

# Glossary of Key Terms

**adaptive management mechanism** – in the context of rangeland management, this is the use of adjustable mechanisms such as rotating livestock production and resting and seeding periods in the management of rangelands

**agriculture and plant biodiversity** – the wide range and variety of plant and agricultural species

**agricultural productivity** – volume of products produced from agriculture

**alternative renewable energy technologies** – energy technologies other than electric power, such as solar, wind, biogas, hydropower, geothermal, and others that are renewable or do not deplete natural resources and cost little or no harm to the environment

**ambient temperature** – air or room or outside temperature at any given altitude

**annualised energy cost** – yearly cost to produce energy

**annual operating cost** – cost to run an installation or a project for a year

**artificial hydraulic structures** – human-made structures (such as dams) to divert, restrict, stop, or otherwise manage the natural flow of water

**baseline data** – basic information gathered before a programme or project begins; the data is used later to provide a comparison for assessing programme impact

**bee colony** – the aggregate of worker bees, drones, queen, and developing brood living together as a family unit in a hive or other dwelling

**bee forage resources** – plants that provide nectar and pollen and assure sources of food for bees, which bees in turn pollinate

**beehive** – an enclosed structure in which some species of honey bees (genus *Apis*) live and raise their young

**benefit-cost ratio** – a method of analysis trying to determine the proportion or ratio between costs and benefits of a project or programme

**bio-briquettes** – compacted agricultural wastes with beehive holes, which when lighted produce fuel useful for cooking and heating purposes

**biofuels** – solid, liquid or gaseous fuel derived from relatively recently dead biological material and is distinguished from fossil fuels

**biogas digester** – specifically constructed containers that digest or process animal and agricultural wastes (animal dung, grasses, etc) into biogas, a mixture of methane and carbon dioxide, for direct combustion in cooking, lighting, or to power engines or generate electricity

**biomass** – fuelwood, grass, manure and plant matter recently dead and can be used as fuel or for industrial production

**biomass-deficient soils** – soil with not enough essential biomass that enrich soil quality

**biopesticides** – pesticides made of natural biological materials such as plants with natural insect-repellent qualities

**business development services** – services that improve small enterprise in developing countries as a means to improve lives and reduce poverty; they include training, consultancy and advisory services, marketing assistance, information, technology development and transfer, and business linkage promotion

**business incubators** – programmes designed to accelerate the successful development of entrepreneurial companies through an array of business support resources and services developed and orchestrated and offered both in the incubator and through its network of contacts; successful completion of a business incubation programme increases the likelihood that a start-up enterprise will stay in business for the long term

**business plan** – a plan for engaging in business including planning on the cost of managing the project, calculating expected income or revenue from it, training requirements to run the business, quality control, staff and overhead costs, return on investment, and calculating borrowing and lending risks for running the business

**buyer requirements** – volume and quality of goods and services required by a buyer or customer

**capital/capital costs** – assets available for use in the production of further assets; total money needed to run a business or an enterprise

**catchment** – an area of land and what is on it (such as woodlands, farms, or towns) which drains water to the same lowest point such as a river or swamp; small catchments move into larger catchments, and upper catchments flow into lower ones

**climatic variability** – variations (ups and downs) in climate conditions on time scales of months, years, decades, centuries, and millennia

**cohesive groups** – formal or informal groups in a community organised and united by a common purpose or goal

**commercial viability** – ability to survive or operate without going into liquidation or requiring financial support from its shareholders, under all reasonably foreseeable market and operating circumstances

**community-based management approach** – an approach to rural development that lets communities take charge of managing forest, rangelands, and other natural resources

**conflict mitigation** – a creative search for alternatives and a potential future for the conflicting parties; intervention aimed at alleviating or eliminating discord through conciliation

**conflict resolution** – to voluntarily enter into an arrangement that identifies and treats the root causes of dispute and distributes the disputed values or interests in such a manner that the conflict will not reappear, not even in disguise

**conservation areas** – tracts of land that have been awarded protected status in order to ensure their natural features, cultural heritage or biota; in conservation areas, the cutting and use of resources is often restricted, if not totally banned

**crop rotation** – the practice of growing a series of dissimilar types of crops in the same area in sequential seasons for various benefits, such as to avoid the build up of pathogens and pests that often occurs when one species is continuously cropped, to balance the fertility demands of various crops, and to avoid excessive depletion of soil nutrients

**customary use rights** – claims to rights to use unspecified forest or land resources regarded as legitimate by people in the same area ; traditional rights of ownership and the protection and distribution of benefits of indigenous or local people over resources based on customs and traditions

