

PRACTITIONER'S HANDBOOK IMPLEMENTING THE VULNERABILITY REDUCTION ASSESSMENT

- Second Edition -



Suggested citation:

UNDP Cambodia, 2014. Practitioner's Handbook: Implementing the Vulnerability Reduction Assessment. 2nd Edition. Phnom Penh, Cambodia.

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Acknowledgments

This publication is made possible through the kind support of the Swedish International Development Agency (SIDA) and the Australian Agency for International Development (AusAID), through the strategic guidance of United Nations Development Programme, the Global Environment Facility (GEF) Small Grants Programme, and input from the Cambodia Community Base Adaptation Programme (CCBAP) team, CCBAP grantees, Cambodian government representatives and community level beneficiaries. Acknowledgement is also extended to Cecilia Aipira, Liam Fee and Navirak Ngim for their contributions to the 1st edition, and to Robert W. Solar and Paul Chhan, 2nd edition.

PRACTITIONER'S HANDBOOK

IMPLEMENTING THE
VULNERABILITY REDUCTION
ASSESSMENT

- Second Edition -

UNITED NATIONS DEVELOPMENT PROGRAMME,
SMALL GRANTS PROGRAMME CAMBODIA

Phnom Penh, 2014

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VRA user's guide briefing

This handbook is to serve as a guide to climate change adaptation practitioners, donors, NGOs, CBOs, government agencies, and development services providers to support their implementation of the Vulnerability Reduction Assessment (VRA) methodology and the design of climate change vulnerability reduction projects that reflect community needs. It is designed to offer the user basic preparatory guides, and a step-by-step process to investigating and establishing a baseline that outlines climate change vulnerability perceptions, impacts, adaptive capacities, and barriers to adaptation capacity development in the context of climate change resilience building. While the latter is possibly the most complex part of the VRA, understanding its results is key to designing activities that will directly address climate change vulnerabilities in a local area.

The guide assumes that the practitioner has no knowledge of the VRA methodology and only a summary knowledge of participatory methods, climate change, climate change adaptation, adaptive capacity and vulnerability. While it takes a 'step-by-step' approach, this handbook should not be seen as rigid; more so like a recipe that can be followed in order to achieve a desired output fitting to local needs.

The chapters are designed to strategically build VRA practitioner knowledge, provide preparatory guidance to the deliver of the VRA, the conduct of the VRA itself, analysis and findings reporting. The handbook is also designed in a way that inexperienced VRA implementers can use it during the VRA itself, by providing root questions to initiate VRA tools, and organizational and facilitation tips as the VRA workshop progresses through different stages.

The handbook also includes a VRA data analysis chapter. Here, the user will find a process guide to VRA data analysis set at 'minimum requirements' to develop useful insights into climate change impacts, vulnerability and adaptive capacity building needs. The final chapter, VRA reporting, is a guided template to help in the development of a concise and useful VRA report. See Figure 1 for a component overview of the Practitioner's Handbook.

Practitioner’s Handbook Chapter Flow

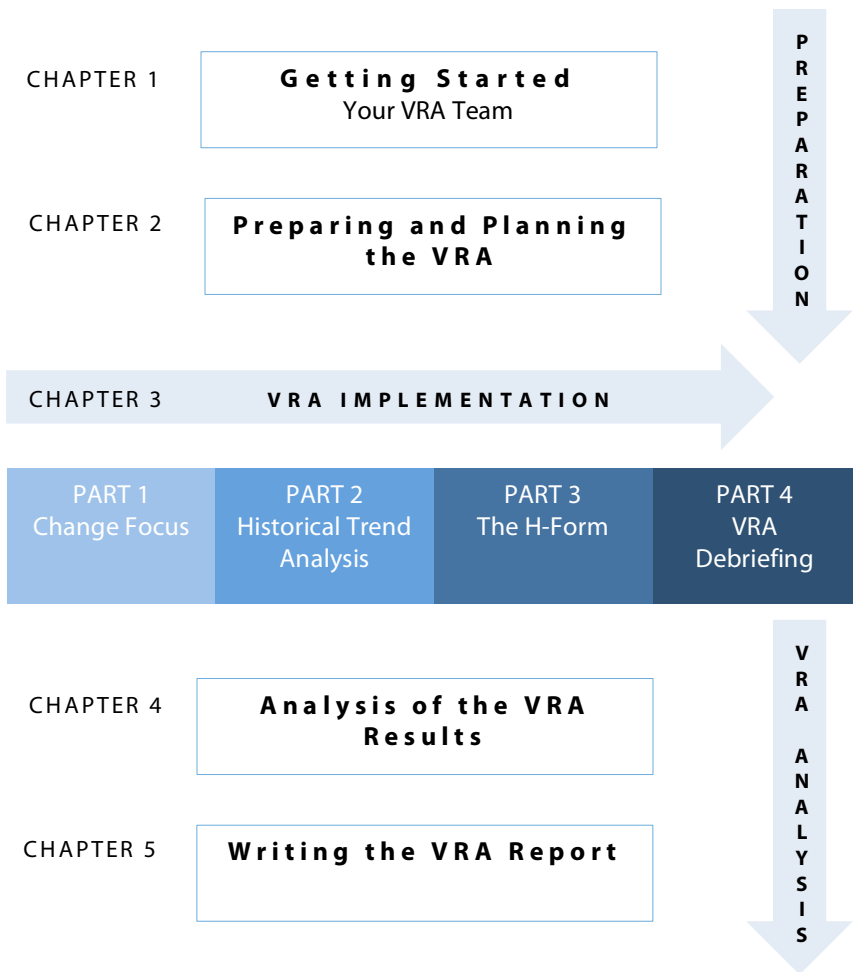


Figure 1 Chapter overview and flow of the 'Practitioner’s Handbook’.

Main acronyms used

CBA	Community Based Adaptation
CBO	Community Based Organization
CCBAP	Cambodia Community Based Adaptation Programme
CDP	Commune Development Plan
CIP	Commune Investment Programme
FGD	Focus Group Discussion
NGO	Non Government Organization
Q1	H-Form Question 1
Q2	H-Form Question 2
Q3	H-Form Question 1
Q4	H-Form Question 1
VRA	Vulnerability Reduction Assessment

CLIMATE CHANGE, COMMUNITIES, AND THE VRA

Cambodia's economy is largely agrarian, with three quarters of the total population living in rural areas and most of them engaged in rain-fed and subsistence agriculture, being normally one crop of rice per year. The impacts of climate change on Cambodia, in particular on agriculture and rice cultivation, are predicted to adversely affect food production and food security in rural areas. Reduced agricultural production could lead to hunger and malnutrition, negatively affect Cambodia's overall economic performance, and hinder the achievement of Cambodia's Millennium Development Goals.

Today, climate change threatens to unravel development gains in Cambodia. The injustice of climate change is that it disproportionately impacts on poor communities who have limited resource to cope with its negative consequences. Local farmers across Cambodia have noticed marked changes in the climate. They report that for the past 40 years, their vulnerability to floods, droughts, variations in seasons, and temperatures extremes have increased enormously. Amidst these changes, farmers are most worried about the impacts of drought; becoming more frequent and prolonged, and of the destructive forces of floods. These climatic hazards continually erode family and community assets that are essential for their survival and their ability to adapt to climate change impacts. Many see climate change as an unstoppable force that will push them further into poverty.

Within this very challenging scenario, women, the elderly and indigenous people are expected to bear a bigger burden of 'climate change' because of their social position in society. In response, local communities rely on social groups such as self-help and savings groups to access small loans to initiate economic activities to supplement and or stabilize their livelihoods in the face of climate change impacts. However, an overwhelming majority of the rural poor depend on natural resources as a means of coping with climate change, yet, these resources are also vulnerable to climate change, and under further threat from current land use and management practices.

Addressing the aforementioned challenging situation, the Cambodia Community Based Adaptation Programme (CCBAP) was launched with the purpose of reducing vulnerability and increasing the adaptive capacity of targeted communities to manage the additional risks of climate change.

CCBAP aims to reduce vulnerability in Cambodia's agricultural sector to climate-induced changes in water resources availability. It also aims to enhance the capacity of vulnerable communities in building resilience, mainstreaming climate change responses in commune development planning and investments, and document good practices in climate change adaptation.

Lessons learned from 71 projects throughout 21 provinces implemented across Cambodia are now being leveraged to promote the replication of successful community practices, and the integration of lessons into sub-national and national policies that reduce vulnerability to climate change impacts.

As part of the CCBAP implementation process, a Vulnerability Reduction Assessment (VRA) process was developed to help communities bring forth their perceptions of vulnerability to climate change, and their capacity to adapt. The VRA was also designed to measure the impact of a Community Based Adaptation (CBA) project vis à vis a CBA project under implementation. The VRA is based on a composite of 4 indicator questions, tailored to capture locally relevant issues that are at the heart of understanding vulnerability to climate change. Responses to these questions move through an analysis process that culminates in priority recommendations for building climate change adaptation capacities aimed at reducing localized vulnerability to climate change. Ultimately, VRA information and recommendations made are to be taken forward, integrated and applied to Commune Development Plans (CDPs) and Commune Investment Programmes (CIPs).

THE VRA AND PARTICIPATION

What is the VRA?

VRA Definition: The VRA is a perception based tool that can be used to develop a vulnerability baseline, and be used to monitor and evaluate the success of community based adaptation activities and progress towards set achievement of outcomes.

The VRA is a flexible methodology that is designed to investigate and establish a baseline regarding vulnerability and adaptive capacity to climate change. Depending on how the VRA is conducted and analyzed, it can give significant details about differentiated vulnerabilities of women, men, farmers, elders, and other demographic groupings. The VRA also has the benefit of being useful throughout the project cycle. At the design stage of a project, it guides practitioners to incorporate vulnerability reduction activities and determine what outcomes the project should aim to achieve. In this regard, it is particularly useful for local NGOs and CBOs who are more inclined to liaise directly with their target communities before or during proposal design phases. Subsequently, if the VRA process is not used before activities and outcomes have been proposed, it can be used at a project inception phase to establish and build baseline indicators as a way of checking the efficacy and targeting of activities and intended outcomes. In this regard, it is particularly useful to national level government departments and larger donors, who are less likely to design their projects in direct contact with the community.

The VRA can also be used as a perception based monitoring and evaluation tool to determine the success of activities and progress towards set achievement of outcomes. Local communities, in particular commune development planning committees can also use the VRA to support their own processes of investigation and learning. The results can be used to plan collective actions on adaptation, or by ensuring that commune development interventions build local resilience rather than exacerbate the impacts of climate change.

Why participate in the VRA?

Understanding how to implement the VRA, or any other participatory methodology, it is useful for practitioners to be aware of what participatory methods are, why they are used, what benefits they bring, and what are the alternatives. Participatory methods emerged in the 1980s as a response to 'top-down' approaches, which were then the dominant method of designing and implementing development projects. These approaches tended to involve external experts spending a short time in the field, interviewing beneficiaries, and subsequently designing projects based on their expertise. While this brought success in some areas, it led to a 'one size fits all' approach to development, whereby local knowledge, traditions and expertise were overlooked. It also meant that local communities had little influence over the projects they were intended to benefit from. As a result, there was little ownership, or incentive, to sustain the project after the intervention ended.

What's Unique About the VRA?

Focused on climate change: The VRA focuses on understanding how climate change is and will affect the lives and the livelihoods of targeted communities. It examines climate related hazards, vulnerabilities and adaptive capacities with a view to building resilience for the future.

Emphasis on collaborative learning: The VRA methodology is designed to balance its research agenda with a purpose of learning through dialogue among communities. It also makes use of learning processes to promote understanding and awareness amongst stakeholder groups

Examines the enabling environment: Local authorities and development committees play a critical role in shaping people's capacity to adapt. The VRA process informs these stakeholders where to concentrate their development efforts in order to reduce local vulnerabilities.

Participation in the VRA process represents a transfer of power and decision making from the development practitioner to the community. Participatory methods, such as the VRA, are designed to assist communities to utilize external development practitioner knowledge in their decision-making efforts, rather than base interventions on it. Instead, the development practitioner acts a facilitator of group discussions that aim to analyze issues in the community jointly. The result is that communities understand the nature of the problem, and development practitioners understand the level of knowledge in the community, and how it can be used to achieve project outcomes. The implication is that communities are empowered, because they have a direct influence on the ways in which donors fund projects to which they are the focal beneficiaries. It also means that project interventions are more targeted and locally appropriate.

Good practice in participation¹

While there are no set rules for implementing participatory methods, in place are a set of principles, which should guide practitioners appropriately:

- ✓ Be aware of methodologies, e.g. FGDs, and the system of learning and interaction through facilitator led discussions
- ✓ Emphasize and reassure that the opinions and perspectives of participants are both valid and valuable
- ✓ Group learning creates an enabling environment of interaction between community members, development practitioners, local authorities and development service providers
- ✓ Ensure flexibility in methods used in order to fit the needs of communities and the context they are coming from
- ✓ Agendas for workshops are facilitated by development practitioners based on community needs
- ✓ Debate, discussion and analysis of the problem/s leads to agreement and sustainable action
- ✓ Building the capacity of local communities to self-mobilize and take responsibility is beneficial

¹ Adapted from: Bradley, D and Schneider, H (2004) Participatory Approaches: A Facilitator's Guide, London, Voluntary Service Overseas.

² Adapted from: Solar, R. 2014. Building Climate Resilience: A Training Manual for Community Based Climate Change Adaptation. Regional Climate Change Adaptation Knowledge Platform

CHAPTER 1

GETTING STARTED

Briefing

The chapter provides key knowledge to VRA facilitators that will help in their performance and quality of VRA data obtained. It sets out the roles and responsibilities of the VRA team, and equips them with knowledge of the most common climate change concepts and vocabulary used in a VRA workshop. The chapter also aims to provide VRA facilitators with a base knowledge of how different sectors of society are impacted by climate change. This is valuable to understanding the context of VRA participants, the data obtained, and to the analysis of the data.

The chapter also includes a VRA team exercise to check their understanding of climate change concepts and vocabulary; a must before moving on to following chapters.

