

Biodiversity Glossary¹

Access and benefit-sharing

One of the three objectives of the Convention on Biological Diversity, as set out in its Article 1, is the “fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding”. The CBD also has several articles (especially Article 15) regarding international aspects of access to genetic resources.

Alien species

A species occurring in an area outside of its historically known natural range as a result of intentional or accidental dispersal by human activities (also known as an exotic or introduced species).

Biodiversity

Biodiversity—short for biological diversity—means the diversity of life in all its forms—the diversity of species, of genetic variations within one species, and of ecosystems. The importance of biological diversity to human society is hard to overstate. An estimated 40 per cent of the global economy is based on biological products and processes. Poor people, especially those living in areas of low agricultural productivity, depend especially heavily on the genetic diversity of the environment.

Biodiversity loss

From the time when humans first occupied Earth and began to hunt animals, gather food and chop wood, they have had an impact on biodiversity. Over the last two centuries, human population growth, overexploitation of natural resources and environmental degradation have resulted in an ever accelerating decline in global biodiversity. Species are diminishing in numbers and becoming extinct, and ecosystems are suffering damage and disappearing.

- An estimated 80% of the original forest that covered the Earth 8,000 years ago has been cleared, damaged or fragmented.
- Some experts assess the rate at which species are becoming extinct at 1,000 to 10,000 times higher than the natural rate would be.
- A sample of 23 common farmland birds and 24 common woodland birds monitored in 18 European countries show a decline in numbers by 71% between 1980 and 2002.

Biome

A major portion of the living environment of a particular region (such as a fir forest or grassland), characterised by its distinctive vegetation and maintained largely by local climatic conditions.

Biotechnology

Any technology that is applied to living organisms to make them more valuable to people.

Buffer zone

The region adjacent to the border of a protected area; a transition zone between areas managed for different objectives.

¹ This glossary is based on the following sources. www.unep-wcmc.org/reception/glossaryM-R.htm
http://pubs.wri.org/pubs_content_text.cfm?ContentID=487
<http://www.edu.gov.nf.ca/curriculum/teched/resources/glos-biodiversity.html>
<http://ec.europa.eu/rapid/pressReleasesAction.do?reference=MEMO/04/27>
http://www.foe.co.uk/resource/local/saving_wildlife_sites/glossary/biodiversity_action_plans.htm
<http://www.iucn.org/themes/CEM/ourwork/ecapproach/index.html>
http://en.wikipedia.org/wiki/Ecosystem_services
<http://www.iucnredlist.org/info/introduction>

The final version of this glossary was checked by Jeff McNeely, the IUCN Chief Scientist.

Carrying capacity

The maximum number of people, or individuals of a particular species, that a given part of the environment can maintain indefinitely.

Co-management

The sharing of authority, responsibility, and benefits between government and local communities in the management of natural resources.

Conservation

The management of human use of nature so that it may yield the greatest sustainable benefit to current generations while maintaining its potential to meet the needs and aspirations of future generations.

Conservation of Biodiversity

The management of human interactions with genes, species, and ecosystems so as to provide the maximum benefit to the present generation while maintaining their potential to meet the needs and aspirations of future generations; encompasses elements of saving, studying, and using biodiversity.

Co-management

The management of a specific resource (such as a forest or pasture) by a well-defined group of resource users with the authority to regulate its use by members and outsiders.

Cultural diversity

Variety or multiformity of human social structures, belief systems, and strategies for adapting to situations in different parts of the world. Language is a good indicator of cultural diversity, with over 6,000 languages currently being spoken.

Drivers of biodiversity loss

The main threats to biodiversity are one or more of the following:

- Human population growth means growing demands for space and food. Human population has grown from approximately 1.65 billion in 1900 to an estimated 6.3 billion today. In 50 years, the UN predicts a world population of 9 billion. More people means less resources for most other species.
- Urban sprawl and intensive agriculture and forestry encroach on habitats. Extension of road, rail and electricity networks that fragments habitats and scares away some species.
- Overexploitation of natural resources means we consume too much of a species or of goods that ecosystems provide. It also includes excessive hunting, collecting and trade in species and parts of species. Due to overfishing, 80% of the fish stocks in the EU face collapse or are of unknown status. In 2001, 40% of all EU fish catches were taken from stocks considered to be below safe biological limits. For certain types of fish, notably cod, haddock, whiting, hake and other round fish as well as salmon and sea trout, the percentage was as high as 60%.
- Pollution affects the health of animals and plants as much as human health. Environmental disasters such as oil spills have devastating consequences for birds and the marine fauna and flora.
- Climate change is predicted, by the end of this century, to raise global temperature by between 1.4° and 5.8° Celsius and the sea level by between 9 and 88 cm. Many species will not be able to adapt or to move to other regions. Over the last century, the average temperature on Earth has increased by about 0.6° Celsius and the sea level has risen by 10 to 20 cm. The 90s were the warmest decade in the last 1,000 years. According to a study published in "Nature" in January 2004, climate change could wipe out a third of the Earth's species by 2050.
- Invasive alien species are species that enter an ecosystem where they don't occur naturally and then thrive and overwhelm endemic species. Often, they are taken there by humans. The tasty Nile

perch was introduced to Lake Victoria in Africa in 1954 and caused the extinction of more than 200 endemic fish species. Imported as a pet from North America, the grey squirrel has caused the extinction of the local red squirrel in the UK and Italy. It is better at competing for food.

Ecology

A branch of science concerned with the interrelationship of organisms and their environment; the study of ecosystems.

Ecosystem

Ecosystems are self-regulating communities of plants and animals interacting with each other and with their non-living environment—forests, wetlands, mountains, lakes, rivers, deserts and agricultural landscapes. Ecosystems are vulnerable to interference as pressure on one component can upset the whole balance. They are also very vulnerable to pollution. Many ecosystems have already been lost, and many others are at risk. The world's forests house about half of global biodiversity. But they are disappearing at a rate of 0.8% per year. Tropical forests are vanishing at an annual rate of 4%.

Ecosystem approach

The Ecosystem Approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. The Ecosystem Approach places human needs at the centre of biodiversity management. It aims to manage the ecosystem, based on the multiple functions that ecosystems perform and the multiple uses that are made of these functions. The ecosystem approach does not aim for short-term economic gains, but aims to optimize the use of an ecosystem without damaging it.

Ecosystem diversity

The variety of ecosystems that occurs within a larger landscape, ranging from biome (the largest ecological unit) to microhabitat.

Ecosystem services

Ecosystem services are processes by which the environment produces benefits useful to people, akin to economic services. They include:

- Provision of clean water and air
- Pollination of crops
- Mitigation of environmental hazards
- Pest and disease control
- Carbon sequestration

Accounting for the way in which ecosystems provide economic goods is an increasingly popular area of development. The concept of ecosystem services is similar to that of natural capital. The Millennium Ecosystem Assessment released in 2005 showed that 60% of ecosystem services are being degraded or used unsustainably.

Eco Tourism

Travel undertaken to witness sites or regions of unique natural or ecologic quality, or the provision of services to facilitate such travel that have the least impact on biological diversity and the natural environment.

