Framework of Milestones and Indicators for Community-Based Adaptation

Community-based adaptation (CBA) is recognized as a vital approach to strengthen the capacity of vulnerable communities and people to adapt to the impacts of climate change. The approach is grounded in good development practice, focusing on sustainable livelihoods, attention to differences within communities of impacts and adaptive capacities, integrating rights-based approaches, and addressing gender inequality and marginalization to ensure that the most vulnerable groups and people are able to adapt.

Development actors see CBA as a useful approach to reduce the climate change vulnerability of their target populations, who are often living in places that are highly exposed to climate impacts, and who are already grappling with the challenges of overcoming poverty and achieving social justice. However, they face challenges in determining how CBA projects differ from typical poverty reduction projects, and are seeking tools and approaches to aid in developing and implementing CBA projects. Monitoring & evaluation of CBA, and specifically the identification of appropriate results and indicators to plan and monitor CBA projects, has been identified as a particular challenge.

The CARE's Community-Based Adaptation (CBA) Framework (Figure 1) was first developed in 2009 and presents a range of *enabling factors* which must be in place at different levels in order for effective community-based adaptation to takeplace. These enabling factors are linked to four inter-related strategies:

- Promotion of climate-resilient livelihoods strategies;
- Disaster risk reduction strategies to reduce the impact of hazards on vulnerable households;
- Capacity development for local civil society and governmental institutions; and
- Advocacy and social mobilization to address the underlying causes of vulnerability.

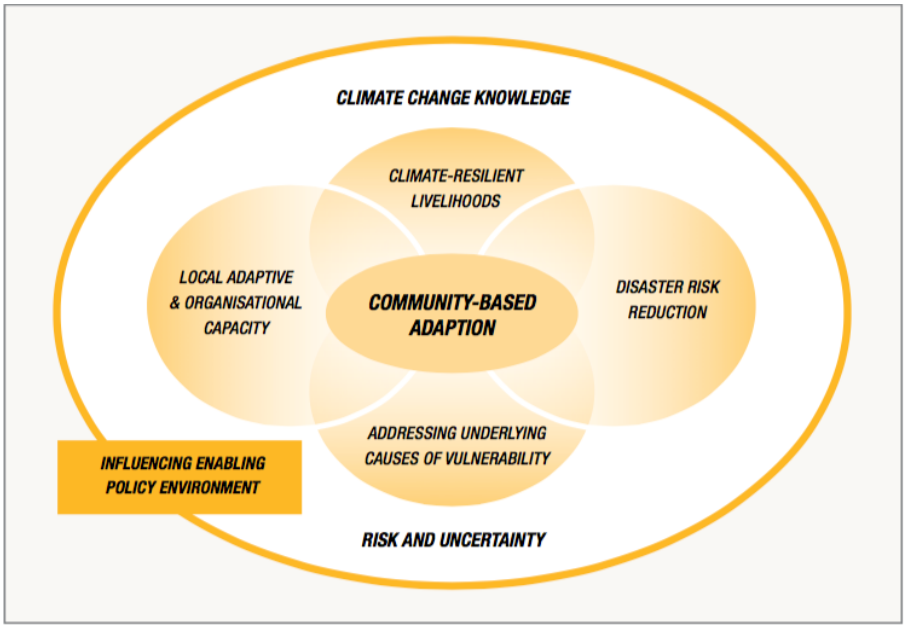

Figure 1 - CARE CBA Framework - Retrieved from CARE, 2014, CBA in practice

This document suggests a set of proposed milestones and indicators to help project teams in planning activities and tracking progress towards achieving the enabling factors. **The approach reflects the fact that adaptation is a process – the milestones and indicators are focused on monitoring and evaluating the adaptive capacity of target populations rather than fixed outcomes.** They reflect the resources and conditions that must be in place for people to manage current climate variability and to adapt to longer term climate change, factoring in the uncertainty associated with future climate impacts.

Though CBA interventions are mostly focused at the local level, it is crucial to recognize that CBA involves not only action at the local level, but also the creation of a wider enabling environment. In order to account for the important factors for successful CBA across scales, it is important to note that the framework is designed to show the wide range of results that adaptation projects could aim to achieve at household/individual, local government/community and national levels. No CBA project will be able to achieve all of these results. Rather**, this document is intended to provide a "menu"of milestones and indicators** to guide project teams in selecting specific results and indicators that are within the scope and focus of their project.

To design a full participatory M&E system for CBA use the Participatory Monitoring, Evaluation, Reflection and Learning for Community-based Adaptation Manual. [CARE, PMERL, 2014

The table 1 provides a description of the Enabling Factors for CBA, broken down in 3 levels: National level, Local Government/Community Level and Household/Individual level. These 3 levels are further elaborated in the next 3 tables:

- Table 2 displays the Enabling Factors but also suggested Milestones and Indicators related **to National level** and provides a brief explanation on the rationale for integrating such milestones and indicators
- Table 3 displays the Enabling Factors but also suggested Milestones and Indicators related to **Local government and Community level** and provides a brief explanation on the rationale for integrating such milestones and indicators
- Table 4 displays the Enabling Factors but also suggested Milestones and Indicators related **to Household/Individual level** and provides a brief explanation on the rationale for integrating such milestones and indicators.