Chapter objectives

- ✓ Describe the roles and responsibilities of the different VRA facilitators needed to conduct a VRA workshop
- ✓ Build VRA practitioner knowledge on climate change concepts and vocabulary most commonly used in the VRA awareness building, facilitation and reporting process
- ✓ Provide background to climate change impacts and vulnerabilities that may be expressed at the local level to improve VRA facilitation, and the development of a fuller VRA profile

BUILDING A VRA FACILITATION TEAM

The VRA exercise requires at least two facilitators per focus group; one to ask the questions and motivate discussions, the other to record answers. Therefore it is a must that both facilitators understand the basic concepts of climate change, associated vocabulary, how these relate to impacts on rural livelihoods and community well-being, and to fully understand the VRA process. Critical is that both group facilitators are able to engage and ensure that information obtained is relevant to the questions asked, and that all participants, in group exercises and focus groups discussions, are heard and feel that they can meaningfully participate. Following are a series of 'minimum' checklists, that when met, your VRA team is ready. Note that facilitators also have some shared roles and responsibilities

Team knowledge

- ☒ Have background knowledge of the targeted area and VRA participants, e.g. demographics, focal livelihood sources, development initiatives, perceived climate change impacts
- ☒ Have completed the VRA team vocabulary and concept exercise
- ☒ Have consulted and briefed the targeted community on the VRA process and its purpose

Lead facilitator role

- ☒ Ensures that all facilitators understand the purpose of each VRA tool, information to be collected, and how this information will be used
- ☒ Ensures that each facilitator can identify well with their designated groups
- ☒ Ensures that information gathered is relevant to the question/s asked
- ☒ Provides oversight, timing, and help when needed to other VRA team facilitators

Group facilitator role

- ☒ Reviews each VRA tool with participants, e.g. the purpose of each VRA tool, information to be collected, and how this information will be used
- ☒ Helps participants assess data and formulate needed questions throughout the VRA process
- ☒ Ensures meaningful participation and dialog from all participants along the lines of the task/ question/ data to be gathered
- ☒ Ensures that information gathered is relevant to the question/s asked
- ☒ End the VRA group activity on a positive note

Note taker role

- ☒ Ensures all materials, charts and forms are organized and ready for use
- ☒ Ensures that information gathered is relevant to the question/s asked and recorded clearly
- ☒ Clarifies data with participants at the end of each activity

LANGUAGE COMMONLY USED IN A VRA²

The following is an introduction to basic vocabulary and concepts used in vulnerability reduction assessments and climate change adaptation. Understanding this basic language will help VRA facilitators ensure that focus group discussion are on topic, and the VRA analysis yields focused vulnerability reduction measures.

Climate change

When thinking about 'climate change', this should be thought of as a long-term change in weather patterns occurring over long periods of time, e.g. decades to millions of years. It may be a change in average weather conditions or the distribution of weather related events, e.g. more or fewer extreme weather events. Climate change may also be limited to a specific region or may occur across the planet. Important to know is that climate change reflects a change in the balance of the earth's climate system.

Weather and climate

Weather events are short-term (minutes to months) changes in the atmosphere, e.g. temperature, rain, cloudiness, to wind etc. Climate is the average of weather over time and space, i.e. climate is what you expect, weather is what you get.

Global warming³

Global warming is a term that describes the rise in the average temperature of Earth's atmosphere and oceans. Since the early 20th century, Earth's average surface temperature has increased by about 0.8 °C, with about two-thirds of the increase occurring since 1980. Scientists are more than 90% certain that global warming is caused by increasing concentrations of

² Adapted from: Solar, R. 2014. Building Climate Resilience: A Training Manual for Community Based Climate Change Adaptation. Regional Climate Change Adaptation Knowledge Platform for Asia, Partner Report Series No. 14. Regional Resource Centre for Asia and the Pacific (RRC.AP), Asian Institute of Technology, Thailand.

³ http://en.wikipedia.org/wiki/Global_warming

greenhouse gases produced by human activities such as the burning of fossil fuels and deforestation.

Greenhouse effect and gasses

The Earth gets energy from the sun in the form of sunlight. As a result, the Earth's surface absorbs some of this energy and heats up. The Earth cools down by giving off a different form of energy. But before all this energy can escape to outer space, greenhouse gases in the atmosphere absorb and reflect some of this back to earth, making the atmosphere and the Earth warmer. This process is called the greenhouse effect. Water vapor (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), and ozone (O₃) are the primary greenhouse gases in the Earth's atmosphere.

Climate change impact

Climate change impact is the outcome of global warming related to change. Assessing this impact/ change includes the use of climate data such as temperature, rainfall and the frequency of extreme events, and non-climatic data, e.g. the current situation on the ground for different sectors including water resources, agriculture and food security, to human health and safety as a result of change.

Hazard events

In terms of 'climate change', a hazard event is a potential event caused by a climate condition that causes the loss of life, and or damage to property, environment, livelihood, and or human dignity. Most common climate related hazards include changes in rainfall patterns resulting in drought and flood events, severe weather related storms resulting in property and or crop losses, to changes in biodiversity within an ecosystem, e.g. loss of species and or pest infestations resulting in the loss of ecosystem services.

Climate vulnerability

Vulnerability is considered as the degree to which physical structures, people, or natural and economic assets are exposed to loss, injury or damage caused by the impact of a hazard. This is similar to 'climate vulnerability', but is broken down into three parts in relation to the hazards:

- The degree of *exposure* to a climate related hazard (e.g. how often, for how long)
- The degree of *sensitivity* to the hazard itself (e.g. regions that are relatively less inhabited will be less vulnerable compared to regions with high population densities, given the same degree of exposure)
- The degree of *capacity* available to deal with this form of hazard (e.g. limited 'how to' knowledge, or savings to recover/ prevent losses caused by exposure to a climate related hazard)

Disaster risk reduction

Disaster risk reduction is the concept and practice of reducing disaster risks via efforts to analyze and reduce the underlying factors of disasters. Reducing exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improving preparedness for adverse events are all examples of disaster risk reduction. Disaster risk reduction, as a framework of elements, considers the possibilities to minimize vulnerabilities and disaster risks via actions to avoid/ prevent the hazardous condition, or to limit the adverse impacts of a hazards through mitigation or preparedness actions.

Climate change adaptation

Climate change adaptation is understood as the things we do, planned or not planned (autonomous), that result in adjustments to climate related hazards. Adaptations are considered as adjustment in natural or human systems in response to current or future effects of climate change. These adjustments/actions are intended either to reduce the harm caused by these effects or to take advantage of opportunities that climate change may present, e.g. adaptation funding.

Adaptive capacity

Adaptive capacity refers to individual and or collective strength and resources that can be accessed to allow individuals and communities to reduce their vulnerability to the impact of hazards. These capacities can either prevent or mitigate the impact of a given hazard, or prepare the community to respond to the impact better (readiness).

Resilience

Resilience refers to the capacity of a system, community or society potentially exposed to hazards to adapt via either resisting or changing in order to reach and maintain an acceptable level of function and structure. This is often determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters to improve risk reduction measures.

Adaptation and resilience building

The simplest way to understand the difference between adaptation and resilience building is to look at 'adaptation' as the 'what to do' to lower vulnerability to climate change, e.g. increasing household water storage capacity. Resilience building can be looked at as the 'how to' design and or deliver the adaptation response to bring forward development value in the context of systems, community, and or society. There are six (6) key characteristic to the 'how to' to consider: 1) scale, 2) robustness, 3) rapidity, 4) redundancy, 5) flexibility, and 6) self organization.

FURTHER LEARNING

For further learning of climate change language, link to the Intergovernmental Panel on Climate Change language portals via https://www.ipcc.ch/home_languages_main.shtml.

UNDERSTANDING CLIMATE CHANGE IMPACT, VULNERABILITY, AND WHY IT EXISTS

Impact

Climate change threatens to unravel the strides that have already been achieved in Cambodia's development. The injustice of climate change is that it disproportionately, and adversely, impacts poor communities who have limited resources to cope with its consequences. Local communities have noticed clear changes in Cambodia's climate; from changes in flood regimes to more intense and prolonged droughts, salt water intrusion along its coast, to extreme heat, and shifts in rainfall patterns. These climatic changes present additional challenges to vulnerable rural communities, as many of their livelihoods are highly dependent on water, soil, climate, and weather conditions. However, not all rural communities are impacted the same by climate change, nor are the individuals within these communities.

Climate change is expected to affect the agricultural output in Cambodia in several ways. For example, irrigation systems and rain fed agricultural areas will be affected by changes in rainfall and runoff patterns, and subsequently, water quality and supply. Climate studies generally indicate increasing rainfall throughout much of the Southeast Asian region with increasing variations and uncertainty for Cambodia. Aside from rainfall increases, temperature increase may also threaten agricultural productivity, stressing crops and reducing yields. Reduced rice yields will particularly affect low-income rural populations that depend on traditional agricultural systems, or on marginal lands.

Maintaining water resources in Cambodia is a key priority for the rural poor. Many parts of Cambodia consistently face water stresses, and many areas are often dependent upon limited groundwater and rainfall collection. Climate change will further aggravate water shortages via extreme events such as droughts that undermine food security, or extreme rainfall events that increase the risk of flooding. Challenges to water resource management will also be exacerbated by sea-level rise that would contribute to salt-water intrusion into available freshwater resources. These changes and challenges

mentioned indicate that Cambodia's ecosystems will experience stress and undergo changes of their own. This is of concern because ecosystems are a key natural asset for all Cambodians, as they provide food and water to sustain human life, and natural resources that support commercial enterprises, e.g. fisheries and forestry. Additionally, the loss of ecosystem functions may also threaten Cambodia's social and cultural identity.

Vulnerability

Climate change impacts are often described in the context of vulnerability to natural hazards such as floods, droughts, cyclones, and seasonal variations, to extreme weather events vis-à-vis those being affected. The level of climate change impact felt on a system and or community, etc. is related to the level of exposure to a hazard, its sensitivity to the hazard, and the level of adaptive capacity in place to deal with the hazard.

Scenarios of Vulnerability

When a community, or even a forest, is unable to cope with the negative effects of climate change, then it is considered to have a high degree of climate change vulnerability. However, it is good to understand this vulnerability in relation to exposure, sensitivity, and adaptive capacity.

Exposure: This can be thought of in two different ways. For example: 1) am I exposed to the full force of the hazard, or just some of it, and 2) how often am I exposed to this hazard.

Sensitivity: This has a lot to do with the surrounding conditions within and around the location of the hazardous condition. For example, if an area is highly populated and natural resources are scarce, communities would be very sensitive to small climate change stressors, e.g. the dry season being prolonged by 2 weeks. Conversely, the same area but with a much lower population would not result in a similar outcome for local communities.

Adaptive capacity: This can be thought of as the form, and or amount of resources that can be mobilized to lessons the impact of a climate related hazard. This can be knowledge, human and financial resources, improved forest management, to the building of water storage facilities.

Vulnerability of different social groups

Men, women, children, minorities and indigenous people are not impacted by climate change equally. This is because each has a different degree of vulnerability given their adaptive capacity. This capacity is, among others, a combination of their socio-economic status, access they have to natural resources and technology, to infrastructure and development services. Thus, it is important to know as much about individual and group vulnerabilities in order to plan and support adaptation needs.

Women

As the majority of the world's poor, women are likely to be disproportionately affected by the impacts of climate change. Girls and elderly women especially are often the most vulnerable in times of stress. Particular vulnerabilities are identified with regards to 1) access to health services, 2) dependence on agriculture as a subsistence and or livelihood source, 3) access to water, 4) access to formal and informal labor in times of climate-related disasters, and 5) displacement and conflict.

Children

Children are particularly vulnerable to disaster-related health impacts of climate change including an increased occurrence of malaria, diarrhea and under-nutrition. Important to note is that children have an important stake in the future, and are very active in creating positive change. Hence, children's vulnerabilities need to be considered in CBA efforts, as well as these vulnerabilities addressed through policy; ensuring that they play a role in decisions that affect them.

Minorities and indigenous peoples⁴

For minorities and indigenous people, the impacts of climate change on them are rarely mentioned. What is clear is that indigenous people and some minorities often have a close relationship with their natural

⁴ Minorities, defined as those groups that are numerically smaller within a population, and who share a common religious, ethnic, or linguistic identity. 'Indigenous peoples' refers to groups who are seen as the 'first people' to inhabit a territory, and who have a special connection with the natural environment.

environments for food security, livelihood, and or spiritual fulfillment. This makes them especially sensitive to climate change on many levels. Also, these groups tend to live in poverty, that of which heightens their degree of vulnerability. Social exclusion and discrimination is also part of their vulnerability profile, with the aforementioned making it harder for them to cope with the impacts of climate change, or to exert influence over governments regarding support for adaptation.

VOCABULARY and CONCEPT CHECK

See Annex 1 for a VRA facilitation team vocabulary and concept check exercise.

CHAPTER 2

PREPARING AND PLANNING THE VRA

Briefing

In this chapter, covered are VRA preparation actions to successfully deliver a VRA workshop. Advice is given for being an effective facilitator, including a series of tips when directly engaging VRA participants. The chapter also provides community focused informational sources on climate change needed to establish a basic, yet essential understanding of what climate change is prior to the conduct of a VRA workshop.

The VRA workshop most often uses focused groups discussions as a key participatory methodology to garner information and build local awareness. Thus, the chapter provides advice on the benefits and limitations of using different types of participant groupings for the VRA. A VRA readiness checklist of 'minimum requirements' is also given as guidance to ensure that VRA facilitators, communities, and other stakeholders are prepared for the workshop.

Chapter objectives

- ✓ Provide informational input and facilitator guidance for the successful implementation of the VRA
- ✓ Ensure that VRA implementing teams have considered the basic, yet most important preparatory steps to the organizing and delivery of a VRA workshop

FACILITATOR'S PREPARATIONS

Prior to conducting the VRA workshop, it is important that the VRA team is fully prepared, e.g. knowledge of climate change concepts and vocabulary, a keen understanding of the VRA process, preparation of materials used in the VRA, and importantly, being prepared to be a good facilitator. Good facilitation skills go beyond extracting information, this also includes being able to recognize and react to ambiguous information that can lead to misinterpretations, i.e. bringing clarity to all responses for everyone. Additionally, following-up on the responses provided by VRA focus groups can provide insights on the interplay between climate change impacts and socio-economic factors, and how these factors interact by either eroding or supporting the mobilization of adaptive capacities.

VRA facilitator training is a must for all. During this process, facilitators should assume the part of local villagers and engage in role-play in order to expose them to potentially confusing answers and questions that most likely will occur during the actual VRA. Role-playing should also extend to entering, analyzing and interpreting data. Understanding how data will be statistically analyzed would also be of value.

Days before the VRA exercise, trained facilitators need to make preparations for the actual VRA workshop/s to be conducted at the field level. This would include knowing what type of group they will be facilitating, who will be the main facilitator, who will be the main data recorder, and the different responsibilities attached to these roles. As there will be several facilitators and data recorders for each VRA workshop, all VRA team members should understand each person's role and responsibilities.

Tips to being a good facilitator

The facilitator has one of the most important and challenging roles in the VRA exercise. It is the job of the facilitator to start the discussion, keep it going, ensure that all participants get an equal chance to participate, and conclude the discussion at the end of each session.

Your Facilitation Tips

- ✓ Be engaging and empathetic to the thoughts of community members
- ✓ Know when to talk, and when to listen
- ✓ Understand the questions being asked, and or questions being formulated fully before moving forward
- ✓ Understand how information collected will be analyzed, because it is the facilitators job to get information in a way that it is useful to the VRA process as a whole
- ✓ Ensure that responses come from all participants and that all voices are heard
- ✓ Create opportunities for participants to discuss questions and responses amongst themselves
- ✓ Be able to identify with the group you are facilitating, hence, chose a facilitator with the audience and context in mind. For example:
 - Chose a young female VRA facilitator to work with a group of young women
 - Chose an older male facilitator to work with a group of elders.

Tips for being a good note taker

No matter if VRA facilitators' have great facilitation skills, data collected is only as good as what is being recorded, e.g. participant responses and the context information of those responses. This must be done for individual responses and for group responses to ensure data collected can be explained.

