

Building Capacity on Climate Change in Coastal Areas of Pakistan

Glossary

CCAP

World Wide Fund for Nature - Pakistan (WWF - P)

(October 2011)

PREFACE

The Building Capacity on Climate Change Adaptation in Coastal Areas of Pakistan (CCAP) project intends to reduce the risks faced by vulnerable communities in coastal areas of Pakistan through the implementation of a variety of actions. These include interventions related to adaptation and building capability among vulnerable coastal communities; in addition to promoting integrated water resources management, and river basin management. The project also focuses on supporting governance mechanisms to become more responsive and robust when addressing climate variability and change related impacts.

The overall project objective is that *“By 2025, coastal areas in Pakistan and neighbouring regions [will] have climate resilient ecosystems to support the livelihoods / lives of coastal communities.”* While the specific objective for the 5 year period (2011-2015) of the project is: *“By 2015, government and community climate adaptation capacity is increased and water governance strengthened, to improve climate resilience of Indus Delta ecosystem processes on which coastal communities depend, supported by regional and transboundary cooperation on adaptation in river deltas.”*

The purpose of the present glossary is to develop a common understanding of key terms used in the CCAP project document. The glossary also aims to minimize the risk of confusion or ambiguity in the interpretation of terms commonly used by direct and indirect stakeholders and WWF Pakistan.

The CCAP glossary will be a living document. Periodic review and addition of terms is envisaged. We encourage all comments on the contents of the glossary to further refine our definitions.

Utmost care has been taken in defining the terms as simply and as accurately as possible. References to source materials have also been provided at the end of the glossary, wherever possible.

**World Wide Fund for Nature WWF-Pakistan
CCAP Glossary**

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A

Activity

An activity is a specific task that when completed with a number of other related tasks contribute to the achievement of a sub-output or output. In the context of the CCAP project, the time-period for an activity is generally six months or less.

Advocacy

In general, the term refers to a campaign undertaken by individuals or groups to promote measures that would broadly benefit society. In the context of the CCAP, the term refers to the pursuit of influencing outcomes -- including public policy and resource allocation decisions within political, economic and social systems.

Adaptive Capacity

“The ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.” (Glick, et al. 2007).

Adaptive management

“A systematic approach for improving resource management by learning from management outcomes. In principle, its purpose is to enable natural resource managers and other relevant decision-makers deal with uncertainty about future conditions by supporting the development of conservation projects based on information available and then providing the flexibility to modify their management activities to improve their effectiveness as new information becomes available.” (Glick, et al. 2007).

Awareness Material (see also Communication Material)

Awareness material refers to all informative material developed under the communication and awareness component of the project. These comprise of print and electronic materials.

C

Campaign

A campaign is an audience specific awareness drive or movement taken by a group of like-minded individuals or organisations aiming at increasing public awareness. It can be a call for action or practical demonstration, such as exposure visits. Different communication tools may be used to carry out a series of campaigns including mangrove plantation, media outreach, local festivals, etc.

Capability

The term capability means the ability to do something. The doing can be (i) creating a new idea, (ii) implementing new or existing ideas and or (iii) copying something through an action etc. Interpretation of capability may vary according to the requirement of action. In the context of CCAP capability is the ability, aptitude, power and competence of the stakeholders to facilitate and own project interventions.

Capability Building

“Efforts aimed to develop human skills or infrastructure within a community or organization needed to reduce the level of risk” to climate shocks and stressors (UNISDR, 2007).

Carbon Sinks

Are anything that absorbs more carbon than it releases (NERC, 2011).

Citizen Community Boards (CCB)

A Citizen Community Board (CCB) is a registered public organization that is entitled to request and obtain funds from district Government.

Climate

Is often defined as the weather averaged over time, typically 30 years (USAID, 2007).

Climate Change

“Climate change refers to a change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.” (Glick, et al, 2007).

Climate Change Adaptation

“Climate change adaptation for natural systems is a management strategy that involves identifying, preparing for, and responding to expected climate changes in order to promote ecological resilience, maintain ecological function, and provide the necessary elements to support biodiversity and sustainable ecosystem services.” (Glick, et al, 2007).

Climate Model

“A numerical representation of the climate system based on the physical, chemical, and biological properties of its components, their interactions and feedback processes, and accounting for all or some of its known properties. The climate system can be represented by models of varying complexity.” (Glick, et al, 2007).

