định của hộ gia đình.	Over the past three years, **women have gained more influence** in household decisions.	☐	→ E.2a
99)	Tôi không biết	I don't know	☐	→ E.3

E.2a	*Lí do chính trong sự thay đổi về tầm ảnh hưởng của nam giới và nữ giới trong việc ra quyết định trong gia đình anh/chị? (**KHÔNG ĐỌC CÁC LỰA CHỌN CHO NGƯỜI ĐƯỢC KHẢO SÁT**)*	*What is the main reason for this change? **(DO NOT READ OPTIONS)***		Chuyển sang câu
1)	Các yếu tố liên quan đến dự án của tổ chức CARE	Factors related to the CARE project	☐	
2)	Các yếu tố khác	Other factors	☐	→ E.3
99)	Tôi không biết	I don't know	☐	

E.3	*Trong vòng 3 năm qua, khối lượng công việc của nữ giới trong gia đình có sự thay đổi nào không?*	*Over the past four years, has the workload of the women in your household changed?*		Chuyển sang câu
1)	Có, khối lượng công việc của nữ giới gia tăng.	Yes, it has increased	☐	→ E.3a
2)	Không	No	☐	→ E.4
3)	Có, khối lượng công việc của nữ giới giảm đi.	Yes, it has decreased	☐	→ E.3a
99)	Tôi không biết	I don't know	☐	→ E.4

E.3a	*Lí do chính trong thay đổi khối lượng công việc của nữ giới trong gia đình? (**KHÔNG ĐỌC CÁC LỰA CHỌN CHO NGƯỜI ĐƯỢC KHẢO SÁT**)*	*What is the main reason for this change? **(DO NOT READ OPTIONS)***		Chuyển sang câu
1)	Các yếu tố liên quan đến dự án của tổ chức CARE	Factors related to the CARE project	☐	
2)	Các yếu tố khác	Other factors	☐	→ E.4
99)	Tôi không biết	I don't know	☐	

Nhóm E.4	*Ai ở **xóm/ ấp** của anh/chị…*	*Who in your **community**…*	1) Chỉ có nam	2) Phần lớn là nam	3) Nam và nữ như nhau	4) Phần lớn là nữ	5) Chỉ có nữ	99) Tôi không biết
E.4.1	…tham gia vào các cuộc họp trong ấp?	…takes part in village meetings?	☐	☐	☐	☐	☐	☐
E.4.2	…phát biểu trong suốt cuộc họp trong ấp?	…speaks during village meetings?	☐	☐	☐	☐	☐	☐
E.4.3	…ảnh hưởng đến quyết định về những vấn đề của ấp?	…influences decisions about village affairs?	☐	☐	☐	☐	☐	☐
E.4.4	…ra quyết định về những vấn đề của ấp?	…makes decisions about village affairs?	☐	☐	☐	☐	☐	☐
E.4.5	…đại diện cho ấp trước chính quyền địa phương?	…represents the village vis-à-vis the government?	☐	☐	☐	☐	☐	☐
E.4.6	…tiến hành các công việc tình nguyện?	…conducts volunteer work?	☐	☐	☐	☐	☐	☐
E.4.7	…có trách nhiệm với các tổ chức cấp địa phương?	…is involved in village-based organisations?	☐	☐	☐	☐	☐	☐

E.5	*Mô tả nào dưới đây phù hợp nhất với xóm/ấp của anh/chị?*	*Which of the following statements best applies to your community?*		Chuyển sang câu
1)	Trong vòng 3 năm qua, **nam giới ảnh hưởng lớn hơn** trong việc ra quyết định của xóm/ấp.	Over the past three years, **men have gained more influence** in community decisions.	☐	→ *E.5a*
2)	Trong vòng 3 năm qua, **không có thay đổi** nào về sự ảnh hưởng của nam giới và nữ giới trong việc ra quyết định của xóm/ấp.	Over the past three years, there has been **no change** in the way men and women make community decisions	☐	→ *F.1*
3)	Trong vòng 3 năm qua, **nữ giới có ảnh hưởng lớn hơn** đến các quyết định của xóm ấp.	Over the past three years, **women have gained more influence** in community decisions.	☐	→ *E.5a*
99)	Tôi không biết	I don't know	☐	→ *F.1*