Endangered species

A technical definition used for classification referring to a species that is in danger of extinction throughout all or a significant portion of its range. IUCN The World Conservation Union defines species as endangered if the factors causing their vulnerability or decline continue to operate.

Evolution

Any gradual change. Organic evolution is any genetic change in organisms from generation to generation.

Ex situ conservation

A conservation method that entails the removal of germplasm resources (seed, pollen, sperm, individual organisms, from their original habitat or natural environment. Keeping components of biodiversity alive outside of their original habitat or natural environment.

Extinction

The evolutionary termination of a species caused by the failure to reproduce and the death of all remaining members of the species; the natural failure to adapt to environmental change.

Fauna

All of the animals found in a given area.

Flora

All of the plants found in a given area.

Gene

The functional unit of heredity; the part of the DNA molecule that encodes a single enzyme or structural protein unit.

Gene bank

A facility established for the ex situ conservation of individuals (seeds), tissues, or reproductive cells of plants or animals.

Genetic diversity

The variety of genes within a particular population, species, variety, or breed.

Grassroots (organizations or movements)

People or society at a local level, rather than at the center of major political activity.

Habitat

A place or type of site where an organism or population naturally occurs.

Habitat degradation

The diminishment of habitat quality, which results in a reduced ability to support flora and fauna species. Human activities leading to habitat degradation include polluting activities and the introduction of invasive species. Adverse effects can become immediately noticeable, but can also have a cumulative nature. Biodiversity will eventually be lost if habitats become degraded to an extent that species can no longer survive.

Habitat fragmentation

Fragmentation of habitats occur when a continuous has become divided into separate, often isolated small patches interspersed with other habitats. Small fragments of habitats can only support small populations of fauna and these are more vulnerable to extinction. The patches may not even be habitable by species occupying the original undivided habitat. The fragmentation also frequently obstructs species from immigrating between populations. Habitat fragmentation stems from geological processes that slowly alter the lay out of the physical environment or human activities such as land clearing, housing, urban development and construction of roads or other infrastructure. Adverse effects sometimes are not immediately notice-

able and sufficient habitats may ostensibly be maintained. However inbreeding, lack of territories and food shortage are some of the problems small populations can encounter. Fragmentation of habitats is therefore expected to lead to losses of species diversity in the longer term.

Habitat loss

The outcome of a process of land use change in which a 'natural'; habitat-type is removed and replaced by another habitat-type, such as converting natural areas to production sites. In such process, flora and fauna species that previously used the site are displaced or destroyed. Generally this results in a reduction of biodiversity.

Hotspot

An area on earth with an unusual concentration of species, many of which are endemic to the area, and which is under serious threat by people.

Indicator species

A species whose status provides information on the overall condition of the ecosystem and of other species in that ecosystem.

Indigenous people

People whose ancestors inhabited a place or country when persons from another culture or ethnic background arrived on the scene and dominated them through conquest, settlement, or other means and who today live more in conformity with their own social, economic, and cultural customs and traditions than with those of the country of which they now form a part. (also: 'native peoples' or 'tribal peoples')

In situ conservation

A conservation method that attempts to preserve the genetic integrity of gene resources by conserving them within the evolutionary dynamic ecosystems of the original habitat or natural environment.

Instruments to protect biodiversity

The Convention on Biological Diversity (CBD) is the principal international instrument in developing sustainable conservation and use of biological resources as stipulated in chapter 15 of Agenda 21. The Conference of the Parties (COP) to the CBD has launched comprehensive programmes of work addressing 5 critical ecosystem-based thematic areas and 13 cross-cutting issues. The adoption of the Ecosystem Approach and the decision to develop a Strategic Plan for the Convention, will greatly contribute to the establishment of a firm policy foundation.

Other biodiversity-related conventions and processes including: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the Convention on the Conservation of Migratory Species of Wild Animals (CMS); the Convention on Wetlands of International Importance, Especially as Waterfowl Habitats (RAMSAR); the World Heritage Convention (WHC); the Meetings of Regional Seas Conventions and the Global Diversity Forum have all made significant contributions to the sustainable management and use of the world's biodiversity.

At the national level, there has been a steady growth in conservation efforts. The number of national organizations involved in conservation has increased, while the number of voluntary conservation organizations and the size of their membership have increased in an exponential manner. The growth in the number of protected areas and the total extent of all protected areas has increased considerably over the last 20 years, but their management and design of these areas is often limited. The problem is that despite these increased national and international efforts, widespread biodiversity loss continues to occur.

Intellectual property rights

Rights enabling an inventor to exclude imitators from the market for a certain period of time.

Invasive species

Invasive species are those that are introduced—intentionally or unintentionally—to an ecosystem in which they do not naturally appear and which threaten habitats, ecosystems, or native species. These species become invasive due to their high reproduction rates and by competing with and displacing native species, that naturally appear in that ecosystem. Unintentional introduction can be the result of accidents (e.g. when species escape from a zoo), transport (e.g. in the ballast water of a ship); intentional introduction can be the result of e.g. importing animals or plants or the genetic modification of organisms.

Inventory

On-site collection of data on natural resources and their properties.

Land use

Land use refers to how a specific piece of land is allocated: its purpose, need or use (e.g. agriculture, industry, residential or nature).

Land use requirements

The requirements are related to growth and yield of crops and trees, animal husbandry, land management and conservation.

Major threats to biodiversity

See drivers of biodiversity loss.

Marine Protected Area

An area of sea (or coast) especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

Millennium Ecosystem Assessment (MA)

An international work program designed to meet the needs of decision makers and the public for scientific information concerning the consequences of ecosystem change for human well-being and options for responding to those changes. The MA was launched by U.N. Secretary-General Kofi Annan in June 2001 and it will help to meet assessment needs of the Convention on Biological Diversity, Convention to Combat Desertification, the Ramsar Convention on Wetlands, and the Convention on Migratory Species, as well as needs of other users in the private sector and civil society. If the MA proves to be useful to its stakeholders, it is anticipated that an assessment process modeled on the MA will be repeated every 5–10 years and that ecosystem assessments will be regularly conducted at national or sub-national scales.”

Mitigating measures

Measures that allow an activity with a negative impact on biodiversity, but reduce the impact on site by considering changes to the scale, design, location, process, sequencing, management and/or monitoring of the proposed activity. It requires a joint effort of planners, engineers, ecologists, other experts and often local stakeholders to arrive at the best practical environmental option. An example is the unacceptable impact on biodiversity of the construction of a certain road, that is mitigated by the construction of a wild-life viaduct.

National Biodiversity Strategy and Action Plan

The Convention on Biological Diversity calls on each of its Parties to prepare a National Biodiversity Strategy and Action Plan (Article 6a) that establishes specific activities and targets for achieving the objectives of the Convention. These plans mostly are implemented by a partnership of conservation organisations. Species or habitats which are the subject of NBSAPs are the governments stated priorities for action and therefore raise greater concern where they are threatened. NBSAPs do not carry legal status and listed species and habitat types are not necessarily protected (although some are covered by other legislation).

Native species

Flora and fauna species that occur naturally in a given area or region. Also referred to as indigenous species.