Community Based Adaptation (CBA)

“Is a community-led process based on communities’ priorities, needs, knowledge, and capacities, which should empower people to plan for and cope with the impacts of climate change.” (Climate Prep, 2011).

Communities (see Settlements)

Community can be a social grouping of people who share geographic locations or common interests. In the context of three sites of the CCAP project, a community can be a group of people living in a village and/or cluster of villages, small towns and scattered populations near the project sites.

Community Adaptation Action Plans

A road map for supporting communities’ ability to cope with climate shocks and stressors by initiating and implementing actions designed to promote resilience. The plan would describe what the specific community wants to accomplish, what activities are needed during a specified timeline and what resources are needed for it to be successful.

Community-Based Institutions

These may be formal or non-formal decision-making bodies that help communities coordinate actions and take joint decisions for the purposes of CCAP. According to a study documenting vulnerability and adapting experiences in India, “these institutions enable local communities to voice and enforce their interests to influence decisions...and to hold policy makers accountable.” (V&A Programme, 2009).

A community-based institution could take the form of a Village Development Organisation (VDO), Community Based Organisation (CBO), a Panchayat or Jirga.

Community Dialogue

A forum that draws community participants to exchange information, share experiences and develop solutions to community concerns and coordinate responses to opportunities.

Community-Based Natural Resource Management

The management of natural resources under a detailed plan developed and agreed to by all concerned stakeholders. The approach requires communities and local institutions to take responsibility for sustained use of natural resources.

Confidence

“A level of ‘confidence’ can be used to characterize uncertainty that is based on expert judgment as to the correctness of a model, an analysis, or a statement. Standard terminology by the IPCC puts ‘very high confidence’ at ‘at least 9 out of 10 chance’ of being correct, and ‘very low confidence’ at “less than 1 out of 10 chance.” (Glick, et al, 2007).

Consultation

Refers to a meeting seeking expert opinion or input.

D

District Disaster Management Authority (DDMA)

A series of official units established at the local (municipal) level to respond to disaster threats and events by the National Disaster Management Authority (NDMA).

Delta

A landform that is created at the mouth of the river where that river flows into an ocean, sea, estuary, lake, reservoir, flat arid area, or another river. Deltas are formed from the deposition of the sediment carried by the river as the flow leaves the mouth of the river (AWR).

Deforestation

“Deforestation, as defined by the Marrakech Accords, is the direct human-induced conversion of forested land to non-forested land (with less than 10% crown cover).” (PACT, 2011).

Disaster

“A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources. Disasters are often described as a result of the combination of: the exposure to a hazard; the conditions of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences.” (UNISDR, 2009).

Disaster Risk Management (DRM)

“The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.” (UNISDR, 2009).

Disaster Risk Reduction (DRR)

The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events. (UNISDR, 2009).

District Coordination Committee (DCC)

Established by WWF – P’s Indus for All Programme, the District Coordination Committee will for the purposes of the CCAP project, review the progress of field level interventions and leverages support from site-specific stakeholders. Committee membership consists of site-specific stakeholders representing line departments, civil society, academia, private sector and WWF management.

E

Early warning system

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss. A people-centered early warning system necessarily comprises four key elements: knowledge of the risks; monitoring, analysis and forecasting of the hazards; communication or dissemination of alerts and warnings; and local capabilities to respond to the warnings received (UNISDR, 2009).

Ecological thresholds

“An ecological threshold is the point at which there is an abrupt change in an ecosystem quality, property, or phenomenon, or where small changes in an environmental driver produce large responses in the ecosystem.” (Groffman et al, 2006 in Glick, et al, 2007).

Environmental Degradation

“The reduction of the capacity of the environment to meet social and ecological objectives and needs. Degradation of the environment can alter the frequency and intensity of natural hazards and increase the vulnerability of communities. The types of human-induced degradation are varied and include land misuse, soil erosion and loss, desertification, wildland fires, loss of biodiversity, deforestation, mangrove destruction, land, water and air pollution, climate change, sea level rise and ozone depletion.” (UNISDR, 2007).