Your Note Taking Tips

- ✓ Ensure that information gathered is relevant to the question/s asked
- ✓ When recording participant responses to questions, be sure to ask for contextual information for clarity when needed
- ✓ Review all responses with the participant and or participant group after an exercise. Ask questions of why, where, what, when, and how to bring added understanding to responses

BRIEFING THE COMMUNITY ABOUT CLIMATE CHANGE

Once the staff have been trained in climate change concepts and have done mock exercises on how to conduct a VRA workshop, the organisation implementing the VRA should brief the targeted villages, communes or provincial representatives about climate change. The selection of the targeted communities should be based on sound scientific evidence regarding communities that are most vulnerable to climate change. In Cambodia, national strategies like the National Adaptation Plan of Action (NAPA) to climate change, and the Cambodia Climate Change Strategic Plan 2014 – 2023, can guide local organisations in identifying which provinces are most vulnerable.

Basic knowledge of climate change is important to the smooth running of the VRA workshop. The practitioner must make sure that the community is aware of climate change, vulnerability and adaptation concepts. This may mean visiting the community in advance of the VRA workshop to disseminate information or give training. The benefit of briefing the community in advance is that more time can be spent with the community introducing concepts and climate change vocabulary in terms they will understand well. In the case this is not possible, a condensed introduction can be given at the start of the VRA workshop. This method may be more appropriate if the community has some prior knowledge of climate change.

Climate change awareness - Khmer videos

Multiple Videos: Climate Change Department, Cambodian Ministry of Environment, Cambodia	www.camclimate.org.kh
Multiple Videos: Mekong River Commission	www.mrcmekong.org
Multiple Videos: Adaptation Learning Mechanism (ALM)	http://undp-alm.org/videos

YOUR VRA FOCUS GROUPS

A focus group is a small-group discussion guided by a facilitator. To implement the VRA workshop, it is recommended that groups be formed, groups that have shared characteristic regarding climate change vulnerability, e.g. men, women, children, the elderly, minorities, and indigenous peoples, to development services providers such as local government, and non-government and community-based organization representatives. Thus, VRA participant profiles are needed, and these profiles will help guide the VRA facilitator/s as to who to invite to the VRA, how they will be group, to how the VRA results will be reported.

Your choice of grouping

Whole Group



Allows for a bigger, more vibrant discussion, involves less facilitators, less preparation, and a simpler analysis



May mean that certain groups (e.g. young women) don't feel able to participate, doesn't give as rich of data, and doesn't allow for detailed analysis

This is a good method for doing a 'quick' VRA, but only as a scoping exercise. For project planning purposes, desegregated vulnerability data is required to ensure that those most at risk/ vulnerable to climate change are able to voice their vulnerability reduction needs.

Focus Groups



Allows the group to be split along demographic and or 'climate vulnerability' lines, gives good data without being overly complex to analyze, gives more vulnerable or marginalized groups a voice



Requires more space and a greater number of facilitators (at least 1 per focus group), and requires comparative group data and analysis to be reported

Often, marginalized and or disempowered people find comfort and strength participating in groups of similar characteristics. By doing so, data gathered is enriched through open discussion, thus allowing for a deeper analysis of vulnerability, as well as the planning of more targeted vulnerability reduction responses.

Individuals



Allows for a rich analysis, and if privacy is ensured it can be a good way to access the feelings of individuals that may not be otherwise expressed in group discussions.

Generates a lot of data that adds complexities to the analysis, doesn't allow for consensus building, as well, the facilitator may influence participant responses.

This form of data collecting is most often used by academic researchers whose primary aim is the gathering and reporting of a large amount of data for statistical purposes.

Special Vulnerability Focus

If the VRA is to be used to align targeted vulnerability reduction actions for specific focal groups, e.g. children, within the set of focus groups it is a MUST to have a group comprised of children. The same follows for the elderly, women, and indigenous groups etc.

Invitation to the VRA

- ! ■ Conducting a workshop with whoever turns up often means that the more empowered and less vulnerable persons to climate change impacts may dominate the participant profile, and recommended actions may not target the most vulnerable.
- ! ■ Always take the time to invite specific people that are representative of the target area. At a minimum, recommended is that 10% of families living in the target area are represented.

VRA READINESS

Because the VRA involves many different people playing different roles, and with several different exercises taking place over several hours in a day, it is best to plan in advance. Provided below is a checklist of 'minimum requirements' to ensure the VRA team, community, and other stakeholders are prepared.

VRA facilitation team readiness

- ☒ Each team member has successfully completed the VRA vocabulary and concept check exercise from Chapter 1
- ☒ The team understands their designated roles and responsibilities for each step of the VRA
- ☒ Each team member understands how to facilitate VRA tools and the information to be collected by each tool
- ☒ The team prepared H – Forum flip charts (1 set for each focus group), or printed forms for individual respondents

Community stakeholder readiness

- ☒ All potential VRA workshop participants understand the purpose of the VRA, why their participation is needed, and how the information collected will be used
- ☒ Proposed VRA workshop participant profile is diverse and balanced, e.g. men, women, children, youth, development services providers etc.
- ☒ Participants have been selected and invited to the VRA workshop
- ☒ All participants know where and when the workshop will be conducted, and how long the process will take. (This should have been consulted upon with stakeholders prior to the invitation process)

CHAPTER 3

CONDUCTING THE VRA

Briefing

In this chapter, provided is a step-by-step guide to the conduct of a Vulnerability Reduction Assessment (VRA) workshop via the use of the H-Form tool. The process starts off with a video to help participants understand climate change, and participatory exercises that aim to relate and map climate change impacts with experienced changes within their community (or focal area where the VRA is to be conducted). Following, participants are grouped thematically according to commonalities and or differentiated vulnerabilities, e.g. men, women, the elderly, to development services providers, to carry through with the H-Form tool. Grouping is done to gather specific information on vulnerable groups to facilitate the development of targeted climate change vulnerability reduction responses.

The H-Form tool is comprised of four (4) separate H-Forms (H-Form Question 1 (Q1), H-Form Question 2 (Q2), H-Form Question 3 (Q3), and H-Form Question 4 (Q4) based on a key question/s, used to capture information on different aspects of climate change including an analysis of current and future climate change risks and impacts, resources and strategies used to lessen the impact of climate change, barriers to adaptation, and adaptation capacity building support needed to reduce climate change vulnerability.

Chapter objectives

- ✓ Provide guidance to an ethical briefing conducted at the field level
- ✓ Inform a VRA facilitator of the scope of information to be gather
- ✓ Provide step-by step facilitation guidance to the implementation of the VRA H-Form

Recommended overall field facilitation time: 6 hours⁵

⁵ 6 hours is the recommended facilitation time. This may vary depending on facilitator experience, and or VRA participant participation.

IMPLEMENTATION BRIEF

You are now ready to implement the VRA workshop process. Figure 2 outlines the VRA process and the tools used in each step.

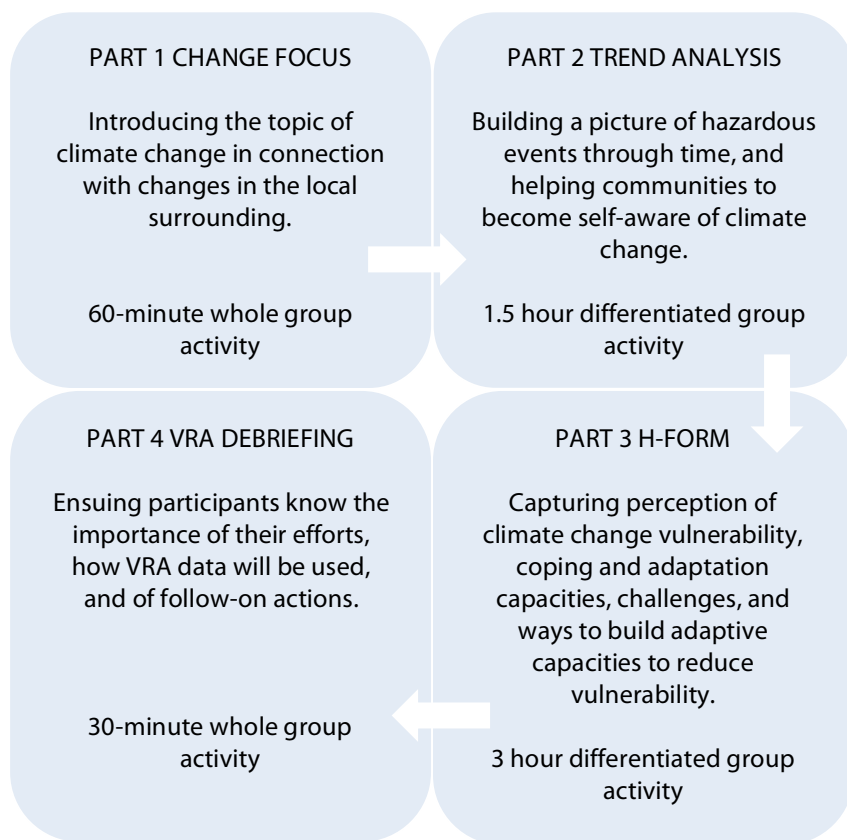


Figure 2 VRA workshop process and step content briefing.

Ethical briefing

Most participants will know why the workshop is being conducted, but not all. Recommended is to start the VRA workshop with an 'ethical briefing'. An ordered check list is provided below:

- ☒ Introduce the VRA team, including their roles and key responsibilities in the VRA workshop
- ☒ Review the purpose of the VRA workshop and what kinds of information are you looking for, how the data will be used, and who will see it
- ☒ Stress that the data given will be treated with confidence
- ☒ Give the participants a brief overview of the VRA process (see Figure 2 for ideas), including showing samples of the tools to be used
- ☒ Inform the participants that they can leave the workshop should they wish to
- ☒ Explain to the participants that once the results of the VRA are known, you will return to give them the opportunity to review and verify the information
- ☒ Note: if project funding is not guaranteed, make sure to inform the participants of this to avoid raising false hopes

Scoring and ranking

The H-Form tool requires participants to rank their vulnerability to a variety of contexts. Recommended is to use a simple ranking scale of 1 to 5 for H-Form Question 1, 2 and 3 as follows:

- 1 - Not at all vulnerable
- 2 - Not very vulnerable
- 3 - Some vulnerability
- 4 - Vulnerable
- 5 - Very vulnerable

PART 1 CHANGE FOCUS

Tool briefing⁶

The change focus tool is a Focus Group Discussion (FGD) used as a 'warm-up' activity to introduce the topic of climate change, and the context of the VRA. The process provides both facilitators and participants time to share and discuss their 'climate change' experiences openly; from changes in their surrounding ecosystems to impacts on their livelihoods, family, and society.

Tool objectives

- ✓ Introduce the concept of climate change and build awareness towards climate related impacts
- ✓ Bring forward climate change related impacts and other changes happening within the local area to improve VRA facilitation
- ✓ Provide base information need for the development of the historical trend analysis matrix

Materials

- ✓ Climate change video – 20 minutes and equipment for viewing⁷
- ✓ Markers, chart paper, and tape

Recommended facilitation time: 1 hour

⁶ Adapted from: AIT-UNEP RRCAP, 2011a. An approach to Climate Change Adaptation Research: Events, Strategies, and drivers. Copyright © AIT-UNEP RRCAP 2011, Bangkok, Thailand

⁷ See 'Climate change awareness - Khmer videos' section in Chapter 2 for video resources.

CHANGE FOCUS – FACILITATION

Step 1

Start the process by explaining the activity objectives, process, and how the output will be used. Following, show the recommended video. After the video, ask participants for feedback, e.g. how did the video make them feel (positive and negative), what were they able to relate in the video to their everyday lives?

Step 2

The next step is to facilitate a focus group discussion (FGD). Note that it is not important to mention 'CLIMATE CHANGE' from the start of the FGD. Start by asking participants to visualize their village area and surrounding ecosystem/s; then to share openly changes that have occurred over time, e.g. variations in seasons, changes in water resources, soil fertility, the condition of the environment, to hazardous incidents such as floods, drought, and or illnesses. Highlight significant changes on chart paper under the category 'Environmental Changes'

Environmental Changes

- Response
- Response
- Response
- Response
- Response
- Etc.

Step 3

Ask participants to think of the aforementioned changes (Step 2), and describe how these changes have impacted and or changed their livelihood strategies. Highlight significant changes on chart paper under the category 'Livelihood Changes'

Livelihood Changes

- Response
- Response
- Response
- Response
- Response
- Etc.

Step 4

Considering the changes listed under environmental and livelihood changes, ask the participants to describe how these 'changes' have impacted their social relationships and their participation in community development activities. Highlight significant changes on chart paper under the category 'Social Changes'

Social Changes

- Response
- Response
- Response
- Response
- Etc.

Step 5

Review with the participants the 3 outputs and reflect, through discussion, on those that could be considered a hazardous conditions. Underline these on the various charts. Next, ask participants to select from those underlined those that are of most concern to them. Record those selected on chart paper under the category 'Changing Hazardous Conditions' (see sample given)

Inform participants that this output will be used to help develop the historical trend analysis matrix.

Changing Hazardous Conditions

- Dry season length/ longer
- Crop damage because of long flood periods
- Deforestation
- Food insecurity
- Stronger winds
- Fires
- Livestock death
- Changes in the wet/ dry season timing
- Floods lasting longer
- Drought
- Heavy rains
- Income becoming less and less every year
- Loss of income
- Family debt is growing
- Increased participation in decision making processes concerning the community

PART 2 HISTORICAL TREND ANALYSIS

Tool briefing

The historical trend analysis lends to the development of the VRA context by bringing forward community perceptions of climate change in the past. It complements the H-Form tool by enabling non-government organizations (NGOs), community based organizations (CBOs), and others to assess whether people have noticed changes in the climate in terms of changing hazardous conditions. The historical trends analysis also helps facilitators to frame the H-Form discussion in the context of the most important climate change conditions and related events. Additionally, by discussing changes in the weather over a long period of time, communities become self-aware of how climate change differs from weather change.

To get the most out of the historical trends analysis, it is best to investigate trends based on segregated groups e.g. men, women, children, the elderly, minorities, and indigenous peoples. This provides space for all to freely share their observed changes over time, and to identify what are the most important events or observation important to each group.

Tool objectives

- ✓ Chart climate and weather hazardous conditions and events over a set time period, and participants' perceptions of vulnerability to these events
- ✓ Learn about 'most significant climate change events' and the impact these have had on community livelihoods and well-being

Materials

- ✓ Prepared historical matrix chart (see example)
- ✓ Final output from the change focus tool (step 5)
- ✓ Markers, chart paper and tape

Recommended facilitation time: 1.5 hour

HISTORICAL TREND ANALYSIS - FACILITATION

- Step 1

Prepare the historical trend analysis matrix. A sample has been provided. Note that time periods are given in addition to political regimes. Communicating the time frame in this way can help participants identify time periods in the past and related events.
- Step 2

Using information obtained from the ‘change focus’ tool, ask participants to highlight climate and or weather related events and impacts they are very concerned about. These will then be moved into the historical trend analysis matrix. You may also consider asking participants to characterize the hazardous condition by adding and adjusting these in the column to enrich the investigation process.