Natural environment

The natural environment comprises all living and non-living things that occur naturally on Earth. In its purest sense, it is thus an environment that is not the result of human activity or intervention. The natural environment may be contrasted to “the built environment”, and is also in contrast to the concept of cultural landscape.

Natural resources

Natural resources are often classified into renewable and non-renewable resources. Renewable resources are generally living resources (fish, coffee, and forests, for example), which can restock (renew) themselves if they are not overharvested. Renewable resources can restock themselves and be used indefinitely if they are used sustainably. Once renewable resources are consumed at a rate that exceeds their natural rate of replacement, the standing stock will diminish and eventually run out. The rate of sustainable use of a renewable resource is determined by the replacement rate and amount of standing stock of that particular resource. Non-living renewable natural resources include soil, as well as water, wind, tides and solar radiation—compare with renewable energy.

Resources can also be classified on the basis of their origin as biotic and abiotic. Biotic resources are derived from animals and plants (i.e. the living world). Abiotic resources are derived from the non-living world e.g. land, water, and air. Mineral and power resources are also abiotic resources some are derived from nature.

Both extraction of the basic resource and refining it into a purer, directly usable form, (e.g., metals, refined oils) are generally considered natural-resource activities, even though the latter may not necessarily occur near the former. Natural resources are natural capital converted to commodity inputs to infrastructural capital processes. They include soil, timber, oil, minerals, and other goods taken more or less as they are from the Earth.

A nation's natural resources often determine its wealth and status in the world economic system, by determining its political influence. Developed nations are those which are less dependent on natural resources for wealth, due to their greater reliance on infrastructural capital for production. However, some see a resource curse whereby easily obtainable natural resources could actually hurt the prospects of a national economy by fostering political corruption.

Non-Governmental Organization (NGO)

A nonprofit group or association organised outside of institutionalised political structures to realise particular social objectives (such as environmental protection) or serve particular constituencies (such as indigenous peoples). NGO activities range from research, information distribution, training, local organisation, and community service to legal advocacy, lobbying for legislative change, and civil disobedience. NGOs range in size from small groups within a particular community to huge membership groups with a national or international scope.

Overexploitation

Overexploitation occurs when harvesting of specimens of flora and fauna species from the wild is out of balance with reproduction patterns and, as a consequence, species may become extinct.

Participatory rural appraisal

PRA is a relatively new and different approach for conducting action-oriented research in developing countries. PRAs are used to help involve villagers and local official leaders in all stages of development work, from the identification of needs and decision making to the assessment of completed projects. The

term can be used to describe any new methodology which makes use of a multidisciplinary team. Rapid Rural Appraisal is a quicker approach that may or may not be participatory.

Patent

A government grant of temporary monopoly rights on innovative processes or products.

Protected Areas

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means. A protected area can be under either public or private ownership.

Red List

The IUCN Red List of Threatened Species provides taxonomic, conservation status and distribution information on taxa that have been globally evaluated using the IUCN Red List Categories and Criteria. This system is designed to determine the relative risk of extinction, and the main purpose of the IUCN Red List is to catalogue and highlight those taxa that are facing a higher risk of global extinction (i.e. those listed as Critically Endangered, Endangered and Vulnerable). The IUCN Red List also includes information on taxa that are categorized as Extinct or Extinct in the Wild; on taxa that cannot be evaluated because of insufficient information (i.e. are Data Deficient); and on taxa that are either close to meeting the threatened thresholds or that would be threatened were it not for an ongoing taxon-specific conservation programme (i.e. are Near Threatened).

Rehabilitation

The recovery of specific ecosystem services in a degraded ecosystem or habitat.

Restoration

The return of an ecosystem or habitat to its original community structure, natural complement of species, and natural functions.

Seedbank

A facility designed for the ex situ conservation of individual plant varieties through seed preservation and storage.

Species

A group of organisms capable of interbreeding freely with each other but not with members of other species.

Species diversity

The number and variety of species found in a given area in a region.

Succession

The more or less predictable changes in the composition of communities following a natural or human disturbance.

Sustainable development

Development that meets the needs and aspirations of the current generation without compromising the ability to meet those of future generations.

Sustainable use

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.

Taxonomy

The classification of animals and plants based upon natural relationships.

Threatened species

A technical classification referring to a species that is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. 12,259 species are known by IUCN, the World Conservation Union, to be threatened with extinction. IUCN keeps the world's inventory of the conservation status of animals and plants, compiling data from thousands of scientists and conservationists worldwide. However, the 12,259 threatened species are only the tip of the iceberg. Nobody knows how many species there are on Earth, let alone how they are doing. The total number of recorded living species is around 1.75 million. But more than two thirds are insects and other invertebrates, which are extremely difficult to monitor. An estimate of the real number of species on Earth is 14 million. For its 2003 "Red List of Threatened Species", IUCN was able to evaluate the conservation status of 2% of 1.53 million species for which it has descriptions. The only two well-monitored groups are birds and mammals, so IUCN was able to evaluate 100% of birds and 99% of mammals for threatened status.

Wild species

Organisms captive or living in the wild that have not been subject to breeding to alter them from their native state

Wild life

Living, non-domesticated animals. Some experts consider plants also as part of wildlife.

Communications Glossary¹

Adult learning

Adult learning is a specific methodology for education of professionals and adults. It differs from the methods used in the formal education system as adults learn best when

- learning is accomplished through dialogue
- they feel respected as responsible self directed learners
- they feel their knowledge and experience are valued and can be shared
- they feel able to trust, sense safety in the learning environment
- they see how the skill or information is relevant to their lives or their work
- when they see that the information or skill is immediately useful in performing tasks or to deal with problems they confront in their lives.

Advertising

Those forms of PR and marketing communication aimed at the influencing and /or promoting purchasing behaviour with regard to the services and products of the organisation. Successful advertising is based on principles such as “ perception is the only reality”, “ one picture is more powerful than a thousand words”, “ emotion is what triggers action”. Advertising tools range from billboards and TV spots to direct mail.

Branding

Branding is the use of texts and/or images to create a specific image and positive associations for a person, organization, product or service.

Capacity building

‘Capacity building is the creation of an enabling environment with appropriate policy and legal frameworks, institutional development, including community participation (of women in particular), human resources development and strengthening of managerial systems. Capacity building is a long-term, continuing process, in which all stakeholders participate (ministries, local authorities, non-governmental organizations and water user groups, professional associations, academics and others). Capacity building are activities which strengthen the knowledge, abilities, skills and behaviour of individuals and improve institutional structures and processes in such a way that the organization can efficiently meet its mission and goals in a sustainable way.

Communication

Communication is an activity in which a sender transmits a message, with or without the aid of media and vehicles, to one or more receivers, and vice versa. The way in which communication takes place is referred to as the communication process. The ideal form of communication is a two way process aimed at mutual understanding, sharing of values and action. For governments the two-way exchange of information is a means to gain cooperation of groups in society by listening to them first and clarifying why and how decisions are made. In an instrumental approach governments use communication with other instruments to support biodiversity conservation to address economic constraints and to motivate action. Governments also use one-way communication to inform audiences about policies and legislation.