Ecoregion (Indus)

A large unit of land or water containing a geographically distinct assemblage of species, natural communities, and environmental conditions. The boundaries of an Ecoregion encompass an area within which important ecological and evolutionary processes most strongly interact. In the preliminary stages, the boundary of the Indus Ecoregion only covered the deltaic area. Recognizing the impacts of activities outside the Indus delta on the deltaic biodiversity, the northern edge of the Indus Ecoregion was extended all the way to Guddu barrage. Since this is a freshwater Ecoregion, the current boundary has also been defined keeping in mind the habitat of the Indus Dolphin, a flagship species. The current boundary of the Indus Ecoregion has been finalized in consultation with stakeholders from the government, civil society, academia and the private sector.

Environmental Awareness

“Environmental education, awareness and training is a process through which people are encouraged to participate in activities aimed at conservation, protection and management of the environment, essential for achieving sustainable development.” (MOEF, 2010).

Environmental Flows (see Sustainable Flows)

“Environmental Flows are the quantity, timing and quality of water flows required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these ecosystems.” (Brisbane Declaration, 2007).

Equitable Distribution

Equitable distribution depends on a common understanding and set criteria to decide how to distribute benefits.

Exposure

“The nature and degree to which a system is exposed to significant climate variations.” (Glick, et al, 2007).

Exposure Visit

Are organized so that groups of people living in one site/ country can visit another location (in different regions or different countries) to observe and learn from development and conservation activities. Successful exposure visits rely on direct interaction between groups living in similar circumstances, active participation in questioning, and practical learning. Discussion between participating groups may involve broader information exchanges beyond the central topic (PA, 2011).

Extreme Events

“Extreme events can be quantified...on the basis of, how rare they are, which involves notions of frequency of occurrence; how intense they are, which involves notions of threshold exceedance [sic]; and the impacts they exert on environmental or economic sectors, in terms of costs or damage.” (Beniston and Stephenson, 2003).

F

Field Visit

A pre-planned visit to an area or community with a defined objective and expected results

Food Security

Physical and economic access, at all times, to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life.

Forest Degradation

“The term used to describe the condition of a forest that has been reduced below its natural capacity, but not below the 10 percent crown cover threshold that qualifies as deforestation.” (PACT, 2011).

Fuel-Efficient Stove Technology

Primarily to conserve fuel wood and forests, and improve health of the inhabitants where it is installed. Generally they upgrade the domestic environment and help conserve rural trees and forests

Forcing mechanisms

Anything that changes the energy balance of the earth's system, leading to a net change in the earth's average temperature. Examples include regular variations in the earth's orbit, changes in ocean circulation, volcanic eruptions, and changes in the composition of the earth's atmosphere. (Glick, et al, 2007).

G

Gender

"Gender refers to the socially constructed roles, behaviour, activities and attributes that a particular society considers appropriate for men and women. The distinct roles and behaviour may give rise to gender inequalities, i.e. differences between men and women that systematically favour one group. In turn, such inequalities can lead to inequities between men and women' in terms of access to resources, benefit sharing and participation." (WHO, 2011).

Global Climate Model

"Global climate models are large, three-dimensional coupled models that incorporate the latest understanding of the physical processes at work in the atmosphere, oceans, and earth's surface. They range from lower-level General Circulation Models (GCMs) to coupled Atmosphere–Ocean General Circulation Models (AOGCMs)." (Glick, et al, 2007).

Global Warming

"Is an average increase in the temperature of the atmosphere near the earth's surface which can contribute to changes in global climate patterns...In common usage, 'global warming' often refers to the warming that can occur as a result of the increased emissions of GHGs from human activities." (U.S. EPA, 2011).

Greenhouse Gas (GHGs)

"Any gas that absorbs infrared radiation in the atmosphere." GHGs include but are not limited to carbon dioxide, methane, nitrous oxide, etc. (U.S. EPA, 2011).

Greenhouse Effect

“Trapping and build up on heat in the atmosphere near the earth’s surface. Some of the heat flowing back towards space from the earth’s surface is absorbed by water vapor, carbon dioxide, ozone, and several other gases in the atmosphere and then re-radiated back towards the earth’s surface. If the atmospheric concentrations of these GHGs rise, the average temperature of the lower atmosphere will gradually increase.” (U.S. EPA, 2011).

H

Hazard

“Natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.” (UNISDR, 2009).