Changing Hazardous Conditions	Climate and Weather Hazardous Conditions	1980 - 1989	1990 - 1999
• Dry season length/ longer • Crop damage because of long flood periods • Deforestation • Food insecurity • Stronger winds • Fires • Livestock death • Changes in the wet/ dry season timing • Floods lasting longer • Drought • Heavy rains • Income becoming less and less every year • Loss of income • Family debt is growing • Increased participation in decision making processes concerning the community	• Drought (5+ weeks)	1 2 3 4 5	1 2 3 4 5
	• Dry season length/ longer (+3 weeks)	1 2 3 4 5	1 2 3 4 5
	• Crop damage from drought	1 2 3 4 5	1 2 3 4 5
	• Crop damage from floods	1 2 3 4 5	1 2 3 4 5
	• Heavy rains	1 2 3 4 5	1 2 3 4 5
	• High floods	1 2 3 4 5	1 2 3 4 5
	• Long lasting floods	1 2 3 4 5	1 2 3 4 5
	• Changes in the wet/ dry season timing	1 2 3 4 5	1 2 3 4 5

Step 3

Within each time frame and according to the identified climate/ weather related hazardous condition, participants are to rate their 'vulnerability' on a scale of 1 to 5, 1 being not vulnerable at all, 5 being very vulnerable. Allow time for discussion amongst the group of participants in order to come up with a single rating though consensus. Circle the answer as shown in the matrix below.

rating vulnerability...
ask... how big of a
problem was it?

HINT

Climate and Weather Hazardous Conditions	1980 - 1989	1990 - 1999
• Drought (5+ weeks)	1 2 3 4 5	1 2 3 4 5
• Dry season length/ longer (+3 weeks)	1 2 3 4 5	1 2 3 4 5
• Crop damage from drought	1 2 3 4 5	1 2 3 4 5
• Crop damage from floods	1 2 3 4 5	1 2 3 4 5
• Heavy rains	1 2 3 4 5	1 2 3 4 5
• High floods	1 2 3 4 5	1 2 3 4 5
• Long lasting floods	1 2 3 4 5	1 2 3 4 5
• Changes in the wet/ dry season timing	1 2 3 4 5	1 2 3 4 5

Step 4

Learn more about severe events. Using the historical trend analysis table, identify significant timeframes of interest, i.e. those where a 4 or 5 have been circled. Ask the participants about the event/s that happen during that period, especially those that had a big impact on livelihoods and peoples' safety. If possible, try to get quantitative information, for example:

- How long was the flood?
- How long was the dry season?
- How many hectares of crops were lost/ what % of crops were lost?
- How often did this happen in the time period?
- How many lives were lost?

Sample Historical Trend Analysis Matrix

Climate and Weather Hazardous Conditions	1980 – 1989 <i>(State of Cambodia)</i>	1990 – 1999 <i>(UNTAC and coalition)</i>	2000 – 2009 <i>(Kingdom of Cambodia)</i>	2010 – current <i>(Kingdom of Cambodia)</i>	Option (current year)	Comments
• Drought	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
• Dry season length/ longer (+3 weeks)	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
• Crop damage from drought	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
• Crop damage from floods	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
• Heavy rains	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
• High floods	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
• Long lasting floods	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
• Changes in the wet/ dry season timing	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	

PART 3 H - FORM TOOL PROCESS

Tool briefing

The H-Form tool is comprised of four (4) separate H-Forms (H-Form Question 1 (Q1), H-Form Question 2 (Q2), H-Form Question 3 (Q3), and H-Form Question 4 (Q4) based on a key question/s. Participants are grouped thematically according to commonalities and or differentiated vulnerabilities, e.g. men, women, the elderly, to development services providers, to carry through with the H-Form tool. Grouping is done to gather specific information on vulnerable groups, and to identify targeted climate change vulnerability reduction responses.

Tool objectives

- ✓ Capture information on different aspects of climate change including an analysis of current and future climate change risks and impacts
- ✓ Understand resources and strategies communities use to lessen the impact of climate change, and of the outcome of given strategies
- ✓ Identify barriers to adaptation, and adaptation capacity building support needed to reduce climate change vulnerability

Materials

- ✓ Output of the historical trend analysis, specifically that of vulnerability ratings vis-à-vis climate and weather related hazardous conditions
- ✓ Prepared H-Forms on chart paper as illustrated in the facilitation guide - at least 4 will be needed for each group for every hazardous condition chosen to investigate; if conducting the H-Form by the individual, 4 H-Forms will be needed (A4 paper size for every hazardous condition chosen to investigate)
- ✓ Markers, chart paper and tape

Recommended facilitation time: 3 hours

IMPORTANT NOTE: Identify participant grouping prior to facilitating the H-Form tool. By informing participants of this, much time can be saved.

H-FORM QUESTION 1 - FACILITATION

Step 1

To set the base question/s for the H-Form process, there is a need to focus on climate and extreme weather events that had the most severe impact on the livelihoods and or well being of the community, e.g. food security. Step 1 begins by reminding participants of the historical trend analysis tool output, specifically:

- The '**Climate and Weather Hazardous Conditions**' they have highlighted
- Conditions they have indicated they are most vulnerable to (e.g. those ranked 4 or 5 in that later years)

Example

Climate and Weather Hazardous Conditions	–	1990 - 1999	2000 – 2009	2010 – Current
• Drought (5+ weeks)		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Dry season length/ longer (3+ weeks)		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Crop damage from drought		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Crop damage from floods		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Heavy rains		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• High floods		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Long lasting floods		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Changes in the wet/ dry season timing		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Step 2

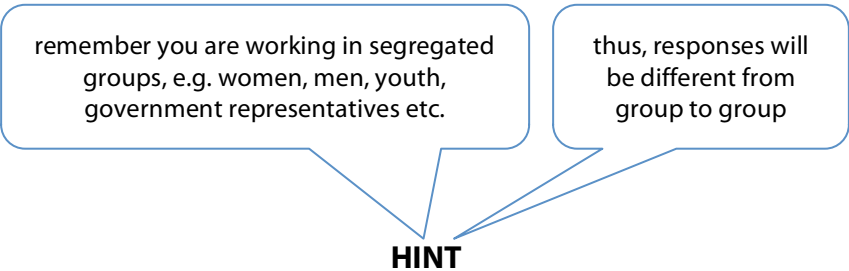
In order to make the VRA manageable and focused on areas where reducing vulnerability to climate change impacts will have a great benefit, it is recommended to work with the top two (2) most hazardous conditions. Participants can select these by vote/ frequency of response, or consensus.

From the example given, best choices would be to address, 1) drought and the damage cause to agriculture crops, and 2) floods and the damage they have caused to agriculture crops.

Step 3

The H-Form requires a question to be asked. Either the facilitator or the participants can take the information acquired in step 2, and convert this into a question. For example:

- What experiences do you face because of droughts (5+ weeks past the normal dry season length) and how does this affect you?
- What experiences do you face because of long lasting floods, and how does this affect you?



Step 4

Move the question developed into the prepared H-Form. Only place one (1) question into the H-Form. For other questions to investigate, this will require another H-Form (see example below)

Negative impacts on livelihoods and community well-being	<i>What experiences do you face because of droughts (5+ weeks past the normal dry season length), and how does this affect you?</i>	Existing resources and strategies used that reduced the negative impacts on livelihoods and community well-being
	1 2 3 4 5	

Step 5

To facilitate the ‘negative impacts on livelihoods and community well-being’, the facilitator must help participants think in different terms, e.g. impacts on the five (5) livelihood assets groupings (human, natural, financial, social, and physical), and or constituents of well-being (security, basic materials for life, health, and social relations)⁸. Suggested root questions for the facilitator are given below.

Livelihood	Community Well-Being
- What and how have the natural resource you use for your livelihoods been impacted? - How has your ability to meet financial obligations been impacted? - How have the local groups been impacted, e.g. Women’s savings and loans groups, farmer-based organizations, traditional welfare and social support groups etc.? - How has the infrastructure you rely upon for your livelihoods been impacted? - How has your ability to do, or contribute labor been impacted? - How has your ability to work or apply your knowledge and skills towards livelihood pursuits been impacted?	- How has your personal safety been impacted? - How has your food security and family nutrition been impacted? - How has your personal health been impacted? - How has your access to clean water been impacted? - How have your social relationships been impacted? - How has your ability to help others been impacted?

All answers to the facilitator’s questions, and other participant inputs are to be moved into the left side column in the H-Form.

Negative impacts on livelihoods and community well-being	<i>What experiences do you face because of droughts (5+ weeks past the normal dry season length), and how does this affect you?</i>	Existing resources and strategies used that reduced the negative impacts on livelihoods and community well-being
- Response - Response - Response - Response	1 2 3 4 5	

⁸ Millennium Ecosystem Assessment (2005). Ecosystems and Well-being Synthesis report. Washington DC: Island Press. v+86 pp.

Frequency and Grouping Data Tips

Frequency: When conducting your VRA analysis, it is very important to indicate the 'frequency of response' to questions asked (Q1, Q2 and Q3), or when prioritizing vulnerability response actions (Q4). This is a simple process that requires the facilitator to 1) ensure all participants have a chance to respond to questions, and 2) facilitate a brief review of given responses while asking participants if they are experiencing something very similar and would like to add their agreement to the recorded response.

1st

Tip: When very similar responses are given to a previously recorded response, just place a check mark next to the recorded response.

Negative impacts on livelihoods and community well-being	What experiences do you face because of droughts (5+ weeks past the normal dry season length), and how does this affect you?					Existing resources and strategies used that reduced the negative impacts on livelihoods and community well-being
No water for gardening ✓✓	1	2	3	4	5	
Cost of food increases						
Outbreaks of animal diseases						
Decreases in rice yields ✓✓✓						

Frequency: Add all check marks together and + 1 for the written response = 6.

2nd

Tip: When participants feel they have given all their responses, end by facilitating a brief review of these, and ask participants if they would like to add their agreement to a recorded response that they have not already done so. Place a check mark by the recorded response if needed. Caution! Often participants will follow others, and agree to everything already recorded. Ensure that for those wishing to add their agreement to a previously recorded response, that doing so is very important to them.

Grouping: Grouping similar participant responses together can ease and simplify your VRA analysis. Once all responses are given to a question, e.g. negative impacts on livelihoods and community well-being, there should be a group discussion about how the responses can be categorized into recurring themes. This is not an exact science, and there are bound to be examples that are vague or not clear. Responses should be categorized in a way that brings forth the most common information emerging. Some examples are provided below.

Q1 - Negative impacts on livelihoods and community well-being		
Food Shortage	Low agricultural Production	Animal health
• Home gardening fails	• Rice is damaged by storms	• Pigs do not eat
• No water for our gardens	• Decreases in rice yields	• Cattle and buffaloes get sick
• No water for our animals	• Low harvest	• Outbreaks of animal diseases
• Cost of food increases	• Seedlings dry up	• No fodder to feed animals
• Family rice is not enough for the year	• Rice and other crops are damaged	• Animals get sick and die

Frequency and Grouping Across Groups: Depending on the data required, wanted may be an overall frequency across several groups for closely related responses, e.g. men and women. An example is provided below.

Q1 - Negative impacts on livelihoods and community well-being	
Low agricultural Production (Men)	Low agricultural Production (Women)
• Rice is damaged by storms	• Rice is damaged by storms
• Decreases in rice yields ✓✓	• Decreases in rice yields ✓✓
• Low harvest ✓✓	• Low harvest ✓✓
• Seedlings dry up	• Seedlings dry up ✓✓

Frequency: 1+1
for written
responses = 2

= 10

= 6

Frequency:
1+1 for written
responses + 2
= 4

Step 6

To facilitate the 'existing resources and strategies used that reduced the negative impacts on livelihoods and community well-being', best for analysis purposes is that the facilitator helps participants' organize their answers, e.g. impact vs. resources or strategies. Some suggested root questions are given below.

Livelihood	Community Well-Being
- Because of the 'drought', what did you use/ do to lesson or compensate for the impact it had on the natural resources you rely upon for your livelihood? - Because of the 'drought', what did you use/ do to lesson or compensate for the impact it had on meeting your financial obligations? - Because of the 'drought', what did you use/ do to lesson or compensate for the impact it had on meeting your civic responsibilities? - Because of the 'drought', what did you use/ do to lesson or compensate for the impact it had on the infrastructure you rely upon for your livelihoods? - Because of the 'drought', what did you use/ do to lesson or compensate for the impact it had on your ability to do, or contribute labor? - Because of the 'drought', what did you use/ do to lesson or compensate for the impact it had on your ability to apply your knowledge and skills towards livelihood pursuits?	- Because of the 'drought', what did you use/ do to protect your personal safety? - Because of the 'drought', what did you use/ do to maintain your food security and family nutrition? - Because of the 'drought', what did you use/ do to protect your personal health? - Because of the 'drought', what did you use/ do to protect or maintain access to clean water? - Because of the 'drought', what did you use/ do to protect or maintain your social relationships? - Because of the 'drought', what did you use/ do to protect or maintain your ability to help others?

Answers to the facilitator's questions, and other participant inputs are to be

Negative impacts on livelihoods and community well-being	What experiences do you face because of droughts (5+ weeks past the normal dry season length), and how does this affect you?	Existing resources and strategies used that reduced the negative impacts on livelihoods and community well-being
	1 2 3 4 5	
Often responses to the impacts of climate change do not yield intended results. When participants are giving their responses, it is good to ask what was the result of their actions, and record this.		<i>Resources (use)</i> - Response and result - Response and result - Strategies (do) - Response and result - Response and result

Step 7

After the left and right side of the H-Form are completed, review this in brief with the participants; next, ask them to rate their overall vulnerability to the hazardous condition discussed on a scale of 1 to 5. As a consensus, circle the answer on the H-Form.

Negative impacts on livelihoods and community well-being	What experiences do you face because of droughts (5+ weeks past the normal dry season length), and how does this affect you?	Existing resources and strategies used that reduced the negative impacts on livelihoods and community well-being
1 2 5 9 11 2 2 3 4 5 Math: $(2 \times 2) + (3 \times 5) + (4 \times 9) + (5 \times 11) = 110 \div 27$ (# of votes) 2 3 4 5		

OPTION: Ranking vulnerability can also be done on an individual basis/vote. To achieve an overall score, add together all the ranking scores and divide by the number of participants whom gave a score.

Step 8

The last section to this H-Form is based again on a simple question, "what should be done to improve the vulnerability score?" Try to help participants think in terms of activities, and to also think in terms of the five (5) livelihood asset groupings, and or constitutes of well-being.

Negative impacts on livelihoods and community well-being	What experiences do you face because of droughts (5+ weeks past the normal dry season length), and how does this affect you?	Existing resources and strategies used that reduced the negative impacts on livelihoods and community well-being
1 2 3 4 5 ▪ Response ▪ Response ▪ Response		

H-FORM QUESTION 2 - FACILITATION

Step 9

Q2 of the H-Form is set in a similar way as in Q1, the difference being is that participants are asked to think of the situation posed in Q1, but its frequency is 'TWICE as OFTEN'. Some examples are given bellow.

- Q1: What experiences do you face because of droughts (5+ weeks past the normal dry season length) and how does this affect you?
- Q2: What would you experience if droughts (5+ weeks past the normal dry season length) came TWICE as OFTEN, and how would this affect you?

- Q1: What experiences do you face because of long lasting floods, and how does this affect you?
- Q2: What would you experience if long lasting floods happened 'TWICE as OFTEN', and how would this affect you?