E.5a	*Lí do chính trong sự thay đổi tầm ảnh hưởng của nam giới và nữ giới trong việc ra quyết định của xóm/ấp? (**KHÔNG ĐỌC CÁC LỰA CHỌN CHO NGƯỜI ĐƯỢC KHẢO SÁT**)*	*What is the main reason for this change? **(DO NOT READ OPTIONS)***		Chuyển sang câu
1)	Các yếu tố liên quan đến dự án của tổ chức CARE	Factors related to the CARE project	☐	→ *F.1*
2)	Các yếu tố khác	Other factors	☐	
99)	Tôi không biết	I don't know	☐	

PHẦN F | NĂNG LỰC CỦA CỘNG ĐỒNG – COMMUNITY CAPACITY…….

F.1	*Giả sử ấp của anh/chị muốn thực hiện các hoạt động mang lại phúc lợi chung và cải thiện chung cho ấp nhưng lại không mang lại lợi ích trực tiếp cho gia đình anh/chị. Anh/chị sẽ hỗ trợ cho hoạt động này như thế nào?*	*Suppose your village were to implement an activity that would benefit the overall welfare and conditions of the village - but that would not bring direct benefits to your household. How likely is it that you would support this activity?*	
1)	Hỗ trợ hết khả năng	Very likely	☐
2)	Hỗ trợ theo khả năng	Likely	☐
3)	Không hỗ trợ	Unlikely	☐
4)	Hoàn toàn không hỗ trợ	Very unlikely	☐
99)	Tôi không biết	I don't know	☐

F.2	*Mức độ người dân trong ấp đóng góp để làm cho ấp trở thành nơi tốt hơn để sống như thế nào?*	*To what extent do people in this village contribute towards making the village a better place to live?*	
1)	Rất nhiều	To a great amount	☐
2)	Vừa phải	To a considerable amount	☐
3)	Ít	To a small amount	☐
4)	Không	Not at all	☐
99)	Tôi không biết	I don't know	☐

F.3	*Mức độ thường xuyên người dân đi họp để đề xuất nguyện vọng của họ đến các cấp chính quyền địa phương?*	*How often do villagers get together to jointly request government officials or political leaders with requests for action?*	
1)	Mỗi tháng 1 lần hoặc nhiều hơn	Once a month or more often	☐
2)	Vài lần trong năm	Several times a year	☐
3)	Khoảng 1 năm 1 lần	About once every year	☐
4)	Ít hơn 1 năm 1 lần hoặc không bao giờ	Less than once a year or never	☐
99)	Tôi không biết	I don't know	☐

F.4	*Nói chung, những nguyện vọng mà người dân cùng nhau đề xuất được chính quyền địa phương đáp ứng ở mức độ nào?*	*Overall, to what extent do these joint requests lead to the desired government actions?*	
1)	Cao	To a great extent	☐
2)	Trung bình	To a moderate extent	☐
3)	Thấp	To a low extent	☐
99)	Tôi không biết	I don't know	☐

F.5	*Câu nào sau đây áp dụng đúng nhất trong cộng đồng của anh/chị?*	*Which of the following statements best applies to your community?*		Chuyển sang câu
1)	↗ Hiện tại người dân ở đây cộng tác với nhau **tốt hơn** so với cách đây 3 năm	↗ Villagers here are now working together **more** than three years ago.	☐	→ *F.5a*
2)	↘ Hiện tại người dân ở đây cộng tác với nhau **kém hơn** so với cách đây 3 năm	↘ Villagers here are now working together **less** than three years ago	☐	→ *F.5a*
3)	→ Trong 3 năm vừa qua, mức độ mà người dân cộng tác với nhau **không thay đổi** so với cách đây 3 năm	→ Over the past three years, the extent to which villagers work together has **not changed**	☐	→ *F.6*
99)	Tôi không biết	I don't know	☐	→ *F.6*