Communication plan or strategy

A communication plan or strategy sets the communication goals, chooses the right media and messages and sets out the method of evaluation. One first analyses the management or biodiversity issue one wants to address. The second step is to analyse what communication obstacles have to be addressed to reach or change the relevant stakeholders. The third is to define for each group of stakeholders one needs to communicate to (the target group) the communication objectives, the messages and the means.

¹ This glossary is an updated version of a communication glossary developed by the IUCN CEC product group corporate communication, and edited by Frits Hesselink in 2003.

Communication objectives

Communication objectives are different from the organization, policy, project or program objectives. Communication as an instrument for the organization, policy, project or program may have the following objectives: setting agenda, forming opinions, raising awareness or creating involvement, generating support, changing knowledge, changing attitudes, changing behaviour.

Corporate communication

A management instrument that is used to harmonise all forms of communication in such a way that the Ministry acquires and/or retains the image it wishes to acquire and/or retain among its target groups and customers (both internal and external). Two key concepts in relation to corporate communication are image and identity. In successful organisations corporate communication is a priority of the top executives.

Diffusion

Diffusion is a process by which an innovation is communicated through certain channels over time among members of a social system. The members of a social system are on the basis of innovativeness classified in 5 groups: innovators, early adopters, early majority, late majority, laggards behind. Each group needs a different marketing communication approach. The diffusion process contains five steps: knowledge, persuasion, decision, implementation, conformation and adoption or rejection.

Education

Is the guiding of learning processes in the form of instruction, experiencing or setting examples. Formal education is the hierarchically structured, chronologically graded educational system running from primary through the tertiary institutions. Non formal education are organized educational activities outside the established formal system, intended to serve an identifiable learning clientele with identifiable objectives. Informal education is the process whereby every individual acquires attitudes, values, skills and knowledge from daily experience, such as family, friends, peers and media. Education is a set of processes that can inform, motivate and empower people to support biodiversity conservation, not only by making lifestyle changes, but also through promoting change in the way that institutions, business, and governments operate.

External communication

All forms of communication that are geared towards external target groups. There are two types of external communication: press communication (or media relations) and communication aimed at the general public or specific external target groups.

Focus group

A major tool for listening is the use of focus groups. A focus group is a non-directive type of interviewing a specific social group: a segment of consumers, voters or stakeholders in a policy issue. It is a technique in commercial and social marketing. It draws on group interaction to gain greater insight into why certain opinions are held. Focus groups are used to improve planning and design of new products or programs, to provide means for evaluation and to provide insights and qualitative data for communication and marketing strategies. Good consumer-orientated companies have been using focus groups for years. Increasingly they are used in politics, policymaking and policy implementation.

Formal communication

Formal communication in general is exchange of information that adheres to the rules and standards that apply to the formal relation between organizations or between the organization and the individual. It is an effective form of communication to establish clear and precise transactions and statements. Formal communication takes place in written form through letters, contracts, articles and speeches during official meetings and recordings of those meetings.

Formal Education

Formal education is the hierarchically structured, chronologically graded educational system running from primary through the tertiary institutions.

Framing

Framing is a process of selective control over the individual's perception of media, public, or private communication, in particular the meanings attributed to words or phrases. Framing defines how an element of rhetoric is packaged so as to allow certain interpretations and rule out others.

House style

The house style of an organisation is the codification of the rules how to communicate externally. A house style manual contains standards with regard to logo, colours, lay out, typography etc. in all forms of written communication. It also contains procedures and standards for oral communication and organizational behaviour. House style is an instrument of corporate communication and culture. It is closely connected with marketing. In successful organisations management and control of house style is a priority of the top executives.

Identity

(Corporate) Identity is the way an organisation wishes to be perceived by the outside world. The corporate culture is an essential part of the corporate identity.

Image

(Corporate) Image is the way a person or organisation is actually perceived by the outside world (clients and stakeholders). The corporate image is the result of the actions and behaviour of an organisation and its staff.

Information

Information is the deliberate and systematic transfer of knowledge by means of processed facts and data aimed at opinion forming or decision making.

Informal communication

Informal communication in general is exchange of information on a personal basis and adheres less to the rules and standards that apply to the formal relation between organizations or between the organization and the individual. It is an effective form of communication to establish and maintain relationships, to discuss sensitive issues and get better and more detailed personal feedback. Informal communication takes place by face to face meetings often in informal settings, corridors, happy hours, pizza lunches etc.

Informal Education

Informal education is the process whereby every individual acquires attitudes, values, skills and knowledge from daily experience, such as family, friends, peers and media.

Intermediaries

In communication an intermediary is a third party that offers intermediation services between a sender and the intended receivers of communication messages. The intermediary acts as a conduit for the messages and facilitates communication. Typically the intermediary offers some added value to the transaction that may not be possible by direct communication, e.g. credibility, knowledge of the target group etc.

Corporate Information

The information on the organisation has three functions: disclosing, performing a public service, acting as an instrument to support organizational policies or programmatic objectives.

Internal communication

All forms of communication within an organisation. Internal communication has a strong link with the corporate culture. It is geared towards the interests both of the organisation and of its staff. It takes the form of both formal and informal communication.

Interpersonal communication

All forms of communication involving direct interaction between two or more people. It is the opposite of mass communication. Interpersonal communication is highly appreciated by the “receivers”. It satisfies their needs of acknowledgement. Tools are visits, phone calls, interviews, informal meetings, personal letters. The effectiveness of a personal approach is the possibility to customize the message, receive feedback and ensure action.

Knowledge management

The set of disciplined and systematic actions that an organisation takes to derive the greatest value from the knowledge it acquires, creates, stores, shares and uses.

Knowledge networking

The process of sharing and developing knowledge through human and computer networks. Knowledge resulting from people sharing information with one another formally or informally. Knowledge networking often occurs within disciplines (such as programmers communicating with one another) and projects (such as all of the people working on a new software product sharing information with one another).

Lobbying

Lobbying or public affairs are a specialised form of public relations. It refers to those activities aimed at building up and maintaining informal relations with formal decisionmakers. The informal relations are used to influence decision making processes in the interest of the organisation, its program and/or objectives.

Marketing

Those corporate activities aimed at systematically identifying, satisfying and creating the needs of current and potential market parties. The optimal form of marketing is a mix of product, price, place and promotion (marketing communication). Marketing is connected with continuous research of the market, the current and potential customers.

Marketing communication

Those strategic activities—based on research of trends, target groups and/or customers—to promote the services or products of an organisation based on such principles as “perception is the only reality”, “it is better to be first than to be best”, “exclusivity is better than imitation” and other principles of trends in society. The communication is aimed at acquiring a top brain position for the brand or product. The core business of an organization influences the major choices of marketing communication strategy, as a consumer oriented business has a different market than a business to business operation. A nature conservation fund has a different market than a nature conservation research institute.

Maslow’s hierarchy of needs

Maslow’s hierarchy of needs is often depicted as a pyramid consisting of five levels: the four lower levels are grouped together as deficiency needs associated with physiological needs, while the top level is termed growth needs associated with psychological needs. While our deficiency needs must be met, our being needs are continually shaping our behaviour.