Depending on the questioned posed in Q1, and that of specific interest and emerging events, as an option, the facilitator can pose a related question that express 'TWICE the STRENGTH' of the hazard for Q2. Some examples are given bellow.

- Q1: What experiences do you face because of strong rains damaging agricultural crops, and how does this affect you?
- Q2: What would you experience if 'strong rains' TWICE the STRENGTH as now in terms of agricultural crop damage, and how would this affect you?

- Q1: What experiences do you face because of strong winds damaging agricultural crops, and how does this affect you?
- Q2: What would you experience if 'strong winds' TWICE the STRENGTH as now in terms of agricultural crop damage, and how would this affect you?

Step 10

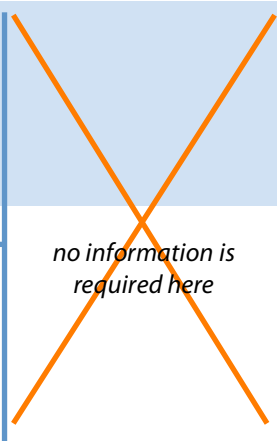
Once the question/s have been formulated, they are to be placed in the H-Forum as before. Facilitating the H-Forum should follow that of Q1. See below for a reminder to this process.

Reminder

In relation to the Q1 - question:

- Participants are to give responses to 'Negative impacts on livelihoods and community well-being'
- Participants are to give response to what 'resources and strategies used that reduced the negative impacts on livelihoods and community well-being'
- Participants are asked to rate their overall vulnerability to the hazardous condition on a scale of 1 to 5
- Participants are to give responses to "what should be done to improve the vulnerability score?"

However, not all areas of the H-Form are filled in because the question to be asked is placed in the future (see the illustration below).

Negative impacts on livelihoods and community well-being	What would you experience if droughts (5+ weeks past the normal dry season length) came TWICE as OFTEN?	 no information is required here
▪ Response ▪ Response ▪ Response ▪ Response	1 2 3 4 5 ▪ Response ▪ Response ▪ Response ▪ Response	

H-FORM QUESTION 3 - FACILITATION

Step 11

Q3 only has one column to fill in, in the H-Form. Information to be gained is to highlight constraints that communities and other stakeholders face in their attempt to cope with or adapt to the impacts of climate change.

As with Q1 and Q2, the process is based on a question that is placed in the H-Form. The Q3 question is developed in direct relation to those used in Q1 and Q2. See below for an example.

- Q1: What experiences do you face because of droughts (5+ weeks past the normal dry season length) and how does this affect you?
- Q2: What would you experience if droughts (5+ weeks past the normal dry season length) came TWICE as OFTEN?
- Q3: What prevents you from adapting to drought (5+ weeks past the normal dry season length)?

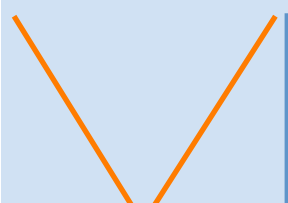
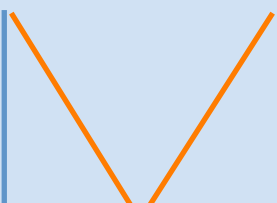
Step 12

The developed question is placed in the H-Form as shown below. The facilitator is to help participants answer the question, ensuring that participants consider the five (5) livelihood assets groupings, and or constitutes of well-being. Responses are placed in the center column as shown below.

	What prevents you from adapting to drought (5+ weeks past the normal dry season length)?					
	1	2	3	4	5	
<i>no information is required here</i>	▪ Response ▪ Response ▪ Response ▪ Response					<i>no information is required here</i>

Step 13

The final step in Q3 is to ask participants to rank their overall vulnerability in the context of what is preventing them from adapting to the hazardous condition. Responses are placed in the center column as shown below.

 <i>no information is required here</i>	What prevents you from adapting to drought (5+ weeks past the normal dry season length)?	 <i>no information is required here</i>
	1 2 ③ 4 5 ▪ Response ▪ Response ▪ Response ▪ Response	

3.62

	6	5	9	7
1	2	3	4	5

Math: $(2 \times 6) + (3 \times 5) + (4 \times 9) + (5 \times 7) = 98 \div 27 (\# \text{ of votes})$

OPTION: Ranking vulnerability can also be done on an individual basis. To achieve an overall score, add together all rankings and divide by the number of participant whom gave a score.

H-FORM QUESTION 4 - FACILITATION

Step 14

This step aims to prioritize actions identified in Q1 of the H-Form for an organisation, community, and or development services provider for the implementation of a community-based adaptation response.

To facilitate the process, the facilitator is to prepare a new H-Form, with copied responses given to the question “what should be done to improve the vulnerability score?”... in direct relation to the hazardous condition stated in Q1 (see example below).

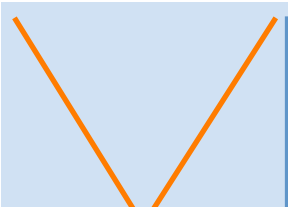
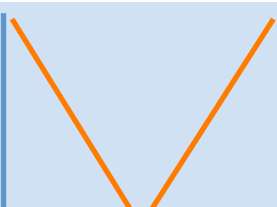
What activities should be prioritized to improve your adaptive capacity to drought (5+ weeks past the normal dry season length)?				
1	2	3	4	5
<i>no information is required here</i>		▪ Response from Q1 ▪ Response from Q1 ▪ Response from Q1 ▪ Response from Q1	<i>no information is required here</i>	

Step 15

Ask participants to rank the responses listed from the most important to implement to the least important to implement. If the list is very long, suggested it to group similar responses together, and then conduct a ranking exercise. This can be done by voting or consensus building, or through the use of a ranking tool (see handout S12.5, Solar, R. 2014⁹)

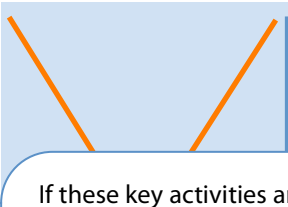
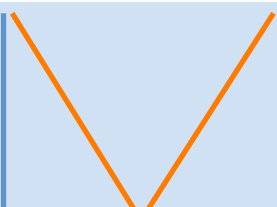
⁹ Solar, R. 2014. Building Climate Resilience: A Training Manual for Community Based Climate Change Adaptation. Regional Climate Change Adaptation Knowledge Platform for Asia, Partner Report Series No. 14. Regional Resource Centre for Asia and the Pacific (RRC.AP), Asian Institute of Technology, Thailand.

OPTION: If time permits, Step 15 can be repeated using the H-Form information from Q2, adjusted in the same way as outlined in Step 14 (see example below).

 no information is required here	What activities should be prioritized to improve your adaptive capacity to drought (5+ weeks past the normal dry season length) occurring TWICE as OFTEN?	 no information is required here
	12345 - Response from Q2 - Response from Q2 - Response from Q2 - Response from Q2	

Step 16

Once the priority ranking exercise is done, participants are to rate their confidence that if key activities prioritized are done, their vulnerability to climate change will be improved (see example below).

	What activities should be prioritized to improve your adaptive capacity to drought (5+ weeks past the normal dry season length)?	 no information is required here
	2345 If these key activities are done, how confident are you that your vulnerability to climate change will be lessened? (1 = very confident, 5 = not confident at all) Response from Q1 Response from Q1 Response from Q1 Response from Q1	

PART 4 VRA DEBRIEFING

Objectives

- ✓ Ensure that all participants understand the importance of their efforts throughout the VRA workshop
- ✓ Inform participants of the 'next steps', i.e. what will be done with data collected, when the community will have a chance to verify the analysis of the data, and any other onward actions by the VRA implementing organization

Your briefing

After the H form exercise has been conducted, it is ideal to have a summary conclusion and debriefing with participants. For practical reasons this may not be possible, particularly if a focus group methodology is used, given that not all focus groups may finish at the same time. Nonetheless, try to keep the different groups on track together. To conclude the VRA workshop, the following check list is offered for guidance:

- ☒ Thank all participants for taking an important step towards building a resilient community, or that their time is greatly appreciated if the exercise is being done for research purposes
- ☒ Ask participants from each focus group to express what they liked most about the VRA workshop, and what they have learned from it
- ☒ Inform participants that the VRA team will 'organize the data' (an analysis) and will come back to the community to verify the data and key findings, and when
- ☒ Inform the participants how the data and findings will be used
- ☒ Inform participants of any specific follow-on actions that will require their participation
- ☒ Express thanks and a joint sense of accomplishment

Recommended facilitation time: 30 minutes

CHAPTER 4

ANALYSIS OF THE VRA RESULTS

Briefing

The chapter aims to provide the VRA practitioner with very simple tools to aid in the conduct of a VRA analysis, at a minimum. Tools put forth, e.g. averages, line and bar graphs, to comparative tables covered can be used in combination with each other to derive a simple, yet, meaningful analysis of the VRA data. Throughout the chapter, each H-Form Question is covered, complete with an overview of what analysis should be done, and how the data from the analysis should be reported. This would also include disaggregated data between vulnerable groups, to that between villages, communes, and upward.

Note that the intent of the chapter is to help VRA practitioners build their reporting analysis skills. It is not to provide a sample of every possible data chart and or figure that could be, or should be developed for a VRA report.

Chapter objectives

- ✓ Provide a basic understanding of how to use analysis tools to assess and report VRA results
- ✓ Provide guidance to VRA data analysis, including desegregated data, and reporting standards for each H-Form question

TOOLS OF ANALYSIS

To prepare the VRA data for analysis, three (3) basic tools are used:

- ✓ 'Averages' to indicate the degree of vulnerability or confidence score to questions posed in the H-Forms
- ✓ A 'trend line graph' to show trends in vulnerability over time vs. climate and weather related hazardous conditions
- ✓ A 'bar graph' to indicate the frequency of common and or closely related responses given in the H-Forms

Averages

Finding 'averages' are a way to gather a collective score, and in the context of the VRA, this is about participants' perception of vulnerability to a situation. For example, for Q1 and Q2, an average vulnerability score is taken to indicate the degree of vulnerability to the stated question for villagers, and or a specific group of participants, e.g. women. This is done by adding the scores given by individuals and then dividing by the number of individual scores given.

For Q3, 'what prevents you from adapting', participants are asked to look at all the barriers noted, and rate their vulnerability to this. Getting the average vulnerability score to Q3 responses, i.e. the group's responses, is done by adding the scores given by participants and dividing by the number of individual scores given. The same process applies to Q4.

There are two basic rules to follow when averaging scores:

1. When dividing the added scores by the number of responses given, do not divide by the number of people in the group. Some participants may not have given a score, thus, the average would not be correct.
2. Be specific about what you are averaging. For example, you cannot take scores related to one question and add this to scores related to a different (unrelated) question, then divide by two. This will not give you an overall vulnerability score.

The trend line graph

- ✓ Chart climate and weather related hazardous conditions and events over a set time period, and participants' perceptions of vulnerability to these events

The trend line graph uses the 'X' (horizontal) and 'Y' (vertical) parts of a standard graph. The line graph will be used to show the results of the historical trend analysis. This includes three (3) elements, 1) vulnerability rating (score) – placed on the 'Y', 2) a time line – place on the 'X', and 3) chosen climate and weather hazardous conditions taken directly from the historical trend analysis matrix. Note that multiple climate and weather hazardous conditions can be shown on a single trend line graph, and that only one trend line graph is needed for every VRA workshop conducted (see Figure 3 for an example).

trend line graphs are easy to understand, most lines go up, others go down, and some are variable, this indicates the trend

try not to have too many variables on one graph, perhaps chart drought related events on one, and flood related events on another

HINT

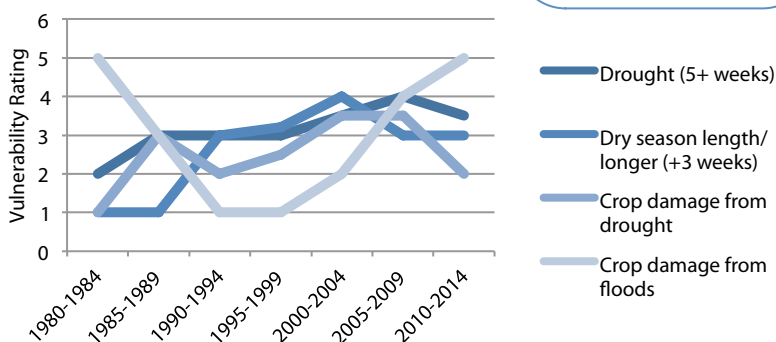


Figure 3 Sample 'trend line graph' indicating trends in vulnerability over time to different climate and weather related hazardous conditions.

The frequency bar graph

- ✓ Capture H-Form information specific to impacts noted in Q1 and Q2 and the frequency of responses to indicate importance across targeted areas
- ✓ Capture H-Form information related to 'what prevents you from adapting' (Q3), and the frequency of responses to indicate importance across targeted areas

IMPORTANT NOTE: Bar graphs are not used to chart group outputs given as a group average. Most often, bar graphs are used for survey type data. For example, if the H-Form process was done on an individual basis, or if group frequency responses were recorded. In such cases, common responses are counted and recorded as a 'frequency of response'. (see page 45 & 46 for a reminder)

The bar graph uses the 'frequency of response' to a specific question. Responses can be vary different from each other, thus, each would have their own element displayed in the graph, e.g. malnutrition, and for similar responses, these are grouped together and given a more general name to be displayed as an element within the graph, e.g. poverty. In both cases, each response given counts as '1' regardless of the element's name.

The bar graph uses the 'X' (horizontal) and 'Y' (vertical) parts of a standard graph. The 'X' indicates frequency, e.g. the number of times a similar response has been given, and along the 'Y' part, the type of response is indicated (see Figure 4 and 5 for examples).

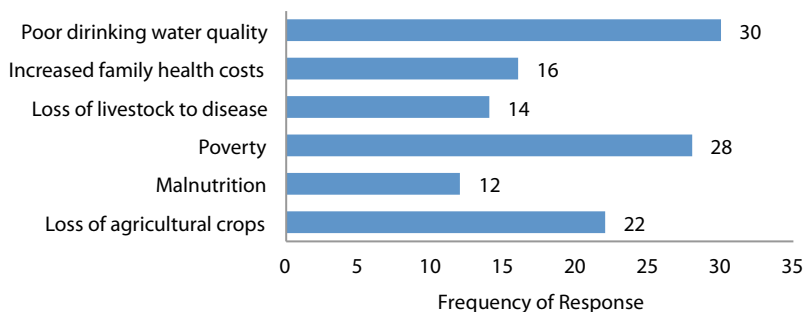


Figure 4 Frequency of Srey Ye villager responses to the impacts of a prolonged dry season (+3 weeks).

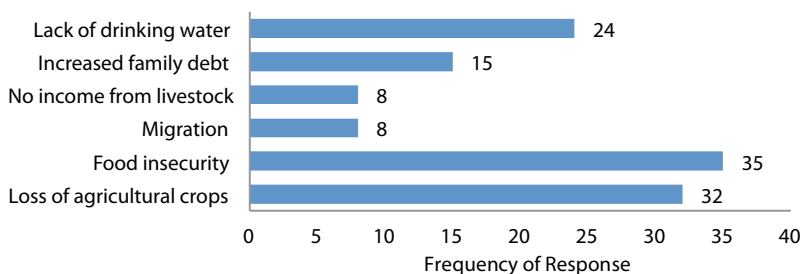


Figure 5 Frequency of Srey Ye villager responses to the impacts of a prolonged dry season (+3 weeks) if this were to happen twice as many times.