**cyclical droughts** – prolonged dry seasons that occur periodically or in cycles

**demand side issues** – in the context of energy, these are issues related to demand for energy such as existing consumption and use patterns and requirements in the community and their availability to stimulate demand for energy

**deforestation** – the logging, burning, or removal of trees in forested areas without sufficient reforestation and results in damage to habitat, biodiversity loss and aridity; deforested regions often degrade into wasteland

**denudation** – to strip a forest or land by depriving it of something it needs in order to exist; for example, to strip it's surface layers, in some cases by erosion

**development practitioners** – those working either with the government or with nongovernment organisations, or donor organisations to help underdeveloped areas develop, find livelihoods for its poor, improve their living conditions, and protect the environment

**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 (United Nations International Strategy for Disaster Reduction, UNISDR, Geneva)

**disaster mitigation** – steps taken to contain or reduce the effects of an anticipated or already occurred disaster and involves various levels such as individuals, groups, communities; actions taken depend in part on perceptions of risk of those exposed

**Disaster preparedness** – the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions. (United Nations International Strategy for Disaster Reduction, UNISDR, Geneva)

**Disaster risk** – the potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period. (United Nations International Strategy for Disaster Reduction, UNISDR, Geneva)

**Disaster risk reduction** – 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. (United Nations International Strategy for Disaster Reduction, UNISDR, Geneva)

**drainage** – the natural or artificial removal of surface and sub-surface water from an area; many agricultural soils need drainage to improve production

**drone** – the male honeybee which comes from an unfertilised egg (and is therefore haploid) laid by a queen

**ecosystems** – natural unit consisting of all plants, animals and micro-organisms (biotic factors) in an area, functioning together with all of the non-living physical (abiotic) factors of the environment

**empowerment** – an often used word in development circles but with no clearly defined meaning, but generally having the following attributes: power of decision-making, access to resources and information, a feeling of belongingness to a group and a sense of hope and capability for action, whether by themselves or with the help or initiation of others

**energy balance table** – illustrates in simple table format the general energy flow (input, output) from production to end users of a region in question

**energy output** – energy produced by a system or installation

**energy resource potential** – the possible sources of energy in an area or locality

**environmental degradation** – deterioration of the state of the environment –air and water quality, soil and natural resources, plant and animal life

**environmental implication** – in the context of energy, this is the effects or impact on the environment of the use of an energy source or an energy installation

**environmental indicators** – in the context of local knowledge in disaster preparedness, this includes minute changes in the environment such as in the behaviour of animals and vegetation patterns indicating a hazardous event is about to take place

**environmental sustainability** – the ability to renew resources and keep environmental conditions in good condition

**ethnicity** – social groups with a shared history, sense of identity, geography and cultural roots which may occur despite racial difference

**ethnic minorities** – a sociological group that does not constitute a politically dominant voting majority of the total population of a given society, and are often prone to a different treatment in the countries and societies in which they live

**entrepreneur** – a person who organises and manages a business undertaking, assuming the risk for the sake of profit and an innovative product or idea; an entrepreneur is not just about business, and entrepreneurs are often creative, imaginative people, always thinking up and supporting new and innovative products or ideas

**feasibility assessment/feasibility study** – the study or appraisal of whether a project or an enterprise is workable and will earn economic and social benefits and requires identifying its technical, financial, and socioeconomic impacts and drawing conclusions about the project's viability

**fermentation tank** – tank where biogas is fermented

**financial cash flow** – the amount of cash generated by an investment, business, or enterprise during a specific period; because cash is the fuel that drives an enterprise, many consider financial cash flow to be an enterprise's most important financial statistic

**financial disbursement scheme** – the plan on how and when to spend or disburse funds including where to source the funds, how to revolve funds, schedule and collect payments, expected income streams, and other factors taken into account

**financial implementation parameters** – monetary measures or guidelines to indicate at what point to implement a project or business

**financial sustainability** – a project or business's ability to keep its finances paying for itself and earning enough profit to go on; the ability to cover costs of an institution over a period of time

**food chain** – food networks and/or trophic networks that describe the feeding relationships between species within an ecosystem

**food insecurity** – uncertainty about food supply, where it is coming from, the means to get it, in order to feed people and communities

**forest cover** – all trees and other plants occupying the ground in a forest, including ground cover, growing more or less closely together

**gender and development approach** – an approach that encourages planning, implementation, monitoring and evaluation undertaken according to the principles of a) work on one level – practical and strategy needs – to bring about change in gender relations; b) work in a participatory way with men and women making sure to involve men and women because it takes men as well as women to change power relations; and taking a long historically formed view of gender relations and its social context