Mass communication

All forms of external communication which are theoretically accessible to everyone, as use is made of mass media and mass communication vehicles. The characteristics of mass communication are that it reaches a large number of people at the same time; it is easy for the receiver to ignore the message; it is not possible to customize the message for individual receivers; it is difficult to obtain feedback; it is relatively cheap per receiver reached.

Message

The message of communication is the content one sends to the receiver. In communication planning one formulates the message in terms of the desired residue of the communication in the mind of the receiver. These are often one-liners, with an emotional undertone appealing to the values of the receiver and inviting him/her to the desired attitudes or actions. The message is always transmitted by a person or by other means. The body language or the choice of the medium has to support the message, if not the result can be counter productive ("the medium is the message").

Networking

Networking consists of exchanging information and establishing personal connections. People network in many different settings: on the telephone, in hallways, in company lunchrooms, at professional conferences, at trade shows, company meetings, classrooms, lounges, hallways, elevators, airplanes, trains, busses, hotel lobbies and waiting rooms. Some networking is carefully planned and some just happens. Networking is friendly, low-key and essential in our complex society. People network to: advance their careers, advance their own business, to increase their impact on the world and to improve their social lives.

Non Formal Education

Non formal education are organized educational activities outside the established formal system, intended to serve an identifiable learning clientele with identifiable objectives. This can be e.g. professional updating courses organized by professional associations, trade unions, women's organizations, NGOs etc.

Process or interactive communication

All forms of communication, both internal and external, which are designed to ensure that a policy-making, program, project or management plan development process proceeds as smoothly as possible and that through an optimal involvement of major stakeholders the final result can count on a maximum of support. Communication in this sense is an integral part of the process. Tools are hearings, round tables, focus groups, workshops, electronic discussion groups, telephone interviews, live shows on mass media, excursions etc.

Product or policy communication

All forms of communication, particularly external, which are designed to put across a policy or organizational product (policy proposals, documents, projects) as favourable as possible. Communication in this sense is about a policy or product. Tools are annual reports, books, brochures, CD Roms, AV presentations, websites, lectures, articles, newsletters etc.

Public affairs

Public affairs or lobbying are a specialised form of public relations. It refers to those activities aimed at building up and maintaining informal relations with formal decisionmakers. The informal relations are used to influence decision making processes in the interest of the organisation, its program and/or objectives.

Public awareness

Public awareness brings the issues relating to biodiversity to the attention of key groups who have the power to influence outcomes. Awareness is an agenda setting and marketing exercise helping people to

know what and why this is an important issue, the aspirations for the targets, and what is and can be done to achieve these.

Public participation

Public participation is an approach for governments, organizations and communities around the world to improve their decisions by involving those people who are affected by those decisions.

Public relations (PR)

The PR of an organization is aimed at systematically promoting its objectives and priorities. PR aims to realize mutual understanding between the organization and its main clients, other stakeholders and target groups. PR uses free, paid or sponsored publicity. It is based on the principle “be good and tell it” or “be good and let others tell it”. PR tools are advertising, new letters, websites, brochures, gimmicks, etc. The relation management is often supported by a specialised information system, which contains information about clients, last contacts, etc.

Specific forms of communication

Specific forms of communication are e.g.: result communication, risk communication, crisis communication, labour market communication, financial communication.

Stakeholders

Stakeholders are those people or organisations which are vital to the success or failure of an organization or project to reach its goals. The primary stakeholders are (a.) those needed for permission, approval and financial support and (b.) those who are directly affected by the activities of the organization or project. Secondary stakeholders are those who are indirectly affected. Tertiary stakeholders are those who are not affected or involved, but who can influence opinions either for or against.

Survey

Regular or incidental surveys are an important tool of communication managers. They can be aimed at researching the market, the degree of client satisfaction or a specific target group one intends to communicate with. Tools are trend panels, focus groups, personal interviews, questionnaires etc. Successful organisations have integrated such surveys in their management cycles and relation management systems.

Target groups

A target group is a group of people which you need to reach with your communication in order to realize a result (see communication objective). For communication purposes is better not to view them in terms of statistics but as people of flesh and blood. It is best to segment the target group as far as possible and identify the opinion leaders (name, address etc.) to whom face to face communication is possible. It is important to explore how the target group relates to the biodiversity issue and what would motivate them to act as desired. One has to realize that for successful communication their perception of the issue is the starting point. Information about scientific facts will not convince them. Most probably our issue might not even interest them: it is a fact of life that for any issue there are always many more people not interested in it than that are interested.

Unique Selling Point—USP

Something that sets your product or service apart from your competitors’ in the eyes and minds of your prospects

ESD Glossary¹

Action Competence

Action competence is inherently linked to the concept of democracy. In this context actions are viewed not as reactive behaviour or lifestyle changes but rather as an active exercise of democratic participation in society. The action should be undertaken consciously, intentionally and voluntarily. Action competence occurs when citizens: have a critical and holistic knowledge of the issue; are committed, motivated and driven; can envision a sustainable solution; and have experience taking successful concrete action. Action competence is seen by some as crucial outcome for Environmental Education because it brings together the processes and practices of education with the need to develop democratic citizenship skills to improve quality of life.

Action Learning

Action learning is a process designed to build capacity using a form of reflection and assessment. The improvement of practice is the ultimate goal. The process involves the participants developing an action plan, implementing the plan and reflecting on what they have learnt from this. A facilitator and/or mentor assists the participants in developing their plan and learning from their experiences. Increasingly, it is being used in group settings where a number of people come together to critically reflect upon professional knowledge and improve practice.

Action Plan

Action Plan: a written plan of implementation often detailing the timelines, stages, roles and/or responsibilities of projects related to the strategy's objectives.

Action Research

Action Research can be used as a collaborative research tool, which is often represented as a four-phase cyclical process of critical enquiry—plan formation, action, outcome observation and reflection. It aims not just to improve, but to innovate practice. Action Research provides a valuable process for exploring ways in which sustainability is relevant to the researchers' workplaces and/or lifestyles. It views change as the desired outcome and involves participants as researchers of their own practice. In this way Action Research produces more than just a research document. It results in catalytic change for sustainability. Its focus on critical enquiry and continuous self-evaluation makes it a useful tool for professional development in Environmental Education. Critical Action Research aims to change systems and to embed change in practice.

Agenda 21

Agenda 21, is an intergovernmental agreement signed at the United Nations Conference on Environment and Development held in Rio in 1992. This document consisting of 40 chapters provides an agenda for advancing sustainability. It was the first document to examine the social, economic and environmental issues facing our world, focusing on current issues whilst also promoting and examining our future needs. Agenda 21 outlines objectives and actions that can be taken at local, national and international levels and provides a comprehensive blueprint for nations throughout the world who are starting to make the transition to sustainability. Chapter 36 of Agenda 21 accords special significance to the role of education as the most effective means that society possesses for confronting the challenges of the future.

Capacity building

Capacity building consists of participative training which takes place either through a formal course, workshop or in-situ mentoring support. The focus is the development of the individual and/ or the organisation.