Table 1: Description of the 4 enabling factors of Community-Based Adaptation (CBA) Framework at National, local and Household/Individual Level

	Capacity Development	Climate-Resilient Livelihoods	Disaster Risk Reduction	Addressing Underlying Causes of Vulnerability
National Level *see Table 2*	- Government has capacity to monitor, analyze and disseminate information on current and future climate risks - Government has mandate to integrate climate change into policies - National policies are rolled out at regional and local levels - Resources are allocated and used for implementation and monitoring, evaluation and learning (MEL) of adaptation-related policies	- Government is monitoring, analyzing and disseminating current and future climate information related to livelihoods - Climate change is integrated into relevant sectoral policies	- Government is monitoring, analyzing, and disseminating disaster risk information - Government is engaged in planning and implementing disaster risk management (prevention, preparedness, response and recovery) - Functional early warning systemsin place - Government has capacity to respond to disasters	- Government recognizes specific vulnerability of women and marginalized groups to climate change - Policy and implementation are focused on reducing these vulnerabilities - Local Representatives are included in policy development - Civil society is involved in planning, implementation, and MEL of adaptation activities
Local Government /Community Level *See Table 3*	- Local institutions[1] have capacity to monitor, analyze and disseminate information on current and future climate risks - Local institutions have capacity and resources to plan and implement adaptation activities	- Local institutions have access to climate information - Local plans or policies support climate-resilient livelihoods - Local government and NGO extension workers understand climate risks and are promoting adaptation strategies	- Local institutions have access to disaster risk information - Local disaster risk management plans being implemented - Functional early warning systems in place - Local government has capacity to respond to disasters	- Local planning processes are participatory and inclusive - Women and marginalized groups have a voice in local planning processes - Local policies provide access to and control over critical livelihoods resources for all
Household /Individual Level *See Table 4*	- Social and economic safety nets are available to households - Financial services are available to households - People have knowledge and skills to employ adaptation strategies - People have access to seasonal forecasts and other climate information	- People are generating and using climate information for planning / People are managing risk by planning for and investing in the future - Households are employing climate-resilient agricultural practices - People are engaged in climate-resilient and green businesses - Households have diversified livelihoods, including non-agricultural strategies	- Households have protected reserves of food and agricultural inputs - Households have secure shelter - Key assets are protected - People have access to early warnings for climate hazards - People have mobility to escapedanger in the event of climate hazards	- Men and women are working together to address challenges - Households have control over critical livelihoods resources - Women and marginalized groups have equal access to information, skills and services - Women and marginalized groups have equal rights and access to critical livelihoods resources

[1] Local institutions refer to both government and civil society organizations at the local level

Table 2: National Level Milestones and Indicators for CBA

Enabling Factor	Milestones	Indicators	Explanation
Capacity Development			
Government has capacity to monitor, analyze and disseminate information on current and future climate risks	Expertise on climate change isavailable within Government	- # of Government agencies with climate change focal points - Level of climate change expertise of the focal points and experts - # of focal points with adaptation including CBA/locally led adaptation and gender expertise - level and quality of interaction between focal points andregional/local counterparts	- The existence of expertise on climate change, particularly outside the environment agency, will facilitate integration into decision-making - Expertise at central level must be shared with regional/local agencies
	All relevant departments are engaged in planning for adaptation	- # of sectoral analyses taking into account climate change risks and adaptation undertaken per year - # of inter-departments meetings on climate change per year	- Climate change has cross-sectoral implications so it is important to treat it as a cross-cutting issue - Coordination among departments will promote an integratedapproach to adaptation
Government hasmandate to integrate climatechange into policies	Government is committed to integrate climate change into policies	- # of government climate change focal point(s) to the United Nations Framework Convention on Climate Change (UNFCCC) - # of resources for analysisand planning used by Climate change focal point(s) - # of climate analysis and planning resources which integrates gender, ecosystems and governance considerations and locally-led adaptation principles and approaches. - Level and quality of the mandate of Climate change focal point(s) (including working with other Government agencies to integrate climate change into policies).	- Mandate of climate change focal points vary across governments - Ideally, they are mandated to work with other agencies to integrate climate change, and have the resources to do so. - To check the quality of climate analysis and planning, the CVCA handbook can be used as a reference to see if the key issues for analysis are integrated for example.
National policies and programs are rolled out at regional and locallevels	Local administration is aware of adaptation-relevant national policies and programs	- #/% of Local government and non-governmental institutions aware of adaptation-relevant national policies and programs - level and depth of awareness of local administration of adaptation-relevant national policies (e.g. disaster management, water,agriculture, NAPA, etc.)	- Local governments are generally responsible for planning community development, however these stakeholders may not even be aware of national policy documents.
	Local representatives participate in policy development	- Level of participation of local representatives in policy development	- Involving local stakeholders in the development of national policies will ensure national policies respond to local needs and facilitate proper knowledge and implementation of those national policies at local level.