**gender friendly** – considers the effects of a project or undertaking on both women and men, and especially the disadvantaged among them

**gender relations** – relations between women and men in a society

**gender sensitive evaluation** – evaluation of a project considering the effects on men and women particularly on disadvantaged groups among them

**greenhouse gas emissions** – the gases present in the earth's atmosphere which reduce the loss of heat into space and therefore contribute to determining the temperature of the earth

**gross domestic product** – the total market values of goods and services produced by workers and capital within a country during a given period, usually one year, and is considered the measure of a nation's economy

**horizontal linkage (in production)** – the link between people and processes in production

**human resources** – people, an underestimated and often rich resource

**hydrometeorological observations** – studies on the transfer of water and energy between the land surface and the lower atmosphere

**indigenous knowledge** – refers to the matured long-standing traditions and practices of certain regional, indigenous, or local communities; traditional knowledge also encompasses the wisdom, knowledge, and teachings of these communities and, in many cases, orally passed for generations from person to person through stories, legends, folklore, rituals, songs, and even laws

**intercropping** – the agricultural practice of cultivating two or more crops in the same space at the same time

**internal rate of return** – a capital budgeting metric used by firms to decide whether they should make investments

**investment cost** – amount of money invested to run a business enterprise

**key informant interview** – talking to a key person; this may be a community leader or an expert in a particular field, and is called a key informant, to get their views on a particular subject of which they are considered an authority or would have valuable information about

**land degradation** – the decline in the overall quality of soil, water or vegetation condition commonly caused by human activities

**land use planning and management** – planning the uses of the land such as for settlements, forests, agriculture, industrial, and other uses, in the process balancing conflicting interests in an area and ensuring the protection of the environment; usually done in consultation with all possible stakeholders or groups affected

**livestock farming** – raising of farm animals such as pigs, goat, sheep to meet the need for food, dairy products, and income

**local consumption patterns** – overall trends of what people or a local population consume (such as food, water, energy, among others)

**Local knowledge** – in the context of disaster preparedness - what the residents know about natural hazard risks and what they believe and do about them in a given situation. Indigenous knowledge is part of local knowledge: it refers to local knowledge held by indigenous people, or local knowledge unique to a given culture or society (Adapted from Berkes 1999)

**marginalised groups** – disadvantaged groups in terms of socioeconomic status, caste, privilege

**marketing and promotion plan** – the plan on how to market and promote a business, enterprise, or activity

**market demand** – estimated total demand of all potential customers for a product or service

**market research** – primary or field studies (involving both quantitative and qualitative studies such as focus groups, surveys, field tests, interviews or observation, conducted or tailored specifically to that product) and secondary research (based on other published data) that an organisation or an enterprise compiles from various sources which appears applicable to a new or existing product

**meteorological data** – information about the atmosphere and weather

**micro-credit** – the extension of very small loans (microloans) to the unemployed, to poor entrepreneurs and to others living in poverty, individuals lacking in collateral, steady employment and a verifiable credit history and therefore cannot otherwise meet even the most minimal qualifications to gain access to traditional credit

**micro-enterprise** – a business having five or fewer employees and a seed capital of not more than \$35,000; typically, micro-enterprises have no access to the commercial banking sector and micro-finance institutions have become common sources of funding for micro-enterprises, particularly in the Third World

**migration** – the movement of persons from one country or locality to another

**migratory beekeeping** – beekeeping operations where bees, placed in sealed boxes, are transferred from place to place in search of nectar

**Millennium Development Goals (MDGs)** – eight international development goals that 192 United Nations member states and at least 23 international organisations have agreed to achieve by the year 2015; they include reducing extreme poverty, reducing child mortality rates, fighting disease epidemics such as AIDS, and developing a global partnership for development

**mulch** – a protective covering of rotting vegetable matter spread to reduce evaporation and soil erosion and conservation of soil moisture and the moderation of soil temperature

**Natural hazards** – 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. (United Nations International Strategy for Disaster Reduction, UNISDR, Geneva)

**nectar** – a sugar-rich liquid produced by the flowers of plants, in which it attracts pollinating animals

**net present value** – total present value (PV) of a time series of cash flows; a standard method for using the time value of money to appraise long-term projects; used for capital budgeting, and widely throughout economics, it measures the excess or shortfall of cash flows, in present value terms, once financing charges are met