F.5a	*Lý do chính nào cho sự thay đổi này là gì?* ***(KHÔNG ĐỌC CÁC LỰA CHỌN)***	*What is the main reason for this change?* ***(DO NOT READ OPTIONS)***		Chuyển sang câu
1)	Các yếu tố liên quan đến dự án của tổ chức CARE	Factors related to the CARE project	☐	→ *F.6*
2)	Các yếu tố khác	Other factors	☐	
99)	Tôi không biết	I don't know	☐	

F.6	*Trong một năm qua, anh/chị đã tham dự các cuộc họp lập kế hoạch nào trong xóm/ấp chưa?*	*Over the past year, did you participate in any community planning meeting?*		Chuyển sang câu
1)	Có	Yes	☐	→ *F.6a*
2)	Không	No	☐	→ *G.1*
99)	Tôi không biết	I don't know	☐	

F.6a	*Điều gì là quan trọng nhất mà anh/chị học được khi tham dự trong các cuộc họp lập kế hoạch này?*	*What is the most significant thing you have learned in these meetings?*	Chuyển sang câu
1)			→*G.1*

PHẦN G |TỔNG KẾT DỰ ÁN – PROJECT REVIEW

G.1	*Theo anh/chị, ai là người được hưởng lợi từ dự án trong toàn xóm/ấp của anh/chị?*	*In your view, who benefitted from the project?*		Chuyển sang câu
1)	Tất cả các hộ gia đình trong ấp	All households in the village	☐	→ *G.2*
2)	Phần lớn các hộ gia đình trong ấp	Most households in the village	☐	→ *G.1a*
3)	Một vài hộ gia đình trong ấp	A few households in the village	☐	→ *G.1a*
4)	Không ai tại địa phương	Nobody in the village	☐	→ *G.2*
99)	Tôi không biết	I don't know	☐	→ *G.2*

G.1a	*Việc lựa chọn hộ hưởng lợi dự án dựa trên tiêu chí nào?*	*Based on what criteria were households selected?*		Chuyển sang câu
1)	Hộ nghèo	Poor households	☐	→ *G.1b*
2)	Hộ cận nghèo	Near-poor households	☐	
3)	Các tiêu chí khác	Any other criteria	☐	
99)	Tôi không biết	I don't know	☐	→ *G.2*

G.1b	*Theo anh/chị, các tiêu chí này có công bằng không?*	*Do you think that these criteria were fair?*		Chuyển sang câu
1)	Có	Yes	☐	→ *G.2*
2)	Không	No	☐	
99)	Tôi không biết	I don't know	☐	

G.2	*Trong 3 năm vừa qua, anh/chị có học được nội dung mới từ dự án của CARE không?*	*Over past three years, have you learned anything new from the CARE project?*		Chuyển sang câu
1)	Có	Yes	☐	→ *G.3*
2)	Không	No	☐	→ *G.4*
99)	Tôi không biết	I don't know	☐	→ *G.7*

G.3	*Hiện tại anh/chị có đang áp dụng vào đời sống những gì đã học được từ dự án không?*	*To what extent do you currently apply what you have learned?*		Chuyển sang câu
1)	Tôi áp dụngmọi thứ đã được học	I apply everything I have learned	☐	→ *G.5*
2)	Tôi áp dụng phần lớn những gì được học	I apply most of what I have learned	☐	→ *G.4*
3)	Tôi chưa áp dụng những thứ đã học, nhưng có kế hoạch áp dụng trong tương lai	I do not yet apply what I have learned, but plan to do so in the future	☐	→ *G.4*
4)	Tôi không áp dụng	I do not apply anything I have learned	☐	→ *G.4*
99)	Tôi không biết	I don't know	☐	→ *G.4*