Guidelines to using frequency bar graphs

- ✓ Make sure you title the graph clearly and fully, and do not put extra labels on the graph other than needed. Figures 4 and 5 are good examples. Indicated are the village, and what the data is about.
- ✓ Most often the number of responses given by a group should be equal across different graphs representing VRA questions, unless, not all participants responded.
- ✓ If you are going to report 'villages' and or similar 'groups' responses in one graph, the data should be about the same topic, and the name of villages and or group reflected in the figure title. Do not take averages, each response given counts as '1' regardless of how many villages or groups.
- ✓ Often, the higher of 'frequency of response' indicates how important the response is, and sometimes a ranking of importance.

TREND LINE and FREQUENCY of RESPONSE BAR GRAPHS in MICROSOFT EXCEL

See Annex 2 for frequency of response in Microsoft Excel instructions.

BASICS OF THE VRA ANALYSIS

The Historical Trend Analysis Matrix

- ☒ What vulnerabilities are increasing, or decreasing, compared to climate and weather hazardous conditions
- ☒ What climate and weather hazardous conditions seem to be happening more often
- ☒ What specific groups of people are recording higher perception of vulnerabilities to specific climate and weather hazardous events



As shown in Figure 3, clear is that over the past 20 years, peoples vulnerability to crop damage caused by floods is on the rise. What is not clear is if this is a result of the event/ condition happening more often or any other reason. This is why it is important to study the table data that the figure is made from, specifically comments provided by the respondents. As a general rule, a vulnerability scoring of 1 means that the indicated condition did not happen during that time, higher scores indicated the magnitude of the condition and severity of the impact.

H-Form Question 1

- ☒ How peoples' livelihoods and or well-being are being impacted most by climate and weather hazardous conditions, what is most important to address, and what groups of people are most vulnerable
- ☒ What resources and strategies are in use to lower the impact of a given problem (question 1 as stated), and the results of these
- ☒ What are the adaptive capacity needs of the VRA participants (village and or specific group) to lower their vulnerability to a given problem (question 1 as stated)

! To assess how peoples' livelihoods and or well-being are being impacted by climate and weather hazardous conditions, this would begin with noting the response list given in the 'negative impacts on livelihoods and community well-being' column of the H-Form Question 1. If this data was obtained through a collective focus group response, than a bar graph indicating importance through frequency of response cannot be developed. A simple table reporting the results directly can be developed. If the data was obtained through individual responses, a graph can be developed, and level of importance displayed within and reported on.

To assess what groups of people, e.g. men, women, the elderly etc. are most vulnerable to a given hazardous condition/ question; a simple chart can be developed for comparison. This is only possible if you have disaggregated data (for individual surveys) or if the VRA was done with defined focus groups (see Table 2 for an example).

Table 2 Disaggregated and overall vulnerability data reflecting the village of Srae Ye's vulnerability to a prolonged dry season (+ 3 weeks).

Target Group	Q1 Vulnerability Score	Q2 Vulnerability Score	Q3 Vulnerability Score	Average Vulnerability
Women	3.1	3.5	4.0	3.53
Men	2.2	3.0	3.5	2.90
Elderly	3.4	3.5	3.5	3.46
Children	3.3	3.6	4.2	3.70
Over all vulnerability score (average)				3.39

*Note that Q4 does not apply

As shown in the chart, a village can be given a vulnerability score, however, if comparing across villages, e.g. the commune level, best is to ensure that reporting states any significant differences in the form of vulnerability being compared (see Table 3 for an example).

Table 3 Comparison across villages in the Dei Y Commune regarding vulnerability to a prolonged dry season (+ 3 weeks).

Target Village	Q1 Vulnerability Score	Q2 Vulnerability Score	Q3 Vulnerability Score	Average Vulnerability
Srae Ye	3.0	3.1	4.0	3.36
Memong	1.2	2.0	3.5	2.33

Eenang	2.4	3.5	2.5	2.80
Puchrey	1.3	2.6	2.2	2.03
Over all vulnerability score (average)				2.63

*Note that Q4 does not apply

- ! Resources and strategies in use to lower the impact of a given problem (question 1 as stated), and the results of these strategies can be found in H-Form Question 1 in the column listed 'resources and strategies used that reduced the negative impacts on livelihoods and community well-being'. Important to highlight separately are those strategies that had a positive outcome, i.e. lowering the impact of the problem stated, i.e. question 1, and those that did not or worsened the impact and why. If data was collected in segregated groups, e.g. men, females, the elderly, a comparison of resources and strategies used can be made. Differences noted may indicate differences in access to resources, knowledge, skills, etc. between the groups. This may be reflected in differences between their vulnerability scores as well.

If frequency information is available for resources and strategies to lower the impact of a given problem, this information can be represented in a bar graph and discussed (see H-Form Question 3 for more information).

- ! Most important to the analysis of H-Form Question 1 data is the adaptive capacity needs to lower vulnerability. Review data given under the 'resources and strategies used that reduced the negative impacts on livelihoods and community well-being' column. Assess what resources and strategies need to be strengthened and or avoided to ensure more positive outcomes. Follow by reviewing the center column responses under 'what should be done to improve the vulnerability score' and assess if responses address the strengthening of current resources and strategies to lower impacts. If not, this should be noted in the analysis and considered as key actions to undertake.

Center column data should be reviewed and reported on, but should be done in order of priority set out by the participants, i.e. that given in H-Forum Question 4. Priorities should also be reported upon as clear sets of actions. If data was collected in segregated groups, e.g. men, females, the elderly, a comparison of 'priority actions' should be made.

H-Form Question 2



Assess impact and vulnerability if the climate and weather hazardous condition, posed in question 1, happens twice as often, or at double the strength

Data from H-Form Question 1 is used as a comparison against data given in question 2 regarding impact, vulnerability score, and suggestions to lessen the impact via building adaptive capacity. To conduct the comparative analysis:

- Question 1 and 2 must be in direct relation to each other
- Data compared must be in direct relation to each other, e.g. women, men, elderly responses
- Overall vulnerability scores can be compared directly



The assessment should highlight differences in impact within each group (Q1 impact responses vs. Q2 impact responses), and if possible across vulnerable groups, e.g. between men and women. Additionally, vulnerability scores can be compared. Through the same process, note any differences in responses given to lower the vulnerability score/ lessen the impact of the hazardous condition. Overall, the comparison is to give a picture of future risks if adaptive capacities are not built.

H-Form Question 3

- ✓ Highlight constraints that communities and other stakeholders face in their attempt to cope with or adapt to the impacts of the climate and weather hazardous condition posed in question 1
- ✓ Differentiate constraints and vulnerability between focus groups, e.g. men, women, the elderly
- ✓ Assess if highlighted constraints have been considered within responses and or proposed actions given in question 1 to lower the vulnerability score/ lessen the impact of the hazardous condition

! To highlight constraints, best is to group similar responses, and formulate a clear statement for each grouping. The most basic analysis to be done is to note what is needed (question 3 responses given in the center column) vs. what resources and adaptive capacities are present (question1 responses given in the 'resources and strategies used that reduced the negative impacts on livelihoods and community well-being' column). A table can be developed to help in the analysis and or report the data (see Table 4 for an example). Analysis can be done between differentiated groups, at the village level, and or commune level and upward.

Table 4 Comparative of overall constraints vs. adaptive capacities to address a prolonged dry season (+3 weeks) for women in the village of Srae Ye, Dei Y Commune.

Constraints	Adaptive Capacities
▪ Few options are available to develop alternative income sources given a lack of money ▪ Lack of access to information and training on climate smart agricultural technology ▪ Lack of access to affordable micro-credit ▪ Lack of access to water infrastructure for rice farming	▪ Productive farm land ▪ Local community based organization setting up self help groups ▪ Reliable water resources 3km away

By comparing 'constraints' vs. current adaptive capacities listed, a detailed list of adaptive capacity needs can be developed.

! To differentiate constraints amongst different groups, a simple chart can be developed and reported upon. Note that the climate and weather hazardous condition stated should be in direct relation to each other across the groups (see Table 5 for an example).

Table 5 Comparative of overall constraints between groups to addressing the impacts of a prolonged dry season (+3 weeks) for the village of Srae Ye, Dei Y Commune.

Women's Constraints (Vulnerability Score 4.1)	Men's Constraints (Vulnerability Score 3.5)	Elderly's Constraints (Vulnerability Score 4.5)
▪ Few options are available to develop alternative income sources given a lack of money ▪ Lack of access to information and training on climate smart agricultural technology ▪ Lack of access to affordable micro-credit ▪ Lack of access to water infrastructure for rice farming	▪ Few options are available to develop alternative income sources given a lack of money ▪ Lack of access to information and training on climate smart agricultural technology ▪ Lack of access to water infrastructure for rice farming	▪ Unable to develop an alternative income sources given physical problems and or appropriate options ▪ Lack of access to affordable micro-credit

If frequency information is available for constraints to lowering the impact of a given problem, information given, for example in Table 5, can be grouped and given a brief name, and then be represented in a bar graph (see Figure 6 for an example).

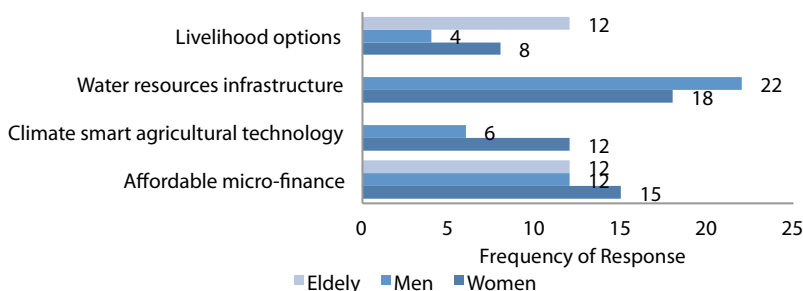
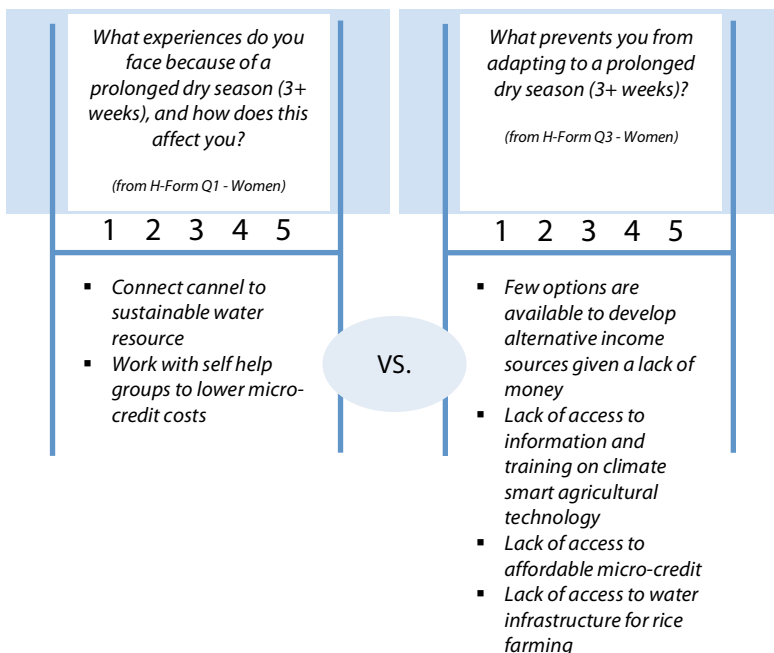


Figure 6 Comparison of constraints between groups to addressing the impacts of a prolonged dry season (+3 weeks) for the village of Srae Ye, Dei Y Commune.

! Similar to H-Form Question 1 analysis, assess if question 3’s constraint responses are addressed within the responses listed under ‘what should be done to improve the vulnerability score’. If not, this should be noted in the analysis and considered as key actions to undertake (see illustration below).



H-Form Question 4

- ☒ Provide a list of prioritized vulnerability reduction actions identified in H-Form Question 1.
- ☒ Provide a 'confidence' score in relation to the lowering of vulnerability if prioritized actions are undertaken

Analysis of H-Form Question 4 data consists only of reporting the data in an organized way. However, reporting should also include details on what adaptation capacity building measures are prioritized vs. needs listed by various groups that have not be prioritized.

A comparative of 'confidence' scores can be made. Justification of the differences can come from various data sources, e.g. H-Form Question 1 and 3 analysis.

CHAPTER 5

WRITING THE VRA REPORT

Briefing

Provided are two guided templates for the writing of a concise VRA findings report and a VRA comparative findings report that compares VRA workshop data conducted in the same context, but at different times, e.g. 3 years apart from each other. There are five (5) important sections to each VRA report: introduction, methodology, VRA findings, proposed adaptation activities, and lessons learned and conclusions. The reporting templates provided indicate the minimum information required for a complete VRA report of each type. Guide notes are provided in each section, e.g. length of each section and or sub section. Guidance is also provided through 'lettered bullet points'. These are given in the order the information should be expressed in the report. This is to ensure that reports are concisely written, and are a manageable length for the reader.

Chapter objectives:

- ✓ Guide VRA implementers in the writing of organized and concise VRA findings, and VRA comparative findings reports
- ✓ Inform report writers of the minimum requirements to VRA reporting

IMPORTANT NOTE: Depending on whom the report is to be submitted to, or how it will be used, other information and or sections may be required.

Guided VRA findings report template

Project Title:	
Project Sites:	
Proponent:	
Authorized Representatives:	
Cooperating Organizations:	
VRA Assessment Dates:	

Section Content	Required Tables and Figures
1.0 Introduction (2 – 3 paragraphs)	
a. Outline your organization, including name, main mission, and a brief history of the organization's experience in community-based adaptation. b. If the VRA is supported by a donor organization, this should be stated, followed by why the VRA implementing organization has chosen to implement the VRA and what the information will be used for.	
2.0 Methodology (1 page)	
c. State when the VRA was conducted, and where (village, commune, district, province, country), and the number of participants involved. d. State the process done to select the targeted areas/ villages, and any preparation work conducted, e.g. background information acquired, consultations, to steps taken at the field level to prepare participants to participate meaningfully in the VRA process.	