Health (Ecological)

Ecological health or ecological integrity or ecological damage is used to refer to symptoms of an ecosystem's pending loss of carrying capacity, ability to perform nature's services, or pending ecocide due to cumulative causes such as pollution.

Household

In the context of CCAP, household is defined to be constituted of all those persons who usually live together, share their meals and share a common budget. A household may consist of one person or more than one person who may or may not be related to each other.

I

Income Generation

Income generation refers to the production of general revenues for financing basic human needs, usually through some economic activity or purpose-built scheme. It also requires addressing issues such as accessibility of credit, indebtedness, market connections and alternative livelihoods.

Indicators (Environmental/ Ecological)

“A measurable feature or features that provide managerially and scientifically useful evidence of environmental and ecosystem quality or reliable evidence of trends in quality.” Environmental indicators must be measurable with available technology, scientifically valid for assessing or documenting ecosystem quality, and useful for providing information for management decision-making.” (ACWI, 1996).

Information Dissemination

To propagate, publicise, circulate and broadcast information aiming at informing, creating awareness, motivating audiences about different aspects of the Indus Ecoregion and associated environmental risks and threats, including natural hazards and climate change and variability.

Institutional Capacity (see also Capability)

The ability of an institution to perform functions, solve problems and set and achieve objectives based on the quality of human capital, mandate(s), resources, systems and procedures and good governance.

Intervention

An activity or action implemented at either the site level or the policy level to bring about a desired outcome.

K

Katchehri

The name of a gathering in an ‘ottaque’ (a community defined gathering/ meeting place that services multiple purposes) of a village in rural Sindh, where, generally, adult male villagers meet to discuss ideas, resolve internal conflicts through arbitration and meet with visitors.

L

Livelihood

A livelihood is the means by which a person or household makes a living over time.

Local Adaptation Action Plans

Roadmaps developed and implemented by local authorities/governments to strengthen the resilience of local infrastructure and communities to climate change shocks and stressors, i.e. extreme weather events, impact of climate change on livelihoods, etc.

Logical Framework Approach (LFA)

A management tool mainly used in the design, monitoring and evaluation of development projects. The approach is applied through a logframe tool, which is generally a 4x4 column matrix document that includes information on: objectives, outputs, activities, targets, timescales, risks and assumptions.

Local Government Ordinance 2001

The set of legal guidelines and processes introduced under the Devolution Plan by General Pervez Musharraf's Government. The implementation of the Local Government Ordinance, 2001 that has resulted in establishment of a District Governments with several tiers of Local Government falling under it such as Tehsils and Union Councils. The overall aim of the Local Government Ordinance, 2001 is to ensure increased decision-making powers and financial freedom at the local level. In the context of the Climate Change Adaptation Project, this devolution plays is significant due to its role in providing increased opportunities for community involvement and empowerment.

M

Macro

Federal government departments, national and international conservation NGOs and other civil society organizations, donors and multilateral agencies form the third tier of stakeholders.

Mangrove Forest Cover

The more or less continuous cover of branches and foliage formed collectively by the crown of a tree and the crowns of adjacent trees and other woody growth. Canopy closure may be the amount of overhead tree cover as measured using a spherical densiometer held at 1.5 m from the ground OR Plants and plant parts, living or dead, on the surface of the ground. Also, the percentage of a named area that has such plants.

Memorandum of Understanding (MoU)

An official agreement establishing the principles, areas of collaboration and scope of action that will guide the implementation of programmes or projects.

Meso

District and provincial governments and departments including some civil society organizations operational at the provincial level are the second tier of stakeholders.

Micro

Local communities, volunteers and CBOs at the project sites are the first year of stakeholder engagements

Mitigation (hazard)

The lessening or limitation of the adverse impacts of climate change risks, threats and hazards. Mitigation measures encompass engineering techniques and hazard resistant construction as well as improved environmental policies and public awareness. (UNISDR, 2009).

Mitigation (climate change)

The UN defines mitigation in the context of climate change, as a human intervention to reduce the sources or enhance the sinks of greenhouse gases (UNFCCC, 1997).

N

National Disaster Management Authority (NDMA)

The National Disaster Management Authority was instituted in response to the National Disaster Management Ordinance of 2006. The NDMA has been designed to coordinate and monitor implementation of national policies and strategies on disaster management. (NDMA).