Enabling Factor	Milestones	Indicators	Explanation
National policies and programsare rolled out at regional and local levels	Central government is activelyengaging regional and local counterparts	- # and quality of CBA-related/relevant communication and meetings between central government and regional/local government - # and quality of mechanisms that exist for exchanging of information - # of propositions of local and regional counterparts integrated in national policies, strategies or plans concerning adaptation	- Good communication between central governments and regional/local governments is essential for good governance - Two-way flow of information is necessary for transparency and accountability
Resources are allocated and used for implementatio n and MEL of adaptation-related policies	Resources are allocated by government to implement adaptation activities	- Amount/% of national budget allocated to adaptation activities - Amount of international adaptation funding received by Government	- The scale of needs for adaptation will require governmentsto allocate resources within existing budgets and to seek new sources of funding
	Allocated resources are being used for the implementation of locally led adaptation initiatives.	- % of adaptation resources used for locally-led adaptation initiatives [incl. CBA]	- Locally led adaptation has proven to be very effective to support the most vulnerable people to adapt.
	Adaptation related policies are monitored and evaluated	- # of policies which define indicators to track results of the policy. - # of policies which include CSOs/external reviewers in their policy review processes	
Climate-Resilient Livelihoods			
Government ismonitoring, analyzing and disseminating current and future climate information related to livelihoods	Government is systematically monitoring and analyzing currentand future climate information	- Existence and Quality [coverage, frequency, accuracy, …] of the monitoring and analysis of rainfall and temperature trends by the meteorological agency	- Ongoing monitoring of climate variables and improvement of future climate projections are critical to effective planning and adaptive management - The information must be shared across Government to ensure that it is used in planning
	Government is disseminating information on current and futureclimate risks	- #/% of agencies/institutions reached with climate information sharing/communication(e.g. climate projections, downscaling)	- Governments have a responsibility to share the information generated, both with the general public andwith local institutions
Climate change isintegrated into relevant sectoral policies	Policies in relevant sectors such asagriculture, land management,water, economy or poverty reduction take climate change into account	- # of policies that take climate change in account - Quality of climate change integration into sectoral policies [Evidence-based, coherence, integrated approach, community-based, gender and vulnerable groups, Landscape approach]	- Policy directions need to be analyzed to ensure that they are making the maximum contribution to adaptive capacity and avoiding increased climate risk [based on available climate science]. The next level of integration would be to have policy directions which are targeted to reducing vulnerability toclimate change. - You can use the Integrated Risk Management Law and policy checklist to assess the quality of CC integration in your policy.

Enabling Factor	Milestones	Indicators	Explanation
Disaster Risk Reduction			
Government is monitoring, analyzing and disseminating disaster risk information	Government is systematically monitoring and analyzing disaster risk information	- Quality of the monitoring and analysis of disaster risk trends (informed by climate change observations and projections) by a government agency	- Ongoing monitoring and analysis of disaster risk information provides the foundation for effective disaster risk management planning
Government isengaged in planning and implementing disaster risk management (including prevention, preparedness ,response and recovery)	Government is disseminating disaster risk information	- #/% of agencies/institutions/people reached with disaster risk information sharing/communication	- Governments have a responsibility to share the information generated, both with the general public andwith local institutions
	National Disaster ManagementPolicy in place	- Quality of the National Disaster Management plan - #/% of organizations that understand and agree to the defined roles and responsibilities of different organizations(government, UN, non-governmental)	- Given the predicted increase in extreme whether events as a result of climate change, planning for disaster management becomes increasingly important. This plan must clearly define roles and responsibilities tofacilitate a coordinated approach. Stakeholders must understand and agree to their definedroles - You can use the Integrated Risk Management Law and policy checklist to assess the quality of DRR integration in your policy.
	Disaster Management Policy takesclimate change into account	- Quality of integration of climate change in Disaster Management Policy [includes an analysis of climate trends, includes Disaster risk reduction measures]	- Climate change has significant implications for disaster management, so analysis of climate trends should form a basis for planning for disaster management - Planning must then focus on actions which make sense in light of climate change
Functional early warning systems (EWS) in place	National early warning system (EWS) inplace	- Quality of EWS (e.g. based on sound scientific information, risk analysis, and holistic vulnerability monitoring) - #/% of Local government and civil society , representatives included in planning and with recognized role in EWS	- To effectively implement early warnings, identification of sound triggers is key - Early warnings are only as successful as the communication structures which support them - Response to early warnings occurs primarily by local stakeholders, therefore their involvement in the development
	Government is monitoring vulnerability for early warning andintervention on crises	- # and quality of mechanisms in place for vulnerability monitoring - # and quality of reports on vulnerability monitoring per year	- The triggers for early warning systems must come from monitoring of vulnerability - This monitoring must be regular and communicated to national and local stakeholders - The indicators used must be carefully chosen in order to reflect the reality of vulnerability in the particular context

Enabling Factor	Milestones	Indicators	Explanation
Functional early warning systems (EWS) in place	EWS uses appropriate communication mechanisms	- Quality EWS communication methods (e.g. accessibility, timeliness, and usefulness for institutions, agencies and populations) - #/% of institutions/agencies reached by EWS communication mechanisms	- In order to reach different stakeholders, an EWS needs to use different methods – radio, TV, community volunteers, etc. - The EWS will only be effective if the messaging is relevant tothe local context to which it applies
Government has capacity to respond to disasters	Government has contingency plans for disaster events	- Quality of government's participatory and scenario-based planning - Quality of government's response plans and procedures - # of trainings on response for national stakeholders per year*	- Contingency plans must be tailored to the different hazards that may affect a particular country - The contingency plan must clearly outline the procedures for response and the roles of different actors Response teams must be trained in order to launch an effective response
Government has capacity to respond to disasters	Government has logistical capacityto manage emergency response	- #/% of trained organizationalpersonnel to carry out response activities* - Quality of the coordination and decision- making mechanisms between central and local governments, and between governmental and non-governmental institutions	- Launching an emergency response requires a large numberof trained personnel - Coordination is key to an effective response, so mechanisms must be worked out in advance
	Government has resources torespond to emergencies	- # of Emergency facilities available* - # and quality of existing communications infrastructure and mechanisms - Quality of locally owned or available transport sufficient foremergency needs* - # of stores of emergency supplies in place*	- Resilient shelters, hospitals, etc. will be needed during the response phase - Infrastructure and mechanisms for vertical and horizontal communication* - Boats, helicopters and other means of transportation that will be needed in the emergency phase - Relief supplies including food, safe water, medical supplies and temporary shelters
Addressing Underlying Causes of Vulnerability			
Government recognizes specific vulnerability of women and marginalized groups to climatechange	Policy and planning documents incorporate analysis of vulnerabilityof women and marginalized groups	- # and quality of policy and planning documents which incorporate vulnerability analysis	- An equitable approach to adaptation requires analysis of differential vulnerability among genders and social groups - The quality of the analysis is important to leadpolicymakers to appropriate actions