G.4	*Những lí do nào anh/chị* ***không*** *áp dụng kiến thức đã học?* ***(KHÔNG ĐỌC CÁC LỰA CHỌN)***	*What are the reasons why you did* ***not*** *apply some of the things you have learned?* ***(DO NOT READ OPTIONS)***	
1)	Tôi **không có nguồn lực** để thực hiện những điều đã học	I do **not have the resources** to implement the changes	☐
2)	Tôi **không tự tin** để thực hiện những phương pháp mới	I do **not feel confident** in applying new techniques	☐
3)	Tôi không muốn việc kiếm sống của tôi bị **rủi ro**	I do not want to put my livelihood at **risk**	☐
4)	Tôi không tìm được người cần **liên hệ** nếu tôi gặp vấn đề với phương pháp mới	I do not know who to **contact** if I have problems with the new technique	☐
5)	Tôi không tìm được những **lợi ích** khi áp dụng những phương pháp mới này	I see **no advantage** in the new technique(s)	☐
6)	Khác:_____	Other:_____	☐

G.5	*Anh/chị có cho rằng những kỹ thuật, cách làm mà anh/chị học được sẽ có giá trị hữu ích trong tương lai?*	*Do you think that the new techniques/strategies that you have learned are worth applying into the future?*		Chuyển sang câu
1)	Có, tất cả những gì đã học đều hữu ích	Yes, all of them	☐	→ *G.5b*
2)	Có, một vài thứ thực sự hữu ích	Yes, some of them	☐	→ *G.5a*
3)	Không	No	☐	→ *G.5a*
99)	Tôi không biết	I don't know	☐	→ *G.6*

G.5a	*KHÔNG BẮT BUỘC: Anh/chị có thể cho chúng tôi biết một ví dụ về kỹ thuật/cách làm **không có giá trị áp dụng** không? Vì sao nó không mang giá trị áp dụng?*	*OPTIONAL: Can you give me an example of a strategy **not worth** applying? Why is it not worth to be applied?*	
1)	Viết vào đây:	Write here:	☐

G.5b	*KHÔNG BẮT BƯỢC: Anh/chị có thể cho chúng tôi biết một ví dụ về kỹ thuật/cách làm **có giá trị áp dụng** không? Vì sao nó mang giá trị áp dụng?*	*OPTIONAL: Can you give me an example of a strategy **worth** applying? Why is it worth to be applied?*	
1)	Viết vào đây:	Write here:	☐

G.6	*Nếu anh/chị có những kỹ thuật/cách làm tốt nhất, anh/chị có nghĩ rằng mình sẽ thực hiện nó trong tương lai không?*	*Thinking of the most technique/strategy that is most important to you, do you think you will be able to apply it into the future?*	
1)	Có, tôi sẽ tự thực hiện	Yes, on my own	☐
2)	Có, với hỗ trợ từ người khác	Yes, with support from others	☐
3)	Không	No	☐
99)	Tôi không rõ	I don't know	☐

G.7	*Anh/chị có chia sẻ về đóng góp thêm gì cho dự án không – ví dụ, những hoạt động cụ thể đã thực hiện tốt hoặc cách làm những dự án tương tự có thể thực hiện tốt hơn?*	*Is there any feedback on the project that you would like to share – for instance, what went particularly well, or ways how similar projects could be carried out better?*
1)	Viết vào đây:	Write here:

Cảm ơn anh/chị đã tham gia khảo sát.

The project 'Integrated Community-based Adaptation in the Mekong Delta Region (ICAM) was launched in mid-2012 to increase community adaptive capacity and resilience to existing hazards and the impacts of climate change. Three years on, this evaluation finds that the project led to the commitment of government agencies and mass organizations to community-based adaptation, to better inter-agency collaboration and to stronger vertical links and responsiveness.

The evaluation also recognizes that adaptation processes take time for their impact to emerge more fully. The ICAM project contributed to improvements in disaster preparedness, access to finance, and linkages to the government. In terms of advancing climate-resilient livelihoods, it identified and documented several options. The project experience provides a rich set of lessons towards further advancing and enhancing community-based adaptation.