Nature Clubs

A body composed of students under the supervision of a teacher at a local school. The club is intended to promote environmental awareness and education. It is anticipated that the site office staff will facilitate the promotion of nature clubs by providing them with reference material and activity ideas.

Natural forest

A natural forest is a complex ecosystem, comprising of indigenous species that has evolved over millennia.

Natural Resource Management

NRM can be defined as the responsible and broad-based management of the land, water, forest and biological resources base--including genes--needed to sustain agricultural productivity and avert degradation of potential productivity.

Needs Assessment

A systematic process to acquire an accurate, thorough picture of the strengths and weaknesses of stakeholder communities in order to design locally responsive adaptation interventions and plans.

O

Objectively Verifiable Indicators (OVIs)

A group of criteria used to verify the degree of accomplishment (foreseen or actual) of the objective, and the inputs and outputs of a project. They can be quantitative, and therefore both verifiable and measurable or qualitative and therefore only verifiable (IFAD).

Ottaque

A community defined gathering/ meeting place that services multiple purposes in rural Sindh.

P

Participatory Rural Appraisal (PRA)

Is an approach used by (NGOs) and other agencies involved in international development. The approach aims to incorporate the knowledge and opinions of rural people in the planning and management of development projects and programmes. (Chambers, 1997).

Plans (Sectoral and Provincial)

Documents produced by the government of Pakistan that outline goals and targets to be achieved by the concerned line departments. These are usually annual, but some are produced periodically. Examples include Annual Development Plans, Forest Sector Master Plan, etc.

Platforms (District / Tehsil-wide for Dialogue and Coordination)

The District/Taluka-wide platforms established for dialogues and coordination among communities and local institutions. Areas of cooperation and ToRs of these platforms are identified and agreed upon by the local stakeholders CBO/CCBs/community groups and local government institutions.

Population

The total number of inhabitants constituting a particular race, class, or group in a specified area

Potable Water

Potable water is water that is safe for human consumption. Potable water is free from pollution, harmful organisms and impurities.

Poverty

There are a number of approaches to defining poverty, including approaches based on monetary income, capabilities, social exclusion and participation. Traditionally, poverty has been conceptualized as an economic or social condition, with income and consumption indicators used to map poverty. Poverty is recognized today as being multidimensional and this is the basis for its application in the CCAP.

The CCAP views poverty as a process, whereby affected people are deprived of capabilities and opportunities stemming from physical, natural, human, social or financial limitations.

Poverty-environment indicators

Analysis by WWF - Pakistan proposes three categories of poverty –environment indicators which, when applied together, provide some indication of the state of poverty and the environment, and suggest levers which may be affected to create a stronger status change. These categories are:

- **Status indicators** – reflecting the state of the environment, access to natural resources by people and the level of income of communities dependent on natural resources. These status indicators will provide the most basic measure of whether resources are available for use by communities and what state in terms of quality and quantity those resources are in. Examples include: size of fish stocks, rate of forest conversion, topsoil erosion rates, percentage of income derived from non-timber forest products, number of individuals affected by flood and drought.
- **Enabling conditions indicators** – in three basic categories: institutional arrangements, economic policies, and ecological management capacity. Examples include: share of spending on poverty environment projects in relation to other development activities, application of

strategic environmental analysis for major projects, availability of incentives for protecting the environment and provide access of resources to the poor.

- **Social capital indicators** – reflecting the capacity of local populations to influence basic decisions and institutional arrangements such as the ability to organize, existing networks, ability to engage in decision-making, capacity to mobilize investment, ability to gain access to information and markets etc. Examples include: to what degree the poor can influence institutions linked to management of rural livelihoods and environmental resources, to what degree the rural poor can mobilize resources to improve access to and management of natural resources-including investment capital, and information.

Poverty-Environment Linkages (P-E Nexus)

A characterization of local poverty and environmental conditions, their co-linkages and proximate causes that are driving their deterioration or impeding an improvement in their conditions.

Programme Support Unit (PSU)

An internal advisory body composed of senior management from WWF-Pakistan that provides advice and guidance on project management, planning and implementation.