**off-farm employment** – employment not involving the farm or agriculture; other sources of livelihood

**operational efficiency** – running an enterprise in the best possible way and least cost with best results

**optimum temperature requirement** – the most favourable or desirable conditions or greatest degree of temperature under a restriction, expressed or implied, for best results

**payback period** – the period of time required for the return on an investment to "repay" the sum of the original investment

**pollen** – the fine spores that contain male gametes and that are borne by an anther in a flowering plant

**political association** – a political party with which a person or group is associated or belong to

**population displacement** – the dislocation of people from their places or home because of a disaster, or various other reasons

**power relations** – the dynamics of mutual influence; in most situations such relations are activated in fields whose pattern is perceived by those who enter the field in terms of role relationships, or less consciously simply as appropriate behaviour, a predisposition to act in a certain way

**precipitation** – the quantity of water (rain, snow, hail, or sleet or mist) falling to earth at a specific place within a specified period of time

**production** – the process of producing a product and may involve getting the raw materials and combining a number of processes and technologies to make or manufacture the product

**public-private partnerships** – partnership between the public sector (government) and the private sector or private businesses or enterprise

**relay cropping** – a kind of multiple cropping in which the second crop is started amidst the first crop before it has been harvested

**residual slurry** – leftover waste

**row intercropping** – growing two or more crops at the same time with at least one crop planted in rows

**sequential cropping** – form of multiple cropping in which crops are grown in sequence on the same field

**simultaneous cropping** – that in which several crops are all coming forward on the ground at the same time

**Shura** – a local authority and traditional institution in Afghanistan making decisions for the community, mediating conflict, managing community resources, among others local leadership roles

**small and medium enterprises/small-scale producers** – (also SMEs, small and medium businesses, SMBs, and variations thereof) are those enterprise whose headcount or turnover falls below certain limits; small though they may be, the sector plays a pivotal role in the overall industrial economy of the country and provide incomes to small resource-poor people and communities

**social audit** – a method of measuring the extent to which an organisation lives up to the shared values and objectives it has committed itself to through systematically and regularly monitoring its performance and the views of its stakeholders; requires the involvement of stakeholders

**social development indicators** – measures or data collected for assessing human welfare and wellbeing; the indicators vary in different organisations but overall include progress in the quality of life of the people including their state of health, access to basic social services such as health facilities, education, drinking water, food supply, among others

**social structure** – how a society is organised, and may be affected by caste, economic class, religious affiliation of people, political beliefs, among other factors

**socioeconomic acceptability** – the acceptability of a project in terms of economic and social benefits for the people

**soil conservation** – the set of management strategies for the prevention of soil being eroded from the earth's surface or becoming chemically altered by overuse

**soil erosion** – the washing away of soil by currents of either water, wind, or snow

**soil tilth** – refers to the state of aggregation of a soil; aggregates are conglomerates of clay, silt, and sand particles that are held together by physical and chemical forces

**stakeholders** – persons or organisations who have an interest in, or who have invested resources in, the organisation or project and therefore have a stake in its success or failure

**standards and specifications** – provide guidance and instruction on how goods and services are to be designed, constructed, manufactured, handled, conducted or tested; specifications outline requirements for specific products or services, whereas standards provide guidance for more general applications

**stationary beekeeping** – beekeeping in a permanent place, such as a backyard, a hollow of a tree, or wall hives,

**super chamber** – a receptacle in which bees store honey; usually placed over or above the brood nest, called ‘brood supers’

**supply side issues** – in the context of renewable energy, these are issues related to the supply of energy requirements, such as availability of alternative energy solutions (wind, solar, hydropower, etc)

**sustainable energy solutions** – solutions to providing energy that are wise, efficient, and mostly use renewable sources and technologies that provide little or no harm to the environment

**swarm** – a collection of bees containing at least one queen that split apart from the mother colony to establish a new one; a natural method of propagation of honey bees

**topography** – mapping the physical features of any locality or region with accuracy; topographic data is data on the physical features (mountains, hills, plains, etc) of an area, region or locality

**value addition/ value added** – refers to the additional value of a commodity over the cost of commodities used to produce it from the previous stage of production; the contribution of the factors of production, i.e., land, labour, and capital goods, to raising the value of a product and corresponds to the incomes received by the owners of these factors

**vegetation** – plants in an area including trees, shrubs, grasses, and herbs

**velocity of water flow** – speed and direction of water flow

**venture capital** – funds available for start-up firms and small businesses with great business potential

**water erosion** – the detachment and removal of soil material by water, that wears away the earth’s surface

**wildlife diversity** – in the beekeeping context, this is the variety of wild plants