¹ This glossary is—with permission of the authors—taken from: Tilbury, D and Cooke, K (2005) 'A National Review of Environmental Education and its Contribution to Sustainability in Australia: Frameworks for Sustainability' Canberra: Australian Government Department of the Environment and Water Resources and the Australian Research Institute in Education for Sustainability (ARIES)—<http://www.aries.mq.edu.au/portal/about/glossary.ht>. More information on ARIES on the Education for Sustainability Portal: <http://www.aries.mq.edu.au/portal/index.htm>

Carrying capacity

Carrying capacity is the term given to the maximum number of organisms that a given area of habitat can support indefinitely, without degrading the habitat or causing social stresses that result in population decline. The term is often applied by those who have concerns about the ratio of the human population against available resources. However, this application is considered problematic since ethical beliefs and the use of technology add dimensions to the human situation which make it more than a straight-forward calculation.

Citizenship action

Citizenship action is defined as those actions undertaken by citizens who have an awareness and understanding of social, economic or environmental issues and have the capacity to actively participate in their resolution. Types of citizen action can include

Persuasion: working to convince others that a certain action is correct and needed.

Consumer Action: choosing products that are compatible with a particular environmental and social justice philosophy and boycotting products that are not.

Political Action: bringing pressure on individuals or organisations (governmental or nongovernmental) to influence decision-making. Education: facilitating a process of learning to help others reflect on their current actions and build their capacity to contribute to a better future

Community Education

Community Education programs are taken to refer to all education programs which fall outside of the business and industry, school, further and higher education sectors.

Corporate Citizenship

Corporate citizenship refers to the way a company leverages their social, economic and human assets. When a company uses its assets to bring about measurable gains not only for itself, but for society as well, that company is acting as a good corporate citizen. A good corporate citizen integrates basic social values with everyday business practices, operations and policies, so that these values influence daily decision-making across all aspects of the business. It takes into account its impact on all stakeholders, including employees, customers, communities, suppliers, and the natural environment. For further information refer to 'Corporate Social Responsibility'.

Corporate Social Responsibility (CSR)

Corporate Social Responsibility is the decision-making and implementation process that guides all company activities in the protection and promotion of international human rights, labour and environmental standards and compliance with legal requirements. CSR involves a commitment to contribute to the economic, environmental and social sustainability of communities through the on-going engagement of stakeholders, the active participation of communities impacted by company activities and the public reporting of company policies and performance in the economic, environmental and social arenas. For further information refer to 'Corporate Citizenship'.

'Critical Theory'

'Critical theory' is a philosophical framework that seeks to radically critique systems of knowledge and power. 'Critical theory' seeks to develop systemic changes as opposed to individual behaviour changes. It emphasizes the importance of engaging people in thinking critically and developing their own responses and actions to issues rather than imposing on them previously constructed actions. 'Critical theory' attacks social practices, which obstruct social justice, human emancipation and ecological sustainability. It is not only 'critical' in the sense of deconstructive' in relation to dominant thinking, but also 'constructive' in the sense of exploring alternatives to it. 'Critical theory' is what underpins an education for sustainability approach to Environmental Education. For further information see 'Critical Thinking'.

'Critical' Thinking

'Critical' Thinking is an essential part of education for sustainability approaches to Environmental Education. It challenges us to examine the way we interpret the world and how our knowledge and opinions are shaped by those around us. 'Critical' thinking leads us to a deeper understanding of interests behind our communities and the influences of media and advertising in our lives.

Education about the environment

Education about the environment is the most commonly practiced approach in Environmental Education. It focuses on developing key knowledge and understanding about natural systems and complex environmental issues as well as developing an understanding of the human interaction with these systems and issues.

Education in the environment

Education in the environment is an approach, which provides opportunities for learners to have direct experience in the environment and develop positive attitudes and values towards stewardship of the environment. The approach may foster a value-based environmental concern of the importance and fragility of ecosystems and landscapes. While ecological concepts may be taught through these explorations, the focus is on having positive experiences in a natural setting.

Education for the environment

Education *for* the environment moves beyond education *in* and *about* the environment approaches to focus on equipping learners with the necessary skills to be able to take positive action. The education *for* the environment approach promotes critical reflection and has an overt agenda of social change. It aims to promote lifestyle changes that are more compatible with sustainability. It seeks to build capacity for active participation in decision-making for sustainability. In practice, however, education *for* the environment is often interpreted as the involvement of learners in one-off events or individual actions (e.g. tree planting) although occasionally they can trigger greater change on a social level.

Environmental Education

Environmental Education within this series refers to the overall field of education which engages learners with their environments, be they natural, built or social. The range of practices and approaches to Environmental Education have evolved significantly since the term was first used in the late 1960s. Initially in the 1970s educators perceived Environmental Education as 'education *about* the environment' which focuses on developing knowledge and understanding (see glossary). Environmental Education then progressed to favour the approach of 'education *for* the environment' which emerged as a dominant force (see glossary) with its focus on participation and action to improve the environment. Currently within Environment Education one can still find examples of all these approaches in practice. The most recent development in Environmental Education theory and practice is 'education for sustainability'. This approach challenges current practice in several ways to achieve more systemic change towards sustainability (for more information see 'Education for Sustainability').

Environmental Education for a Sustainable Future: National Action Plan

A national Australian strategy launched in 2000 that outlines a direction for Environmental Education in Australia. The plan aims to:

- increase the profile of Environmental Education;
- implement a national coordinating body for Environmental Education;
- provide professional development opportunities for teachers and others involved in Environmental Education;
- develop resources for Environmental Education; and
- integrate Environmental Education into mainstream education and training activities.

Adapted from <http://www.deh.gov.au/education/nap/>

Envisioning and Futures Thinking

Envisioning a better future is a process that engages people in conceiving and capturing a vision of their ideal future. Envisioning, also known as ‘futures thinking’, helps people to discover their possible and preferred futures, and to uncover the beliefs and assumptions that underlie these visions and choices. It helps learners establish a link between their long term goals and their immediate actions. Envisioning offers direction and energy and provides impetus for action by harnessing peoples’ deep aspirations which motivate what people do in the present.

Essential Learnings Frameworks

There are many ways in which curriculum is organised within schooling systems. Essential Learnings provide an organisational framework for the curriculum. The Essential Learnings Frameworks are designed to:

- reduce problems of a crowded curriculum;
- engage learners more deeply in their learning;
- make learning more relevant;
- improve learning across all areas;
- develop higher order thinking;
- support the transfer of learning.

It aims to respond to public concerns about current curriculum frameworks such as a cluttered and compartmentalised curriculum which provides few opportunities for students to explore issues in depth or connect their learning to real-world experience. Essential Learnings is an attempt to trim back the excesses of curriculum to focus on developing deep understandings that students need to develop now and draw upon in the future as active, responsible citizens and life-long learners in a rapidly changing world. In the Essential Learnings frameworks there is a focus on developing student capacity to reflect critically on their own thinking and to have a constructive understanding of their learning.

Essential Learnings frameworks provide opportunities for education for sustainability in that they focus on key components of education for sustainability such as critical and systems thinking and in-depth study of a variety of relevant issues. They are also an innovative attempt at reorienting curriculum to focus on futures in an uncertain world.