Promotional materials

Are designed to raise the public visibility and consciousness of the project and its goals. Merchandise may include caps, pens, bags, posters, key chains, paper weights, souvenirs, certificates, wrist watches, mugs, wall clocks, diaries, stickers, etc.

Provincial Disaster Management Authority

Provincial disaster management authority has been established to support devolved and decentralized mechanism for disaster management. (NDMA).

Q

Quality (Water)

A term used to describe the chemical, physical, and biological characteristics of water, usually in respect to its suitability for a particular purpose, i.e. domestic and agricultural uses and ecological and biodiversity needs.

R

Raising (Nurseries)

Grounds or premises on or in which nursery stock is propagated, grown, or cultivated for the purpose of distributing or selling nursery stock.

Rangeland

Rangelands are ecosystems which carry a vegetation consisting of native and/or naturalized species of grasses and dicotyledonous herbs, trees and shrubs, used for grazing or browsing by wild and domestic animals, on which management is restricted to grazing, burning and control of woody plants.

Rangeland Management

A management strategy to restore or reclaim degraded land, arrest degradation and improve the feed supply and carrying capacity.

Rapid Rural Appraisal (RRA)

A qualitative methodology used to gather information during (relatively) short but intensive studies in the field. A multidisciplinary team makes use of a range of tools and techniques that facilitate the sharing of knowledge through local participation.

Rehabilitation (forest)

A management strategy applied in degraded forest lands that aim at re-establishing site productivity and protective functions and many of the ecological services provided by a functional forest or woodland ecosystem.

Resilience

The amount of change or disturbance that can be absorbed by a system [e.g., an organism, population, community, or ecosystem] before the system is redefined by a different set of processes and structures (i.e., the ecosystem recovers from the change or disturbance without a major phase shift). (U.S. FWS, 2011).

Resistance

The ability of an organism, population or community, or ecosystem to withstand a change or disturbance without significant loss of structure or function. From a management perspective, resistance includes both (1) the concept of taking advantage of/boosting the inherent (biological) degree to which species are able to resist change and (2) manipulation of the physical environment to counteract/ resist physical/biological change. (U.S. FWS, 2011).

Risk Assessment

The process of identifying the magnitude or consequences of an adverse event or impact occurring as well as the probability that it will occur. (Glick, et al, 2007).

S

Seminar (see Training)

A presentation on a topic covering some facet of knowledge or skill. The program can be public or private. The presentation is usually organized into modules. The speaker's goal is to impart knowledge of the topic, and he or she typically uses a combination of lectures, visual aids, interaction with participants, and group exercises to get the job done.

Sensitivity

Innate characteristics of a species or system and considers tolerance to changes in such things as temperature, precipitation, fire regimes, or other key processes.

Settlements

“Totality of the human community - whether city, town or village - with all the social, material, organizational, spiritual and cultural elements that sustain it.” (UNESCAP, 1976).

Significant Levels (refers to population levels by 2025)

The term describes population density capable of negatively affecting livelihood or quality of life for the Pakistani populace in general. Population growth is often associated with increased agricultural land expansion, diminishment in land frontier, little possibility of expanding onto new land, and mismanagement of natural resources.

Stakeholders

The individuals and organisations that have a legitimate interest and are able to influence the implementation and upscaling of the project are referred to as stakeholders. Seven categories of stakeholders have been defined for CCAP: (1) local communities and CBOs, (2) civil society organizations, (3) government departments and authorities, (4) academia and research bodies, (5) media, (6) European Union, donors and multilateral agencies, and (7) WWF- Pakistan and the WWF network. For further information on stakeholder engagement please see: micro, meso and macro.

Steering Committee

Steering Committee is a group of high-level stakeholders who are responsible for providing guidance on overall strategic direction of the project. CCAP's steering committee is composed of senior civil servants, members of civil society organizations and academia.

Socio-Economic Baseline Assessment (SEB)

There are a number of questions to be answered and decisions to be made in the course of planning and implementing the CCAP project. Project interventions must be responsive to poverty-environment linkages and deciding how to increase livelihoods resilience. Such assessments are carried out at the very outset of the project and are essential to developing the project baseline.

Sustainability

“Meeting needs of the present generation without compromising the ability of future generations to meet their needs.” (WCED, 1987). Sustainability is composed of desirable ecological, economic, and social conditions or trends interacting at varying spatial and temporal scales.