Enabling Factor	Milestones	Indicators	Explanation
Policy and implementation are focused on reducing these vulnerabilities	Policies and programs incorporate actions which address specific vulnerability of women andother marginalized groups	- # and quality of policy and planning documents which incorporate actions which address specific vulnerability of women and other marginalized groups	- Ideally the analysis will lead to the identification of actions which address specific vulnerability of women and other marginalized groups - Some actions will have more impact in reaching vulnerable groups
Civil society is involved in planning, implementation and MEL of adaptation activities	Structures for decision-making on adaptation incorporate mechanismsfor civil society participation	- # and quality of mechanisms for civil society participation in decision-making on adaptation - Quality of participation (from perspective of civilsociety representatives)	- Civil society participation is important in ensuring transparency and that the interests of vulnerable people are represented - Mechanisms must allow for participation and influence (vs.consultation)
	Views of civil society are integratedin decisions	- #/% of Civil society representatives feel that views havebeen taken up in adaptation planning - # of Policy documents which integrated civil society priorities	- Real participation means that civil society are able to influence decision-making - Prioritization may result in civil society priorities being dropped, so important to analyze policy directions to ensure priorities are reflected

*Adapted from: Twigg, J. (2007). *Characteristics of a Disaster-Resilient Community: A Guidance Note (Version 1)*. Developed for the DfID Disaster Risk Reduction Inter-Agency Coordination Group.

Table 3: Local Government/Community Level Milestones and Indicators for CBA

Enabling Factor	Milestones	Indicators	Explanation
Local Capacity Development			
Local institutions (gov't and non-gov't) have capacity to analyze climate risks and plan for appropriate actions	Expertise on climate change isavailable locally	- # of local government agencies that have climate changefocal points - # of local research institutions and NGOs that have climatechange experts - # of focal points and experts with expertise in locally led adaptation/CBA, linkages between gender and adaptation, climate vulnerability analysis.	- Expertise in local governments is essential to addressing climate change at the local level - Local experts can provide advisory services and are grounded in the local context
	Local institutions are using vulnerability and risk analysis inplanning	- # of local government and non-governmental institutions that are using tools to analyze vulnerability - Quality of how local governments and non-governmental institutions are integrating vulnerability analysis into planning	- The use of tools can facilitate holistic analysis of vulnerability, which is not typically incorporated into planning - The results of the analysis must then inform the planning
	Local institutions are aware of appropriate adaptation strategies	- #/% of local institutions that have knowledge of Climate trends - #/% of Local government and non-governmental institutions who are knowledgeable about adaptation strategies	- To identify appropriate actions on adaptation, institutions must understand climate trends and appropriate adaptation strategies
Local planning processes are participatory and inclusive	Local planning processes incorporatemechanisms for participation by civilsociety organizations and communities	- # of Local planning processes that have ensured participation of civil society and communities - Quality of participation (from perspective of civil society and community representatives) - #/% of women who participated to the local planning processes	- Participation of civil society and communities in local planning is essential to good governance and quality of local adaptation policies. - Mechanisms must allow for participation (vs.consultation) - The participation should be as inclusive as possible to allow participation of different groups and especially marginalized people.
	Views of civil society and communities are integrated in localplans	- #/% of civil society and community representatives that feel that views have been taken up in local plans - #/% of local government representatives that value inputs from civil society and communities - # and quality of local plans that reflect civil society and community priorities	- Real participation means that civil society and communities are able to influence decision-making - This requires local government representatives who value the role of civil society and communities in planning - Prioritization may result in civil society and community priorities being dropped, so it's important to analyze plans to ensure that views are reflected