Facilitation

Facilitation encourages learning to be driven by the learner. The facilitation process aligns well with the principles of sustainability as it has the following characteristics: enables a learner centred approach; equips the learner with the necessary skills and knowledge to take action and actively participate in change and decision-making; develops the capacity of individuals and groups to ‘critically’ reflect upon the social and cultural context underpinning the change they seek and, offers a more democratic approach to sustainability. The process encourages all citizens to engage in open dialogue and eliminates inequitable power hierarchies as the facilitators do not have a stake in the change for sustainability and the process does not rely on the expert knowledge. For further information please see Volume 3 of this series.

Framework

A framework is a high-level structure which lays down a common purpose and direction for plans and programs.

Inquiry Learning

Inquiry learning is a learner-centred teaching strategy. It is designed to encourage students to develop their own learning through responding to their own concerns by means of systematic investigation, emphasising higher order thinking skills. Inquiry learning is driven by the questions created by the participants. Participants are responsible for gathering, processing, and analyzing their data, in order to reach their own conclusions. This negotiated process (between educator and learner) usually involves:

- *Tuning in*: identifying and defining an issue;
- *Deciding directions*: formulating questions that require answering;
- *Organising*: developing the process of how to investigate the issue;
- *Finding out*: investigating the issue and collecting data;
- *Sorting out*: processing and analysing the data;
- *Drawing conclusions*: students express their understandings and communicate them to others;
- *Considering action*: students participate in decision-making to identify action to address the issue;
- *Reflection and evaluation*: students and teachers reflect on the process and evaluate the outcomes.

Intergenerational Equity

Intergenerational equity is the principle that future generations have fair and equal right to the same standard of quality of life and environment as the present generation. This is a core principle of sustainable development.

Key Learning Areas (KLAs)

There are many ways in which curriculum is organised within formal schooling systems; Key Learning Areas, are one such organisational construct. KLAs particularly emphasise the description and classification of formal school curriculum into composite fields of knowledge. KLAs were endorsed in 1991, as part of the first *'Australian National Statement and Profile on Education'*. Eight KLAs were identified as being core, and attainment of the significant aspects of knowledge, skills and understandings that characterise each KLA is important.

The eight KLAs are:

- English
- Languages other than English (LOTE)
- Mathematics,
- Science
- Studies of Society and Environment (SOSE)
- Technology
- The Arts
- Health and Physical education

The KLAs were re-endorsed as curriculum organisers by State, Territory and Commonwealth Ministers of Education in the *'Adelaide Declaration on National Goals for Schooling in the Twenty-first Century'* and there are a variety of state and territory interpretations of the construct.

Learning

Learning is a process that influences the way people think, perceive and act. People learn through experiences over their entire lives. Learning occurs at both a conscious level or subconscious level but it usually involves critical thinking and reflecting on issues or experiences. People often learn by interacting with other people and their environment.

Learning based strategies

Learning based strategies are used to help shift communities towards more sustainable futures. They consist of an informal but structured process which uses action learning, reflection and change to improve the effectiveness of an organisation, program or action plan.

Education for Sustainability

Education for sustainability has crystallized as a result of international agreements and the global call to actively pursue sustainable development. It provides a new orientation for current practice in Environmental Education. This new orientation attempts to move beyond education *in* and *about* the environment approaches to focus on equipping learners with the necessary skills to be able to take positive action to address a range of sustainability issues. Education for sustainability motivates, equips and involves individuals, and social groups in reflecting on how we currently live and work, in making informed decisions and creating ways to work towards a more sustainable world. Underpinned by the principles of critical theory (see glossary), education for sustainability aims to go beyond individual behaviour change and seeks to engage and empower people to implement systemic changes.

Learning Organisation

A learning organisation is one which is based on the principles of adaptive management and uses these techniques within the workplace. It promotes exchange of information between employees hence creating a more knowledgeable workforce. This produces a very flexible organisation where people will accept and adapt to new ideas and changes through a shared vision. A learning organisation employs certain principles of education for sustainability, such as envisioning, systems and 'critical' thinking to create an atmosphere of team learning and develop shared visions and systems thinking. A key component of a learning organisation is that it incorporates the principles of adaptive management.

Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of operational programs. Its most effective form ('active' adaptive management) employs management programs that are designed to experimentally compare selected policies or practices, by evaluating alternative hypotheses about the system being managed.

Local Agenda 21

Chapter 28 of the '*Agenda 21*' document calls on local authorities to work with their local communities to develop a local action plan for sustainable development, or a 'Local Agenda 21.' This process recognises the role communities have to play in shaping their own future and the importance of building partnerships between local government, community, NGO and industry. Empowering local communities to participate actively in the decision making process is a core aim of Local Agenda 21 and seen as essential for the move towards sustainability. For further information refer to 'Agenda 21'.

Mentoring

Mentoring provides individuals and groups, who are grappling with sustainability, with the support and understanding that they need to engage with this concept. The process offers mentoree centred, collaborative support, and space, to engage people in critically examining opportunities for change within their home, community or workplace. Valuable and important components of the mentoring process are dialogue and sharing of information amongst colleague networks and the creation of opportunities for relevant change to the mentoree. For further information please see Volume 3 of this series.

Multi-sectoral

Multi-sectoral refers to the involvement of stakeholders from more than one discipline or sector. If a program has stakeholders from more than two sectors then it can be said to be multi-sectoral. For further information see also 'Sectors'.

National Environmental Education Council

A key element of the Australian Government's National Action Plan for Environmental Education is the establishment of the *National Environmental Education Council*. The Council is a non-statutory body comprised of people from a variety of sectors who provide expert advice to the Government on Environmental Education issues. A key goal of the Council is to raise the profile of Environmental Education and, in particular, how Australians can move beyond environmental awareness to informed action.

National Strategy for Ecologically Sustainable Development

Australia's '*National Strategy for Ecologically Sustainable Development*' (link to document or reference) was developed in 1992 and endorsed by the Council of Australian Governments. The strategy identifies core objectives and guiding principles and sets out the broad strategic framework to guide government policy and decision-making. These objectives and principles have provided the underlining framework for several Australian and State government policies and legislations, such as '*Australia's Oceans Policy*' (link to document Environment Australia, 1998) and the '*Western Australia State Sustainability Strategy*' (link to document *Government of Western Australia*, 2003). However, the *National Strategy* has not been as influential as anticipated. Critics point to how the Strategy did not allow for a robust solution to Australia's environmental problems and that the Ecological Sustainable Development process had a more economic/prodevelopment focus with less focus placed on the fragile environmental balance or scale of social change needed. The implementation of Ecological Sustainable Development has been challenging due to varying political agendas, institutional barriers and different interpretations of environment resource 'value'.

OECD ENSI

Environment and Schools Initiatives (ENSI) is an international network of educators from 14 member countries across the OECD and under the umbrella of OECD CERi. *ENSI* cooperatively undertake Environmental Education research and development programs particularly focusing on activities related to sustainability. *ENSI* employs a participatory approach which involves government agencies, schools, teachers, teacher trainers and students in research with a main focus on action research and development. *ENSI* also promotes international exchange, understanding and collaboration amongst network members and with other international organisations and makes policy recommendations when appropriate. *ENSI* supports educational developments that promote environmental understanding, active approaches to teaching and learning, and citizenship education, through research and the exchange of experiences.