Sustainable Fishing Practices

Sustainable fishing practices refer to fishing methods used to ensure that the annual fish catch is not in excess of annual fish growth.

Sustainable Flows (see Environmental Flows)

Sustainable Flows or “Environmental Flows are the quantity, timing and quality of water flows required to sustain freshwater and estuarine ecosystems and the human livelihoods and well-being that depend on these ecosystems.” (Brisbane Declaration, 2007).

Sustainable Livelihood

A livelihood is sustainable when it can cope with and recover from stressors and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base. (DFID, 2002).

Sustainable Use

Sustainable use means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.

T

Terms of Partnership (see MoU)

Threats (Anthropogenic)

The term anthropogenic threats refer to man-made threats to natural environments. According to the ACUNU (2011), anthropogenic threats can also come from the natural environment itself (excessive natural radon emissions from the ground) or natural environmental change (earthquakes, floods, mountainous mud flows, though many of them now are becoming more human-induced).

Toolkit

A collection of reference, guidance and educational material on a specific issue intended for a specific audience. Toolkits can be of multiple types including: environmental toolkit, communication toolkit, stakeholder engagement toolkits, etc.

Training (see Seminar)

An activity leading to learning and application of a skill. Training involves an organized attempt to assist learning through instruction, observation, or practice. Training goals normally reflect the demands of a job role

Traditional Ecological Knowledge

This generally refers to the long-standing practices of natural resource use and conservation by local communities. Some forms of this knowledge are expressed through stories, folklores, traditions, and customary laws.

U

Uncertainty

An expression of the degree to which a value (e.g., the future state of the climate system) is unknown. Uncertainty can result from lack of information or from disagreement about what is known or even knowable. It may have many types of sources, from quantifiable errors in the data to ambiguously defined concepts or terminology, or uncertain projections of human behavior. Uncertainty can therefore be represented by quantitative measures, for example, a range of values calculated by various models, or by qualitative statements, for example, reflecting the judgment of a team of experts. (Glick, et al, 2007)

V

Veterinary Camps

Temporary camps established in or near a village with an objective to provide free or subsidised vaccinations to livestock belonging to the community

Village Clusters

Generally defined as an area consisting of several neighbouring villages where groups have been formed on the basis of a commonalities such as geographical proximity, dependence on natural resources, clan affinities etc.

Vulnerability

The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. It is a function of the sensitivity of a particular system to climate changes, its exposure to those changes, and its capacity to adapt to those changes. (Glick, et al, 2007).

Variability (Climate)

“Refers to variations in the mean state of climate on all temporal and spatial scales beyond that of individual weather events.” (USAID, 2007).

Vulnerability Assessment

A tool for carrying out adaptation planning, and informing the development and implementation of climate-smart resource management practices.

W

Watch and Ward Mechanism

A system in which the community is empowered to carry out surveillance and enforcement activities for the protection and caretaking of a particular area or resource

Watering Ponds

Water bodies established to increase available waterfowl habitat in a given area.

Weather

“Describes atmospheric conditions at a particular place in terms of air temperature, pressure, humidity, wind speed, and precipitation.” (USAID, 2007).

Women’s Empowerment

“Women's empowerment has five components: women's sense of self-worth; their right to have and to determine choices; their right to have access to opportunities and resources; their right to have the power to control their own lives, both within and outside the home; and their ability to influence the direction of social change to create a more just social and economic order, nationally and internationally.” (UNPOPIN, 2001).

Women’s Participation

Take measures to ensure women’s full participation in project activities. This can be achieved by creating the necessary enabling environment and using appropriate tools and procedures.

Workshop

Set of activities designed to promote learning, discussion and feedback on a specific topic or set of topics. Participants may create a plan, specification or other documentation that may help guide project implementation or endorse project actions and research.

Y

Youth Greening Events

Youth greening events activities carried out by local youth to promote environmental awareness. These activities may include plantation campaigns, cleanliness campaigns, bird watching events, nature camping etc.

Sources:

Advisory Committee on Water Information (ACWI) (1996) *Technical Appendix E: Indicator Selection Criteria*. Available at: <http://acwi.gov/appendixes/index.html>. Accessed on 18.10.11
America's Wetlands Resources (AWR) Available at:
<http://www.americaswetlandresources.com/>. Accessed on: 14.10.11

American Council of the United Nations University (ACUNU) (2011). *Environmental Security Study*. Available at: <http://www.millennium-project.org/millennium/es-2def.html>.