Enabling Factor	Milestones	Indicators	Explanation
Local institutions have capacity and resources to plan and implement adaptation activities and services	Local institutions have increasedcapacity to plan and implement adaptation	- #/% of representatives of local institutions trained in analyzing climate risks and planning appropriate adaptation activities - #/% of representatives demonstrating knowledge of climate change vulnerability & adaptation - #/% of representatives applying tools and approaches to analyze climate risks and plan adaptation activities	- Capacity development for local actors is a priority to support CBA, including training, knowledge building and the development and application of tools and approaches for adaptation.
	Resources are allocated foradaptation activities	- Amount/% of local government budgets allocated for adaptation activities - #/% of local civil society institutions engaged in implementing adaptation activities	- Capacity is not the only challenge – local actors also need to have resources to implement adaptation activities
Climate-Resilient Livelihoods			
Local institutions have access to climate information	Climate information is accessible atthe local level	- # and quality of mechanisms that exist for disseminating climate information (seasonal forecasts, climate projections,risk analysis, etc.) from national to local level - Level of accessibility of Information for local level users (language, communication methods,etc.) - #/% of people reached by climate information - # and quality of downscaled climate projections that are available at local level	- In order for local actors to analyze risks and plan adaptation actions, they need first to have access to climate information, which is not always available to them - Creating communication channels to get information from national to local level is an important aspect - To be useful, the information must be available at a relevant scale and communicated appropriately
Local plans or policies support climate-resilient livelihoods	Local plans for livelihood take climate change into account	- # and quality of local livelihood plan documents incorporating analysis of climatechange risks - # and quality of planned actions appropriate in the context ofclimate change - # and quality of planned actions that specifically aim to reducevulnerability to climate change	- The first step in integrating climate change is to analyze the risks based on available climate data - Local plans need to be analyzed to ensure that they are making the maximum contribution to adaptive capacity, and avoiding increased climate risks - The next level of integration would be to have plans that include actions targeted to reducing vulnerability to climate change
	Local livelihood-related policies support adaptation	- # and quality of local livelihood-related policies that incorporate analysis of climate change risks - # and quality of local policies that aim to reduce vulnerability to climate change	- For policies to support adaptation, they must be developed based on analysis of risks based on available climate data. - Policies should as well focus on reducing vulnerability to climate change

Enabling Factor	Milestones	Indicators	Explanation
Local government and NGO extension workers understand climate risks and are promoting adaptation strategies	Extension workers understandclimate risks	- #/% extension workers that are aware of climate trends - #/% of extension workers that are able to link climate trends toimpacts on livelihoods	- Extension workers interface directly with communities, providing technical support on livelihoods, so it is important that these agents are aware of climate trends and how these may impact livelihoods
	Extension workers are promotingadaptation strategies	- #/% of extension workers are aware of appropriate adaptation strategies for the local context - #/% of extension workers are promoting adaptation at the community level	- Awareness of climate trends should then lead to identification and promotion of adaptation strategies by extension workers
Disaster Risk Reduction			
Local institutions have access to disaster risk information	Disaster risk information is accessible at the local level	- # and quality of mechanisms that exist for disseminating disaster riskinformation from national to local level - Level of accessibility of Information for local level users (language, communication methods,etc.)	- Disaster risks are often analyzed at national level, with inadequate attention to disseminating information that the local level
Local disaster management plans being implemented	Local disaster management plan inplace	- # and quality of local disaster management plans - #/% of roles and responsibilities of different organizations (government, non-governmental, community-based)clearly defined, agreed and understood*	- Given the predicted increase in extreme whether events as a result of climate change, planning for disaster management becomes increasingly important - This plan must clearly define roles and responsibilities to facilitate a coordinated approach - Stakeholders must understand and agree to their definedroles
	Disaster risk reduction (DRR) actionsintegrated in local development plans	- # and quality of local development plans that incorporate risk analysis - # and quality of local development plans that incorporate actions toreduce disaster risks	- Local planning must be based on an understanding of climate risks in order to reduce vulnerability - Resources are often allocated on the basis of local development plans, so it is important to integrate DRR actions into these plans
Functional early warning systems in place	Local early warning system (EWS) in place	- # and quality of EWS based on sound scientific information, riskanalysis, and holistic vulnerability monitoring - Quality of the vertical and horizontal communication and coordination among stakeholders* - # of Local communities and civil society that are included inplanning and with recognized role in EWS	- To effectively implement early warnings, identification of sound triggers is key - Early warnings are only as successful as the communication structures which support them - Response to early warnings occurs primarily by local stakeholders, therefore their involvement in the development of systems is important

Enabling Factor	Milestones	Indicators	Explanation
Functional early warning systems in place	Local government and/or community committees are monitoring vulnerability	- # and quality of mechanisms in place for vulnerability monitoring - # of reports on vulnerability monitoring per year	- The triggers for early warning systems must come from monitoring of vulnerability - This monitoring must be regular and communicated to national and local stakeholders - The indicators used must be carefully chosen to reflect the reality of vulnerability in the particular context
	EWS uses appropriate communication mechanisms	- Quality of EWS communication methods (e.g. accessibility and usefulness for populations) - #/% of people reached by EWS communication mechanisms - Quality of community trust in EWS *	- In order to reach all members of the community, an EWS needs to use different methods – radio, TV, community volunteers, etc. - The EWS will only be effective if the messaging is relevant to the local context to which it applies
Local government has capacity to respond to disasters	Local contingency plans exist	- #/% of Local governments have undertaken participatoryand scenario-based planning* - # and quality of local contingency plans of local governments and communities - # of trainings on response for local stakeholders per year*	- Contingency plans must be tailored to the different hazards that may affect a particular country - The contingency plan must clearly outline the procedures for response and the roles of different actors - Response teams must be trained in order to launch an effective response
	Local government has logistical capacity to manage emergency response	- #/% of trained organizationalpersonnel to carry out response activities* - Quality of the defined and agreed coordination and decision- making mechanisms between local governments, non-governmental organizations, and communities - Quality of the existing safe evacuation and supply routes that exist	- Launching an emergency response requires a large number of trained staff - Coordination is key to an effective response, so mechanismsmust be worked out in advance
	Local government has resources torespond to emergencies	- # and quality of the emergency facilities available* - Quality of existing communications infrastructure and mechanisms* - # and quality of the locally owned or available transport (vehicles, train, etc.) sufficient for emergency needs* - # of stores of emergency supplies in place* - Amount of local disaster funds	- Resilient shelters, clinics, etc. will be needed during the response phase - Infrastructure and mechanisms for vertical and horizontal communication* - Boats, trucks and other means of transportation that will be needed in the emergency phase - Relief supplies including food, safe water, medical supplies,and temporary shelters