Section Content	Required Tables and Figures
2.0 Methodology (<i>continued</i>)	
e. State if the VRA was conducted via an individual survey method, and or through a focus group discussion method. For individual surveys, state the range of participant types (describe briefly), and the number of survey respondents of that type.	Data requested for 'e' can be put in table form.
f. For the focus group discussion method, provide a brief description of the group. For example, male respondents, age 20 – 40 years old, female respondents age 35 – 45 years old, farmers association, to government representatives, including the commune and district council members etc. Be brief. Include the total number of participants in each group.	
3.0 VRA Findings (3-5 pages) (<i>to be reported by focus group and or participant type for individual surveys</i>)	
g. (3.1) Climate Change Trends and Impacts Using the historical trend analysis output, give a brief overview of significant climate and weather hazardous events highlighted. Provide dates if possible, and details on the impact of these events. Use the historical trend analysis output to describe trends in vulnerability to each form of climate and weather hazardous conditions listed vis-à-vis vulnerability scoring. (3.1.1) Follow by providing more detail on events that relate to H-Form question Q1 regarding the negative impact of events only. This is to be followed by Q2 perception data regarding negative impact only. Provide vulnerability scores.	Figure and Table: Historical trend analysis output (table placed as a annex) Figure: Climate Change Vulnerability Trends (vulnerability score vs. climate and weather hazardous conditions listed)

Section Content	Required Tables and Figures
3.0 VRA Findings (<i>continued</i>)	
h. (3.2) Coping and adaptation capacities (<i>Done by hazardous condition highlighted in the H-Form Q1: Resources and strategies used that reduced the negative impacts on livelihoods and community well-being</i>) - List coping and adaptation capacities to the specific hazardous condition identified by category, e.g. the five livelihood assets (human, financial, physical, social, and natural) as needed. Include resources and strategies mobilized to reduce the negative impacts on livelihoods, and the result of given actions. And or... - List of coping and adaptation capacities to the specific hazardous condition identified by category, e.g. the constitutes of well-being (security, basic materials for life, health, and social relations) as needed. Include resources and strategies mobilized to reduce the negative impacts of the hazardous condition on community well-being (by type), and the result of given actions.	Option: Listing can be done in table form, with the addition of a written overview highlighting the most important points

Coping Strategies	Adaptation Strategies
- Short-term and immediate - Oriented towards survival - Not a continuous process - Motivated by crisis, reactive - Often degrades resource base - Prompted by a lack of alternatives	- Oriented towards longer term livelihood security - A continuous process - Results are sustained - Uses resources efficiently and sustainably - Involves planning - Combines old and new strategies and knowledge - Focused on finding alternatives

Section Content	Required Tables and Figures
3.0 VRA Findings (<i>continued</i>)	
i. (3.3) Barriers to adaptation (<i>This section is based on H-Form Q3 information. Again it is advisable to organize the reporting as done in 3.2 of the VRA Findings reporting. Provide the vulnerability score with a brief overview of the vulnerability context.</i>) (<i>Option: If the NGO conducting the VRA wants to engage commune development committees as a response to vulnerability reduction activities, advisable is to categorize responses in line with the main focus areas of the relevant commune development plan.</i>)	
j. (3.4) Reducing vulnerabilities (<i>Based on H-Form Q1 vulnerability reduction responses/ activities, and the ranking of these responses from H-Form Q4</i>) ▪ List priority actions in order (highest priority to those of less priority). Categorize responses according to the five livelihood assets, and or constituents of community well-being as appropriate, i.e. not all categories may have a response. ▪ Provide a brief and overall justification for the actions stated in each categorized response. ▪ Provide the H-Form Q4 score, and brief justification in the context of how confident the participants are that the actions listed will reduce their vulnerability to climate change.	Option: Priority actions can be listed in a table

Section Content	Required Tables and Figures
4.0 Proposed Adaptation Activities (1-2 pages)	
Having analyzed the main climatic events and key livelihood and community well-being impacts, the resources and strategies they employ to reduce these impacts, and the barriers to vulnerability reduction they face (either as a community and or by focal group), formulate adaptation activities based on: ▪ Prioritized actions by the local community and or focal groups ▪ Local community/ focal group capacities and that of the implementing NGO's ability to develop capacities ▪ Probable funding sources and amounts k. List agreed upon priority actions; categorized in a similar way to that done in 3.4. For each action, provide a brief description of how the activity would be delivered, e.g. roles and responsibilities of different actors involved, trainings, structural inputs etc. Limit each 'action' to 2-3 paragraphs. l. Provide a brief summary of how the activities listed differ from normal development project activities, and how the action/s will contribute to developing climate resilience.	
5.0 Lessons Learned and Conclusions (1/2 - 1 page)	
The Cambodia Community Based Adaptation Programme (CCBAP) is a learning programme. If you have any lessons that you have learned through the VRA process, share these as well as provide recommendations.	

Guided VRA comparative findings report template

Project Title:	
Project Sites:	
Proponent:	
Authorized Representatives:	
Cooperating Organizations:	
Initial VRA Dates:	
Last VRA Dates:	

Section Content	Required Tables and Figures
1.0 Introduction (2 – 3 paragraphs)	
a. Outline your organization, including name, main mission, and a brief history of the organization's experience in community-based adaptation. b. If the VRA is supported by a donor organization, this should be stated, followed by why the VRA implementing organization has chosen to implement the VRA and what the information will be used for. <i>(Reminder: This is a comparative VRA findings report, i.e. why is the VRA being done again? And there may be other reasons, e.g. preparing for a Phase II project intervention.)</i>	
2.0 Methodology (1 page)	
c. State when the first and last VRA were conducted, and where (village, commune, district, province, country), and the number of participants involved.	

Section Content	Required Tables and Figures
2.0 Methodology (<i>continued</i>)	
d. State any preparation work done to prepare for the last VRA workshop, e.g. background information acquired, consultations, to steps taken at the field level to prepare participants to participate meaningfully in the VRA process.	
e. State if the last VRA workshop was conducted differently than the 'first', how and why. Following, state if the VRA was conducted via an individual survey method, and or through a focus group discussion method. For individual surveys, state the range of participant types (describe briefly), and the number of survey respondents of that type.	Data requested for 'e' can be put in table form.
f. For the focus group discussion method, provide a brief description of the group. For example, male respondents, age 20 – 40 years old, female respondents age 35 – 45 years old, farmers association, to government representatives, including the commune and district council members etc. Be brief. Include the total number of participants in each group.	
g. State briefly how data will be analyzed/ compared, as well as any weaknesses in data comparisons given. For example, sample sets, data gaps, to methodology constraints etc.	

IMPORTANT NOTE: The terms 'first' and 'last' are being used. This refers to VRA workshops conducted within the same focal area and context, and the specific data being compared; named in this Handbook as 'first' and 'last'.

Section Content	Required Tables and Figures
3.0 VRA Comparative Findings (3-5 pages) <i>(to be reported by focus group and or participant type for individual surveys)</i>	
h. (3.1) Climate Change Trends and Impacts Most likely climate change trend information has not change from the 'first' and the 'last' VRA workshop. Thus, give a brief summary of what was stated in the first VRA findings report. If a significant climate and or weather related hazardous condition has happened between VRA workshop periods, give a briefing of the event/s. (3.1.1) Follow by providing comparative data related to H-Form Q1. Report on the differences between first and last VRA data collected regarding: 1) impact, 2) resources and strategies employed to reduce the negative impact of hazardous conditions, and 3) VRA scoring. Briefly justify the differences in relation to experienced hazardous conditions during the time between assessments (if applicable), and or in relation to significant project interventions for #2 and #3 listed. OPTION: Regarding H-Form Q2 perception data, unless there are significant differences in data reported between the first and last VRA workshops, reporting is not necessary. However, do report differences in the H-Form Q2 VRA score, and justify the difference if any.	Figure and Table: Historical trend analysis output (table placed as a annex) Figure: Climate Change Vulnerability Trends (vulnerability score vs. climate and weather hazardous conditions listed)

Section Content	Required Tables and Figures
3.0 VRA Findings (<i>continued</i>)	
i. (3.2) Coping and adaptation capacities built (<i>Comparing H-Form Q1 data: Resources and strategies used that reduced the negative impacts on livelihoods and community well-being</i>) ▪ Compare data listed between the first and last VRA workshops, listing the <u>differences</u> between the two. This will indicate what capacities have been built through project interventions, or lost during the period. Try to follow the listing format used in the initial VRA findings report.	Option: Listing can be done in a table form, with the addition of a written overview highlighting most important points
j. (3.3) Barriers to adaptation (<i>This section is based on H-Form Q3 information. Again it is advisable to organize the reporting as done in 3.2 of the initial VRA findings report.</i>) ▪ Comparing data listed between the first and last VRA workshops, list the differences between the two. This will indicate changes in barriers to adaptation resulting from project interventions or other causes. Explain why differences exist. ▪ Provide the vulnerability scores with a brief overview of the last vulnerability context and the contribution project interventions have made regarding vulnerability score improvement, or why the vulnerability score has stayed the same or worsened when compared to the first VRA workshop data. ▪ State what barriers to adaptation still exist, and why.	Option: Provide information in a formatted table

Section Content	Required Tables and Figures
3.0 VRA Findings (<i>continued</i>)	
k. (3.4) Reducing vulnerabilities (<i>Based on H-Form Q1 vulnerability reduction responses/ activities, and the ranking of these responses from H-Form Q4</i>) ▪ Give an overview of ‘priority actions’ stated in H-Form Q4 in the first VRA workshop, and state which actions project interventions have and have not addressed. Note in order of priority, actions being recommended (from H-Form Q4 of the last VRA workshop). Categorize responses according to the five livelihood assets, and or constituents of community well-being as appropriate, i.e. not all categories may have a response. ▪ Provide a brief and overall justification for recommended actions for each categorized responses. ▪ Provide the last H-Form Q4 score, and brief justification in the context of how confident the participants are that the priority actions listed will reduce their vulnerability to climate change.	Option: Priority actions can be listed in a table

Section Content	Required Tables and Figures
4.0 Proposed Adaptation Activities (1-2 pages)	
Having analyzed the main climatic events and key livelihood and community well-being impacts, the resources and strategies they employ to reduce these impacts, and the barriers to vulnerability reduction they face (either as a community and or by focal group), formulate adaptation activities based on: ▪ Prioritized actions by the local community and or focal groups ▪ Local community/ focal group capacities and that of the implementing NGO's ability to develop capacities ▪ Probable funding sources and amounts k. List agreed upon priority actions; categorized in a similar way to that done in 3.4. For each action, provide a brief description of how the activity would be delivered, e.g. roles and responsibilities of different actors involved, trainings, structural inputs etc. Limit each 'action' to 2-3 paragraphs. k. Provide a brief summary of how the activities listed differ from normal development project activities, and how the action/s will contribute to developing climate resilience.	
5.0 Lessons Learned and Conclusions (1/2 - 1 page)	
The Cambodia Community Based Adaptation Programme (CCBAP) is a learning programme. If you have any lessons that you have learned through the initial and comparative VRA process, share these as well as provide recommendations.	

ANNEX 1 VRA FACILITATION TEAM VOCABULARY AND CONCEPT CHECK EXERCISE

This exercise should be done by all VRA facilitators prior to conducting a VRA workshop in the field, even those with a lot of experience. For VRA facilitation teams with limited climate change adaptation experience, it may be advisable to 1) complete the exercise as a single group and discuss and analyse the vocabulary and concepts step-by-step, or 2) acquire an experienced community based adaptation practitioner for facilitation assistance.

Objectives

- ✓ To review/ check on participant understanding of concepts and vocabulary covered in Chapter 1.
- ✓ Provide an evaluation process to gauge VRA team learning.

Materials

- ✓ Exercise worksheet – 1 for each group (4 to 5 participants)
- ✓ Scissors – 1 pair for each group

Time: 15 – 20 minutes

Exercise answers

1&7, 2&17, 3&11, 4&10, 5&13, 6&22, 8&12, 9&18, 16&14, 19&20, 23&26, 24&25

Facilitation

Step 1

Introduce the exercise and process, and again emphasize the importance of all VRA facilitation team members having a common understanding of basic 'climate change' language to be used within this modular learning process.

Step 2

Divide VRA team members into groups of 4 or 5, or a single group if numbers are small; give each group an exercise worksheet sheet and have them cut the indicated squares into individual pieces (squares are not in any specific order). Allow 15 minutes.

Step 3

Ask participants to match the 'vocabulary and or concept' stated (covered in Chapter 1) with a corresponding statement. At this time the facilitator/ trainer should review group work as it progresses to ensure that participants have a clear understanding of the given 'vocabulary' and or concepts. Clarify when needed but do not give the answers. Keep in mind where VRA facilitation team members are having common misunderstandings.

Step 4

After the given time (15 minutes), the facilitator/ trainer should ask VRA team members to STOP, and display their answers to the exercise; ask groups for their scores (optional). After, review 'vocabulary' and or concepts that have presented a common challenge to participants, i.e. most common mistakes.

Exercise Worksheet

Adaptation and Resilience Building	We need to build awareness in our communities, and make sure we are prepared for the dry season
The rainy season seems to be coming later and later every year, and when it does rain, storms are getting stronger	Hazard Events
Climate Change Impact	Communities often know how to solve their problems, what they lack are the needed materials
We installed household water-harvesting units, now we need to organize the community to collectively manage them	Resilience
Climate Vulnerability	Because of this year's drought, forests fires destroyed four houses in a neighboring village
Climate Change	Farmers have found it good to organize themselves into learning groups to share technical knowledge
Positive and negative changes in water resources, agriculture and food security, terrestrial ecosystems and biodiversity	Farmers have started to use nets to protect their crops, and bamboo to protect their soil during the rainy season

Communities often know how to solve their problems, what they lack are the needed materials	Climate Change Adaptation
Disaster Risk Reduction	Poor lowland rice farmers in Thailand again lost much of their crops to annual monsoon rains
To day was the coldest day on record for Vietnam; yet, temperatures across Asia have not been that cold	Weather and Climate
The average temperature of the earth's surface in China has risen by 1.1 degrees Celsius	Adaptive Capacity
Greenhouse Effect and Gases	The average temperature of the earth's surface in China has risen by 1.1 degrees Celsius
Global Warming	A process and product that keeps the earth's temperature in balance

ANNEX 2 TREND LINE and FREQUENCY of RESPONSE BAR GRAPHS in MICROSOFT EXCEL

Trend Line Graphs

A trend line graph is use to display information related to the Historical Trend Analysis tool, e.g. climate and weather related hazardous conditions and events over a set time period, and participants' perceptions of vulnerability to these events. There are 3 main steps to this process using Microsoft Office – Excel 2010 version.

Step 1

Obtain the needed data from the Historical Trend Analysis chart. To be organized in the Excel sheet is a time line, climate and weather hazardous conditions identified, and the corresponding vulnerability rating. Examples are given, 1) by group consensus, and 2) by individual voting within a group. Group consensus data will be used as an example in the tutorial.

Climate and Weather Hazardous Conditions	1980 – 1989 <i>(State of Cambodia)</i>	1990 – 1999 <i>(UNTAC and coalition)</i>	2000 – 2009 <i>(Kingdom of Cambodia)</i>	2010 – current <i>(Kingdom of Cambodia)</i>
• Dry season length/ longer (+3 weeks)	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Crop damage from drought	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Crop damage from floods	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
• Changes in the wet/ dry season timing	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Group consensus example

Climate and Weather Hazardous Conditions	1980 – 1989 <i>(State of Cambodia)</i>	1990 – 1999 <i>(UNTAC and coalition)</i>	2000 – 2009 <i>(Kingdom of Cambodia)</i>	2010 – current <i>(Kingdom of Cambodia)</i>
• Dry season length/ longer (+3 weeks)	1 1.50 5	1 2.62 5	1 3.11 5	1 3.00 5
• Crop damage from drought	1 1.00 5	1 2.00 5	1 3.45 5	1 4.88 5
• Crop damage from floods	1 1.62 5	1 1.22 5	1 3.62 5	1 4.02 5
• Changes in the wet/ dry season timing	1 1.62 5	1 1.42 5	1 2.42 5	1 3.62 5

Individual voting within a group example

Step 2

Organize your data within an Excel sheet, 1) climate and weather hazardous conditions, 2) time line, and 3) participant vulnerability scoring.