Participative Inquiry

Participative Inquiry is the engagement with, and deep exploration of, sustainability questions, which stimulate new ideas for further interrogation and action. Participatory inquiry offers a new paradigm for understanding and engaging with community as well as organizational change. As a methodology, it is useful for exploring the dynamics and characteristics of systems. It brings people together, enabling cooperation and strengthening the relationships which support change. It requires inquiry based learning, collaborative practice and the free, creative interrogation of ideas.

Participatory Action Research (PAR)

Participatory Action Research is a collaborative process in which a group of coresearchers combine inquiry, critical reflection and action. A main component of PAR is that there are no 'experts' and as such all of the group are involved equally in the processes of inquiry and problem solving. PAR seeks to breakdown the traditional hierarchies and power structures experienced between researcher and researched. It is the participants or 'researchers' that have control and ownership of the process, direction of research and ultimately the use of the results. The process has been used as a form of group Action Research that encourages more open communication and discussion amongst colleagues regarding a specific task or issue. The group Action Research process invites deeper critical reflection and more effective action. For further information refer to 'Action Research'.

Sectors

When we mention sectors within this series it refers to the specific bodies of people and organisations who are grouped together due to common interests and working areas. These include sectors such as community, business and industry, school as well as further and higher education sectors.

Social Capital

Social capital represents the degree of social cohesion which exists in communities. It refers to the processes between people which establish networks, norms, and social trust, and facilitate coordination and cooperation for mutual benefit.

Stakeholders

A stakeholder is a person or group with an interest in an activity and/or outcome. It is a term frequently associated with sustainable development. Stakeholders may be internal or external to a group or organisation and may be direct or indirect beneficiaries of an activity or outcome. Sustainable Development promotes cross-sectoral stakeholder engagement in the planning and implementation of actions.

Strategy

A strategy is a long term plan with a defined scope that identifies: measurable objectives; key actors and target groups for the achievement of outcomes aligned with its declared vision.

Sustainability Focused Organisational Learning (SFOL)

The term 'sustainability focused organizational learning' has been used to describe the experience of companies that are attempting to pursue sustainability or the triple bottom line while making substantial changes to their organizational cultures. For further information refer to 'Learning Organisation'.

Sustainable Development and Sustainability

The idea of sustainability owes a great deal to the United Nations which in 1983 set up the *World Commission on Environment and Development (WCED)* and promoted quality of life for present as well as future generations. The key goals of sustainability are to live within our environmental limits, to achieve social justice and to foster economic and social progress.

Issues such as food security, poverty, sustainable tourism, urban quality, women, fair trade, green consumerism, ecological public health and waste management as well as those of climatic change, deforestation, land degradation, desertification, depletion of natural resources, loss of biodiversity and terrorism are of primary concern to sustainable development.

The issues underlying 'sustainable development', or 'sustainability', are complex and they cannot be encapsulated within the diplomatic language and compromises. Sustainability is open to different interpretations and takes on different meanings not only between cultures but also between different interest groups within societies. Sustainability embraces equality for all, and for this reason a key aim of sustainability is to enable multi-stakeholder groups to define their vision of sustainability and to work towards it.

Systems Thinking

Systems thinking is a type of thinking methodology based upon a critical understanding of how complex systems, such as environments and ecosystems, function by considering the whole rather than the sum of the parts. Systems thinking provides an alternative to the dominant way of thinking, which emphasizes analysis and understanding through deconstruction. In comparison, systemic thinking offers a better way to understand and manage complex situations because it emphasizes holistic, integrative approaches, which take into account the relationships between system components and works toward long-term solutions critical to addressing issues of sustainability. Systemic thinking offers an innovative approach to looking at the world and the issues of sustainability in a broader, interdisciplinary and more relational way. Closely related to holistic and ecological thinking, systemic approaches help us shift our focus and attention from 'things' to processes, from static states to dynamics, and from 'parts' to 'wholes'.

Triple Bottom Line (TBL)

Triple Bottom Line is an expanded baseline for measuring performance, adding social and environmental dimensions to the traditional monetary yardstick. Reporting on the TBL is based on the premise that by monitoring and reporting social, economic and environmental performance, organisations can better pre-

pare for future challenges and opportunities, including those traditionally considered intangible, such as reputation.

UN Decade of Education for Sustainable Development

In December 2002, resolution 57/254 was adopted by the United Nations General Assembly establishing the *United Nations Decade of Education for Sustainable Development (2005-2014)*. The Decade is a culmination of the momentum towards sustainability generated by the Earth Summit, 'Agenda 21' and the WSSD and presents an opportunity to focus world attention on education for sustainability across the globe.

The United Nations Decade of Education for Sustainable Development aims to: promote education as a prerequisite for the movement to sustainable human societies; integrate sustainable development into education systems at all levels; and strengthen international cooperation towards the development and sharing of innovative education for sustainable development theory, practice and policy. The Decade also offers opportunities for researchers, practitioners and education policymakers, who are often isolated from each other, to join in partnerships and to contribute to a collective and international imperative.

Values Clarification

An educational approach employing a variety of strategies, which enables learners to clarify and critically examine their own values, particularly those, which are unconscious or inarticulate. This process helps learners uncover how culture, ideology, gender, socioeconomic background and religion shapes ones deepest held personal beliefs and values and assists learners in determining how ones own values coincide or conflict with others. Genuine engagement with sustainability requires us to understand how these factors shape our values and thus our view of the world.

World Summit on Sustainable Development (WSSD) and Johannesburg Plan of Implementation

The *World Summit on Sustainable Development* was held in Johannesburg, South Africa from August 26 to September 4, 2002. The core goal of the summit was to review the progress made towards sustainability in the ten years since the 1992 *UN Conference on Environment and Development (UNCED)* in Rio. The Summit focus was on the status of the implementation of 'Agenda 21' by identifying further measures required to implement the Rio agreements, areas where more effort was needed and new challenges and opportunities. The WSSD reaffirmed commitment to the Rio principles, the implementation of 'Agenda 21' and to the development goals adopted in the '*UN Millennium Declaration*'. An outcome of the Summit was the production of the '*Johannesburg Plan of Implementation*', which is a targeted action plan containing more than 120 goals or targets for sustainable development in conjunction with other UN sponsored principles.

The WSSD achieved a number of accomplishments, including:

- reaffirming sustainable development as a central element of the international agenda;
- focusing attention on the links between poverty, the environment and natural resource use through shared dialogue;
- negotiating concrete agreements from many participating governments to numerous commitments to implement sustainable development objectives;
- prioritising energy and sanitation issues;
- according civil society views a prominent role; and
- boosting partnerships between governments, business and civil society.

Education was a cross cutting theme at the WSSD. The '*Johannesburg Plan of Implementation*' points to the social actions required to achieve sustainable development and to the role of education, capacity building and communication in achieving this goal. It recommended the adoption of the *UN Decade of Education for Sustainable Development* to further opportunities to action sustainable development.