Enabling Factor	Milestones	Indicators	Explanation
Addressing Underlying Causes of Vulnerability			
Local planning processes are participatory	Local planning processes involveparticipation of communities	- # and quality of mechanisms in place for community input to local planning - Level of accessibility of communities to details of local plans (language, communication methods,etc.) - # and quality of mechanisms in place to hold local representativesaccountable to communities - #/% of community members that actively participate in local planning procedures	- Transparent and participatory local governance helps to ensure that community priorities, including those related to adaptation, are accounted for in local planning
	Local government representativesrecognize the importance of participatory governance	- #/% of local government representatives value inputs fromcommunities - # and quality of local government plans that reflect civil society and community priorities	- Decision-makers must value the contributions of communities in establishing priorities
Women and marginalized groups have a voice in local planning processes	Local planning processes incorporatemechanisms to ensure that views of women and marginalized groups are integrated	- #/% of people of all genders who have actively participated in formal and informal climate-relevant decision-making spaces. - # and % of local representatives that have increased their knowledge and skills on the linkages between gender and adaptation. - # and quality of mechanisms in place for integration of the views of women and marginalized people - Quality of women's and marginalized groups' participation (from their perspective)	- Participation of women and marginalized groups in local planning is essential to good governance - Mechanisms must allow for participation (vs. consultation)
	Views of women and marginalized groups are integrated in local plans	- #/% of women and marginalized people that feel that their views have been taken up in local plans - #/% of local government representatives value inputs fromwomen and marginalized groups - Qualitative analysis of how local plans reflect priorities of women and marginalized groups	- Real participation means that women and marginalized groups are able to influence decision-making - This requires local government representatives who value the role of women and marginalized groups in planning - Prioritization may result in priorities being dropped, so it's important to analyze plans to ensure that views are reflected
Local policies provide access to and control over livelihoods resources for all	Land tenure policies provide secure access to and control over land	- # and quality of land tenure policies that provide guidance on tenure - # and quality of land tenure policies that do not discriminate againstwomen and marginalized groups	- Unclear tenure policies can lead to conflict among land users and owners - People need to understand what their rights are in order to ensure security of tenure - Discriminatory policies can exacerbate vulnerability
	Access to common propertyresources is secure	- # and quality of common property policies that provide guidance on rights - # and quality of common property policies that do not discriminate against women and marginalized groups	- Unclear rights to common property resources can lead to conflict among users - People need to understand what their rights are in order to ensure equitable access - Discriminatory policies can exacerbate vulnerability

Table 4: Household/Individual Level Milestones and Indicators for CBA

Enabling Factor	Milestones	Indicators[2]	Explanation
Local Capacity Development			
Social safety nets are available to households	Social protection schemes in place	- #/% of people registered for social protection schemes* - #/% of vulnerable populations receiving social protection benefits	- Social protection is an important strategy in protecting people, particularly the most vulnerable, from increasing climate hazards
	Community disaster fund exists*	- Amount of Funds available at community level to support disaster risk reduction, response and recovery.* - % of community disaster management plan's budget covered by community disaster fund	- The existence of a community disaster fund can facilitate risk reduction activities and/or faster and locally-driven response
Financial services are available to households	People of all genders have access to financial services	- # and % of people of all genders that have access to financial services. - # and % of people of all gender who have used formal and informal financial services in ways that actively support climate resilience.	- Access to financial services has proven important in facilitating adaptation
People have knowledge and skills to employ adaptation strategies	People are aware of adaptation strategies	- #/% of people (vulnerable/non-vulnerable) aware of climate-resilient livelihoods strategies appropriate to their context - level of awareness of climate-resilient livelihoods strategies appropriate to local context	- People need to know that there are alternatives in order to plan for adaptation
	People have technical skills to implement adaptation strategies	- #/% of target population use technical skills to implement adaptation strategies	- Some adaptation strategies may require new technical skills for implementation - Application of skills demonstrates proficiency
People have access to seasonal forecasts and other climate information	Mechanisms exist for sharing seasonal forecasts and climate monitoring information	- #/% of communities where seasonal forecasts and climate information are shared - Means of sharing (e.g. radio, community meetings)	- People need information about climate in order to analyze risks and plan accordingly - A variety of communication means may be needed to reach a wide population
	People have access to quality climate information	- #/% of people having access to climate information/seasonal forecasts that they can (easily) understand and use for livelihood planning	Access to climate information that is understood by communities and households and that can directly inform their livelihood planning is key to select most climate-resilient livelihood strategies.

[2] At this level, indicator data should be disaggregated based on important determinants of vulnerability such as gender, age, poverty level or livelihood group.