Beniston, M. and Stephenson, D. B. (2004) Extreme climatic events and their evolution under changing climatic conditions. *Global and Planetary Change* **44** (1-9).

Brisbane Declaration (2007) *10th International River symposium and Environmental Flows Conference*: Brisbane, Australia. 3-6 September. Available at:
http://www.eflow.net.org/download_documents/brisbane-declaration-english.pdf.
Chambers, R. (1997) *Whose Reality Counts? Putting the First Last*. Intermediate Technology Publications: London.

Climate Prep (2011) *Ecosystem-based Adaptation: What Does It Really Mean?* Available at:
<http://www.climateprep.org/2011/03/02/ecosystem-based-adaptation-what-does-it-really-mean/>. Accessed on 12.10.11

Department for International Development (DfID) (2002) *Sustainable Livelihoods Guidance Sheets*. Department for International Development. Available at:
www.livelihood.org/info/info_guidancesheets.htm. Accessed on 18.10.11

Glick, P., B.A. Stein, and N.A. Edelson (editors) (2011) *Scanning the Conservation Horizon: A Guide to Climate Change Vulnerability Assessment*. National Wildlife Federation: Washington, D.C.

IFAD. *A guide for project M&E: Managing Impact for Rural Development*. Available at:
<http://www.ifad.org/evaluation/guide/>.

Ministry of Environment and Forests (MOEF) (2010) *Environment Education Division*. Government of India. Available at: <http://moef.nic.in/divisions/ee/ee.html>. Accessed on 18.10.11

Natural Disaster Management Authority (NDMA). Available at: <http://ndma.gov.pk/index.html>

Natural Environment Research Council (NERC) (2011) *What Are Carbon Sources and Carbon Sinks?* Available at: www.nerc.ac.uk/research/issues/climatechange/carbon.asp. Accessed on 18.10.11

Pact (2011) *REDD Glossary*. Washington DC. Available at: <http://www.pactworld.org/galleries/default-file/Pact%20REDD%20Glossary.pdf>. Accessed on 12.10.11

Practical Action (PA) (2011) *Technical Information Online: Exposure Visits*. Available at: www.practicalaction.org/practicalanswers/product_info.php?products_id=289. Accessed on 13.10.11

Report of the World commission on environmental development (WCED) (1987) *Development and International Cooperation: Environment*. United Nations. Available at: www.UN-documents.net/wced-ocf.htm. Accessed on 18.10.11

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) *Vancouver Declaration on Human Settlements*. Available at: <http://www.unescap.org/huset/whatis.htm>. Accessed on 18.10.11

United Nations International Strategy for Disaster Reduction (UNISDR) (2009) *Terminology on Disaster Risk Reduction*. UNISDR: Geneva

United Nations Framework Convention for Climate Change (UNFCCC) (1997) *Glossary of climate change acronyms*. UN: Bonn. Available at: http://unfccc.int/essential_background/glossary/items/3666.php. Accessed on 12.10.11

United Nations Population Information Network (UNPOPIN) (2001) *Guidelines on Women's Empowerment*. Available at:
<http://www.un.org/popin/unfpa/taskforce/guide/iatfwemp.gdl.html>. Accessed on 13.10.11.
Accessed on 18.10.11

USAID (2007) *Adapting to Climate Variability and Change: A Guidance Manual for Development Planning*. USAID.

United States Environmental Protection Agency (U.S. EPA) (2011) *Glossary of Climate Change Terms*. Available at: www.epa.gov/climatechange/glossary.html. Accessed on 18.10.11

U.S. Fisheries and Wildlife Service (U.S. FWS) (2011) *Glossary*. Available at:
<http://training.fws.gov/EC/Resources/vulnerability/pdfs/glossary.pdf>. Accessed on 18.10.11

V&A Programme (2009) *Vulnerability and Adaptation Experiences from Rajasthan and Andhra Pradesh*. Community Based Institutions SDC V&A Programme: India.

World Health Organization (WHO) *Gender*. Available at:
<http://www.who.int/topics/gender/en/>. Accessed on: 12.10.11