Excel worksheet view

	A	B	C	D	E
1		1980-1989	1990-1999	2000-2009	2010-Current
2	Dry season length/ longer (+3 weeks)	1	1	3	5
3	Crop damage from drought	2	3	4	5
4	Crop damage from floods	1	3	2	3
5	Changes in the wet/ dry season timing	1	1	3	5

Time Line

Climate and weather hazardous conditions

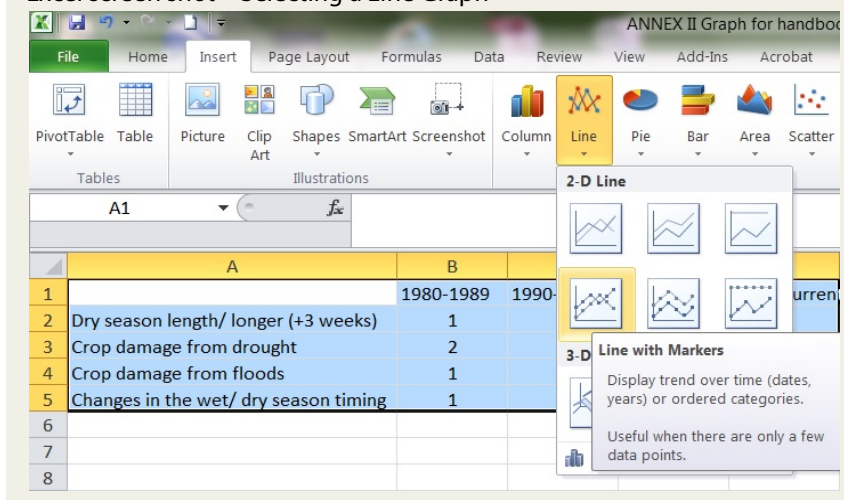
Participant vulnerability scoring

Step 3

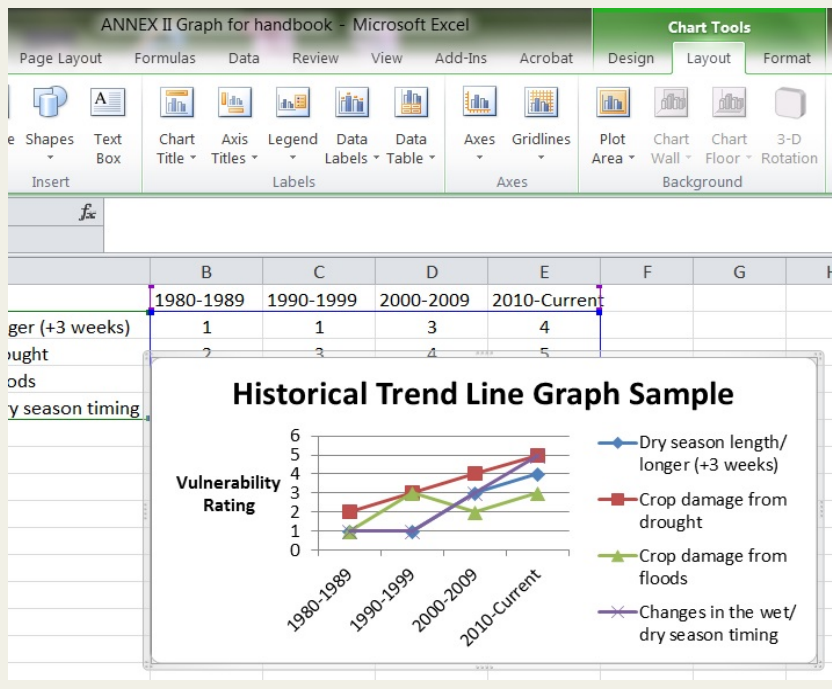
To build the trend line graph, the following steps are:

- I. Highlight rows 1-5 and columns A-E at the same time.
- II. Click on 'INSERT' tab within the function ribbon, and then click on 'LINE' in the 'CHARTS' sub-ribbon, and click again on the '2-D LINE' selection. A trend line graph will appear.
- III. To apply the 'vulnerability' labeling to the trend line graph, click on the graph, then click the 'LAYOUT' tab in the function ribbon, select the 'AXIS TITLES', then 'PRIMARY VERTICAL AXIS TITLES', choose HORIZONTAL TITLE, and then type 'Vulnerability Rating' and press 'ENTER'.
- IV. To add a title to your trend line graph, click onto the graph, then click the 'LAYOUT' tab in the function ribbon, then click CHART TITLE, choose 'TITLE ABOVE CHART' and type the title, then press 'ENTER'.

Excel screen shot – Selecting a Line Graph



Excel screen shot – Historical Trend Line Graph Sample



Frequency of Response Bar Graphs

Frequency of response bar graphs can be used in a number of ways, and for the VRA, these are most often used to display information related to:

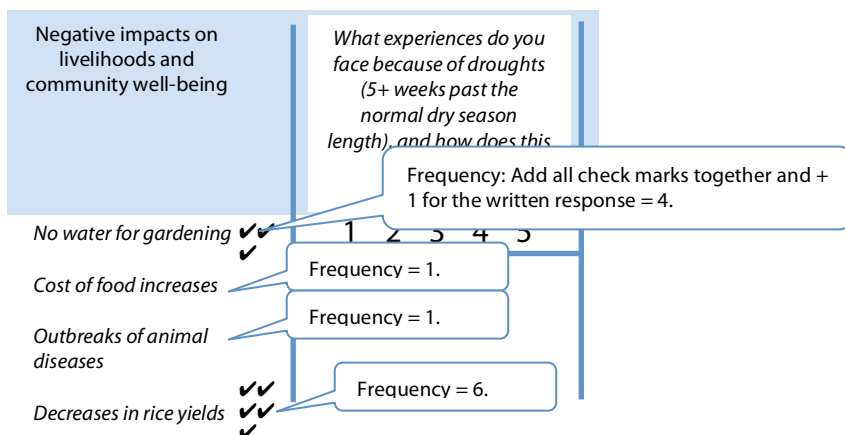
- ✓ H-Form information specific to impacts noted in Q1 and Q2 and the frequency of responses to indicate importance across targeted areas
- ✓ H-Form information related to 'what prevents you from adapting' (Q3), and the frequency of responses to indicate importance across targeted areas
- ✓ Comparisons between similar data but taken at different periods of time.

There are 5 main steps to this process using Microsoft Office – Excel 2010 version.

Step 1

Obtain the needed data from the H-Form Question data sheets. As an example for this tutorial, H-Form Q1 data in relation to the 'negative impacts on livelihoods and community well-being' will be used.

Data needed are, 1) stated 'negative impacts' to the H-Form Question 1, and 2) the number of responses to each stated impact by VRA participants. An example is given below.



Step 2

Organize your data within an Excel sheet, 1) stated 'negative impacts' to the H-Form Question 1, and 2) the number of responses to each stated impact by VRA participants

Excel worksheet view

	A	B
1	No water for gardening	4
2	Cost of food increases	1
3	Outbreaks of animal diseases	1
4	Decreases in rice yields	6

Stated 'negative impacts on livelihoods and community well-being'

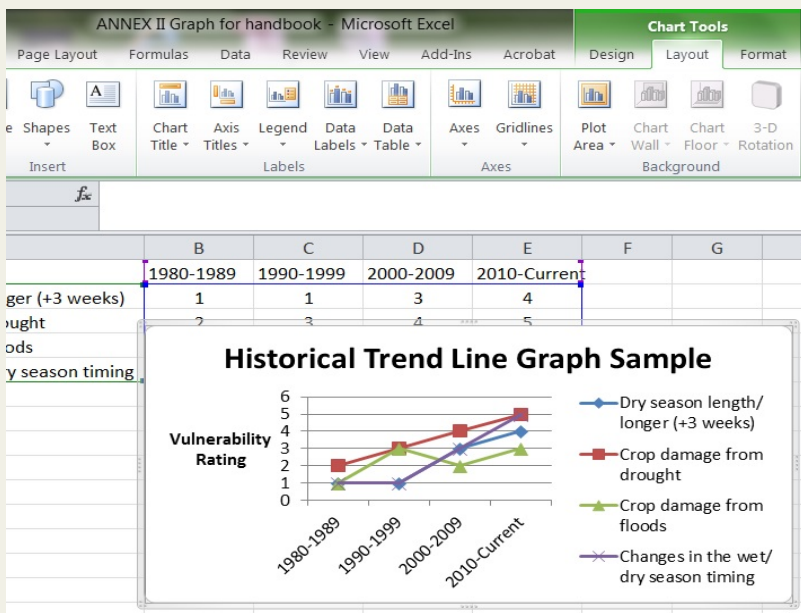
Number of participant responses

Step 3

To build the frequency of response graph, the following steps are:

- I. Highlight rows 1-4 and columns A-B at the same time.
- II. Click on 'INSERT' tab within the function ribbon, then click on 'BAR' in the 'CHARTS' sub-ribbon, and then click again on the '2-D CLUSTERED BAR' selection. A bar graph will appear.
- III. To apply the 'frequency of response' to the end of each bar shown, click onto the graph, then click 'LAYOUT' within the function ribbon, click 'DATA LABELS' within the label sub ribbon, and finally select 'OUTSIDE END' from the dropdown menu. Remove the 'series 1' labeling by clicking onto the titling in the graph and delete.
- IV. To apply the 'frequency of response' labeling to the bar graph, click onto the graph, then click the 'LAYOUT' tab in the function ribbon, select the 'AXIS TITLES', then 'HORIZONTAL AXIS TITLE', and choose TITLE BELOW AXIS, and the type 'Frequency of Response'.
- V. To add a title to your bar graph, click onto the graph, then click 'LAYOUT' tab in the function ribbon, then click CHART TITLE, choose 'TITLE ABOVE CHART' and type in the chosen tile.

Excel screen shot – Frequency of Response Bar Graph Sample



Step 4

To build A COMPARATIVE frequency of response graph, e.g. baseline data vs. end of project data, organize your data within an Excel sheet, 1) stated 'negative impacts' to the H-Form Question 1, and 2) the number of responses to each stated impact by VRA participants for the baseline and end of project data.

Excel worksheet view

	A	B	C
1	No water for gardening	4	2
2	Cost of food increases	1	4
3	Outbreaks of animal diseases	1	2
4	Decrease in rice yields		

Stated 'negative impacts on livelihoods and community

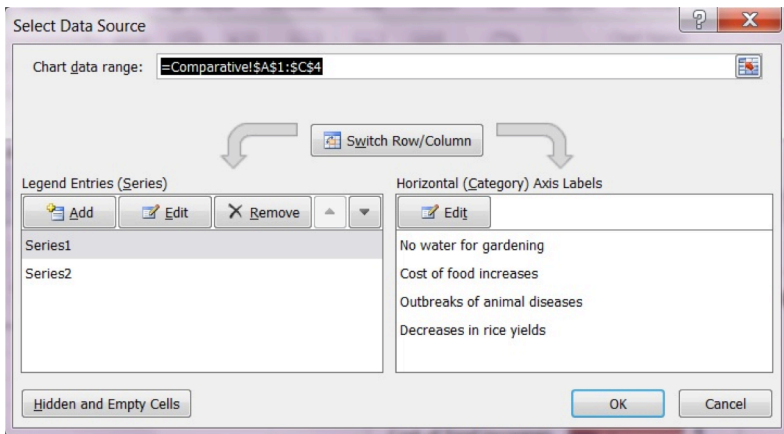
Number of participant responses - baseline

Number of participant responses - end of project

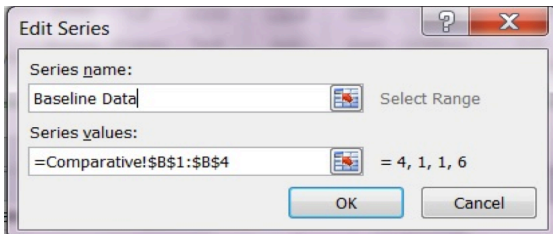
Step 5

To build the COMPARATIVE frequency of response graph, the following steps are:

- I. Highlight rows 1-4 and columns A-C at the same time.
- II. Click on 'INSERT' tab within the function ribbon, and then click on 'BAR' in the sub-ribbon, and click again on the '2-D CLUSTERED BAR' selection. A bar graph will appear.
- III. To apply the 'frequency of response' to the end of each bar shown, click onto the graph, click the 'LAYOUT' tab within the function ribbon, then click 'DATA LABELS' within the label sub ribbon, and finally select 'OUTSIDE END' from the dropdown menu.
- IV. To apply the 'frequency of response' labeling to the bar graph, click onto the graph, then click 'LAYOUT' tab in the function ribbon, select the 'AXIS TITLES', then 'HORIZONTAL AXIS TITLE', and choose 'TITLE BELOW AXIS', and the type 'Frequency of Response'.
- V. To name the 'series', e.g. Baseline Data, and End of Project Data, right click on the 'series' labeling in the graph, and choose 'SELECT DATA'. The following box will appears:



Click on 'Series1' and then click 'EDIT' button in the dialogue box. The following 'EDIT SERIES' dialogue box appears.



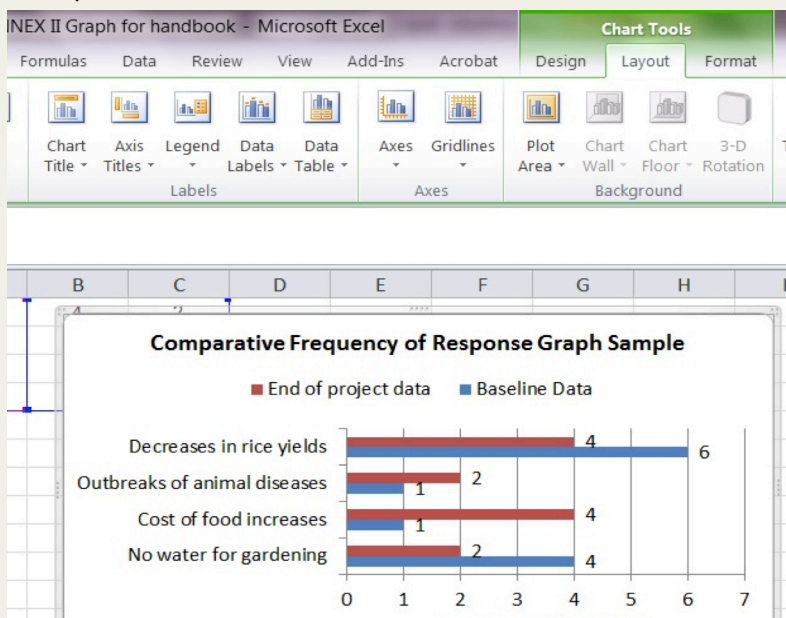
Type a name as appropriate, e.g. Baseline Data, then click 'OK' button.

To rename 'Series2', repeat the above process, then click

the 'OK' button in the 'Select Data Source' dialogue box

- VI. To add a title to your COMPARATIVE bar graph, click onto the graph, then click 'LAYOUT' tab in the function ribbon, then click 'CHART TITLE', choose 'TITLE ABOVE CHART' and type in the chosen title.

Excel screen shot – Comparative Frequency of Response Bar Graph Sample



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