Enabling Factor	Milestones	Indicators	Explanation
Climate-Resilient Livelihoods			
People are generating and using climate information for planning	People are aware of future climate projections for their locality	- % of people able to describe broad future climate trends for their locality	- Local knowledge on climate change is important in catalyzing action on adaptation - Raising awareness of expected trends in future climate gives people a base of information upon which to plan and analyze risks
	People are monitoring key climate variables	- # and quality of mechanisms in place to monitor key climate variables (e.g. rainfall, temperature, extreme events) - # and quality of recorded observations of climate change - #/% of people involved in monitoring and/or distributing key climate variables. - % of key climate variables covered by the monitoring	- Monitoring of climate variables is an essential step in managing climate variability and in preparing for longer-term climate change - Local observations of climate change are important to complement scientific information which is often available only at large scales
	People are using climate information in planning livelihoods strategies	- # and % of people of all genders that have applied climate knowledge and information services to inform their adaptation strategies. It can be disaggregated as follow: - #/% of people using weather (short-term) monitoring information to plan their livelihoods strategies (e.g. shifting to early maturing crops) - #/% of people using seasonal forecasts to plan their livelihoods strategies (e.g. timing of planting for example) - #/% of households adopting new, climate-resilient livelihoods strategies based on climate information -	- When available, climate monitoring information and seasonal forecasts can help in planning and analyzing risks to agriculture and other livelihoods strategies - When households are adopting new livelihoods strategies, it indicates that they are in a better position to manage climate risks
	Households are producing crops that are resilient to climate hazards	- #/% of households growing crops that are resilient to climate hazards affecting the target area (e.g. drought-resistant varieties)	- Crops and varieties that are suited to the changing climate must be introduced and adopted in order to reduce risk of crop loss

Enabling Factor	Milestones	Indicators	Explanation
Households are employing climate-resilient agricultural practices	Households and/or individuals are practicingdimate-resilient agriculture	- #/% of households using conservation agriculture practices, or agro-ecology practices - # and % of people of all genders that have applied at least 3 practices to protect their agricultural livelihoods from negative impacts of climate related shocks and stresses.	- Conservation agriculture practices conserve soil moisture and increase fertility, thereby increasing resilience to erratic rainfall.
People are engaged in climate-resilient and green businesses	Households and/or individuals are engaged in climate-resilient businesses	- # and % of people of all genders that have applied at least 3 practices to protect their businesses from negative impacts of climate related shocks and stresses. - # of % of businesses that are contributing to the regeneration/conservation or protection of the ecosystem or to adaptation.	- Businesses can be affected by climate related shocks and stresses along the whole value chain from production to after sale, thus it is important to take measures to reduce the risks they are facing. - Businesses can also contribute to a better environment for adaptation and resilience by proposing some products that are supporting adaptation or mitigation or by contributing to the regeneration, conservation or protection of the ecosystem.
Households havediversified livelihoods strategies, including non-agricultural strategies	Households are employing a mix of agricultural and off-farm livelihoods strategies	- #/% of households with non-agricultural income sources - #/% of households with three or more different income sources	- Households that are completely dependent on agricultureare more vulnerable to climate change, therefore having other, less climate-dependent sources of income can build resilience - Having a range of income sources spreads risk
	Households have increased income	- #/% of households with increased income(s) - % increase/decrease in income per household	- Households that have an increased income are in a better position to save and invest in adaptation measures
People are managing risk by planning for and investing in the future	People are engaged in savings and credit groups	- #/% of people engaged in savings and credit groups	- Savings and credit provide people with startup capital for new livelihoods activities, and encourage saving for the future
	People are putting money into savings	- #/% of people with savings - % increase/decrease in savings per household	- If people have savings, it provides a buffer against shocks, so savings are an important indicator of resilience - Increased savings is an indicator that people building up their asset base
	Collective ownership of assets to reduce costs and risks*	- #/% of households participating in shared ownership of assets	- Collective ownership of assets such as land, agricultural tools, etc. reduces up-front investments and spreads risk
	People are investing in insurance (e.g. crop insurance, health insurance, livestock insurance)	- #/% of households with insurance for key assets	- Insurance can provide a measure of protectionagainst loss of crops, livestock and other assets

Enabling Factor	Milestones	Indicators	Explanation
Disaster Risk Reduction			
Households have protected reserves of food and agricultural inputs	Households have flood/cyclone proof food and input storage facilities	- #/% of households storing food and inputs in easily accessible safestorage facilities - Kgs of food stored per household	- Reserves are important to minimize the impacts of extreme weather events, but they must be stored in safe places in order to be useful in times of crisis
	Households have increased agricultural production	- % increase in production of key crops	- Increased production is critical to establishing reserves in food-insecure areas
	Households have access to a diverse range of seeds	- #/% of households that are saving seeds - # of varieties of seeds saved per household - # of households that have access to a wide range of seeds responding to the different shocks they are facing.	- Traditional seed saving practices are important to reduce costs for farmers, to conserve varieties that may be adapted to climate variability, and to allow farmers to diversify their crop base
Households have secure shelter	Raised houses in flood-prone areas	- #/% of households with raised houses	- As floods become more frequent, it becomes more cost-effective to raise houses
	Cyclone shelters exist in areas at risk of cyclones	- #/% of households with access to a cyclone shelter - #/% of households using the shelter in case of an emergency.	- In combination with early warning systems, shelters are important in protecting people from cyclones
	Houses constructed with climate/disaster-resistant building techniques	- #/% of households with climate/disaster-resilient housing (e.g cyclone, storms, heatwaves, flooding, etc.)	- Improved construction techniques (using local materials where possible) can reduce impact of storms and cyclones. - Depending on the context, the shocks and stresses, resilient housing should be further defined.
Key assets are protected	Livestock have shelter from floods and storms	- #/% of households with livestock sheltered in safe places and/or a safe evacuation point	- Loss of livestock due to floods and storms has a major impact on household economic security, so protection of these assets is important
	Reserves of fodder and water for livestock exist	- #/% of households storing fodder and water for livestock in facilities protected from disasters (e.g. floods & storms)	- Related to the above, reserves of fodder and water are important to preserve livestock through times of crisis
People have access to early warnings (systems) for climate hazards	People are aware of local disaster management plan	- #/% of people (vulnerable/non- vulnerable) who are aware of local disaster management plan - #/% of people (vulnerable/non-vulnerable) who are aware of emergency procedures - Level of awareness of people of local disaster management plans and emergency procedures	- In order for a disaster management plan to be effective, it must be communicated to community stakeholders - These stakeholders must understand procedures to be followed in an emergency situation

Enabling Factor	Milestones	Indicators	Explanation
People have access to early warnings (systems) for climate hazards	People have radios or other means of communications	- #/% of people (vulnerable/non- vulnerable) who have access to a radio or other formof communication to receive early warnings	- Early warnings must be able to reach all members of the community by some form of communication
People have mobility to escape danger in the event of climate hazards	Disaster management plan recognizes special needs of people with reduced mobility	- #/% of people who would require assistance for evacuation who are covered by the community's disaster management plan	- Community evacuation planning must recognize that some community members may not have the mobility to escape without assistance and plan accordingly
Addressing Underlying Causes of Vulnerability			
Men and women are working together to address challenges	Women are empowered to make decisions within the household	- #/% of women that actively participated in household decision-making. - #/% of women who feel empowered in householddecision-making - #/% of men who feel it is important to involve women in decision-making	- In many contexts, household decision-making is dominated by men, reducing the ability of women to influence the adaptive capacity of their families
	Workload is shared between men and women	- # of hours spent by men and women on livelihoods activities (agriculture, fetching fuel andwater, etc.) - # of hours spent by men and women on childcare.	- Women's workload often increases with environmental change and with the need to pursue a range of livelihoods activities, so sharing the workload becomes increasingly important
	Control of family income and savings is shared	- #/% of women who have independent sources ofincome - #/% of women who have control over the income they make themselves - #/% of women who have shared control of family income - #/% of men who feel that family income belongs to both partners	- Women are empowered by having their own sources of income and having control of how it is used - Shared control of family income can lead to increased family well-being as men and women tend to prioritize differently - Men must recognize the role of women as family decision-makers
Households have control over critical livelihoods resources	Households have secure land tenure	- #/% of households with secure access to land for livelihoods purposes	- It is difficult for people to invest in sustainable land management strategies when they do not have secure land tenure
	Households have access to common property resources for livelihoods purposes	- #/% of households with secure access to a water source - #/% of households with access to pasture, forests, or other common property resources	- Secure water access is key for household and agricultural purposes - Sharing of benefits from sustainable management common property resources can facilitate adaptation

Enabling Factor	Milestones	Indicators	Explanation
Women and marginalized groups have equal access to information, skills and services	Women and marginalized groups have access to information	- #/% of Women/ marginalized groups that have access to information relevant to CBA (local adaptive & organizational capacity, climate-resilient livelihoods, disaster risk reduction, etc.) that is easily understandable - #/% of Women/ marginalized groups that are engaged in organizations in which CBA relevant information is shared. - Quality of the CBA-relevant information women/marginalized groups have access to	- CBOs will only be effective in promoting appropriate community development if women and other marginalized groups are active participants - Information must be shared in communities in a way that it is accessible to all
	Women and marginalized groups have access to skills	- Literacy rates for men, women, marginalized - #/% of women/marginalized groups that participate in trainings of CBA-relevant skills. - Quality of the CBA-relevant skills women/marginalized groups have access to and their use of these skills	- Literacy rates can demonstrate inequalities in education - In a context where women or marginalized groups have limited access to formal education, specialized programs can facilitate skills development
	Services are targeted to women and marginalized groups	- #/% of women/ marginalized groups accessing CBA-relevant services - # of CBA-relevant services accessed by women/marginalized groups that are assessed as at least satisfactory.	- In some contexts, targeted services such as health or extension services may be required to reach vulnerable populations
Women and marginalized groups have equal rights and access to critical livelihoods resources	Women and marginalized groups have secure access to and control over land	- #/% of women/marginalized groups are aware of their landrights - #/% of women/marginalized groups are empowered to claim their rights to land - #/% of women/marginalized groups with secure access to and control over land	- In order for women to claim their rights, they must first be aware of what those rights are, and then empowered to claim their rights (e.g. through negotiation with community leaders)
	Women and marginalized groups have secure access to and control over common property resources	- #/% of women/marginalized groups are aware of theirrights to common property resources - #/% of women/marginalized groups are empowered toclaim their rights to common property resources - #/% of women/marginalized groups with secure access to and control over common property resources	- In order for women to claim their rights, they must first be aware of what those rights are, and then empowered to claim their rights (e.g. through collective use of land by women's groups)