**Agenda 2030 and Ecosystems**

SIDA BRIEF, June 2016

**Agenda 2030** is a global plan of action for sustainable development. It recognizes that ecosystem services and biodiversity are crucial for both people and our planet and are relevant to all Sustainable Development Goals. To accomplish Agenda 2030 Sida needs to support the sustainable use of ecosystems and biodiversity.

**Healthy ecosystems – the basis for social and economic development**

Healthy ecosystems are the basis for economic and social development. Loss of biodiversity has potentially devastating effects on food security, business and industry all over the world. The rural poor in particular depend heavily on their local ecosystem services for their livelihoods, and the impacts of ecosystem degradation and biodiversity loss affect them severely.

Biodiversity provides the basis for Earth’s natural life-support systems, delivering ecosystem services on which we all depend, such as food, water purification, and climate regulation. Diverse, well-managed ecosystems can contribute to adaptation and mitigation of climate change. There is a strong relationship between biodiversity and an ecosystem’s resilience – meaning the capacity to deal with change and continue to develop. In addition, biodiversity is a central component of belief systems and cultural identities worldwide.

75% of our food crops are dependent on pollinators – but 40% of pollinator species, such as bees and butterflies, face a risk of extinction. [IPBES, 2016]

**Rising pressure on ecosystems and loss of biodiversity**

The planetary boundaries framework, developed by leading Earth system scientists, defines a safe operating space for humanity identifying nine Earth system boundaries, of which the loss of biodiversity is one of the boundaries predicted to be transgressed.

Substantial gains in human well-being and economic development have taken place in the last century, but at the expense of ecosystem degradation. The extinction of species is taking place at an accelerating speed. Nearly a quarter of the planet’s plant species are threatened by extinction.

**Biodiversity contributes directly to food security, nutrition and human well-being.**

Crops and livestock genetic diversity continues to decline, as well as traditional knowledge and practices associated with biodiversity and ecosystem services. Humans are increasingly dependent on fewer crops to cater for their survival, creating a system more vulnerable and less resilient to changes.

Causes of biodiversity loss include a lack of policy coherence, pollution, overexploitation such as overfishing, and other unsustainable practices in agriculture, forestry and fisheries. Agriculture accounts for 70% of the projected loss of terrestrial biodiversity.

A growing world population will put further pressure on food production systems through rapidly raising food demand, and the need to eradicate hunger. Addressing trends in food production and consumption is therefore crucial.

**GLOSSARY**

*Biodiversity*: Short for biological diversity – the variety of all forms of life on earth, including the variability within and between species and within and between ecosystems.

*Ecosystems*: All the organisms in a given area, along with the physical environment with which they interact, such as forest or a coral reef.

*Ecosystem Services*: The benefits people obtain from ecosystem processes, e.g. food, provision of clean water, regulation of climate, pollination of crops and fulfilment of people’s cultural needs.

*Resilience*: The capacity of a system – be it a forest, city or economy - to deal with change and continue to develop.
Well functioning ecosystems are relevant for achievement of all the Global Goals.

Examples of Sida’s support to the sustainable use of ecosystems and biodiversity:

- Rights and Resources Initiative, that strives to secure local rights to own, control and benefit from land and natural resources. Research has shown that Indigenous people often play a key role in preserving biodiversity at a global scale. (Links to Goals 1, 2, 10 and 16.)

- Core Agriculture Support Program in the Greater Mekong Subregion, that aims to create enhanced market access to environmentally friendly agri-products produced by smallholders through certification schemes. A more climate-friendly agricultural sector could slow down and possibly reverse the present degradation of soil, water and biodiversity. (Links to Goals 2, 6, 8, 12 and 15.)
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Examples of Sida’s support to the sustainable use of ecosystems and biodiversity:

- UNEP’s medium term strategy, that includes many environmental aspects, one being integrating biodiversity in member countries’ management of land, water and living resources. It also integrates gender in its framework and as an expected measurable outcome. [Links to Goals 1, 5, 14 and 15.]

- Mali’s Local Democratic Governance Programme, that aims to secure access to land for small-scale farmers by creating inclusive, accountable and sustainable use of natural resources. It primarily targets farmer-pastoralist organizations where it also promotes sustainable agricultural techniques and preservation and conservation practices. [Links to Goals 1, 2 and 16.]
Ways forward

A well-managed agricultural system delivers food but also other benefits such as pollination, flood control and erosion control. Protecting biodiversity and ecosystem services enhances long-term food security. Healthy ecosystems ensure productive agriculture and nutritious food. (FAO, 2016)

Ways forward include raising awareness about the diverse benefits we obtain from nature, and the importance of the sustainable use of ecosystems and biodiversity. Their values should be integrated in the economy and in development strategies, in collaboration with relevant actors. There is also a need to reduce harmful subsidies and introduce financial incentives for conservation and sustainable use, as well as promoting sustainable consumption and production patterns.

An important part of the solution is the mainstreaming of sustainable biodiversity management in agriculture, aquaculture and forestry. Other important aspects are fostering appropriate governance, land tenure and resource rights, the equitable sharing of benefits from biodiversity, and the development of law and institutions. Linking ecosystem management to adaptation and mitigation of climate change are necessary parts of integrated solutions.

Namba Park, Osaka – Urban vegetation cools buildings, provides food, and prevents flooding.

SIDA AND ECOSYSTEMS – WHAT WE DO

Sida development programmes should enhance opportunities for improved management of ecosystem services and biodiversity to contribute to resilience, and ensure that development initiatives do no harm. Sida aims to support initiatives at local, national, regional and global levels, through different actors such as the public sector, academic institutions, business organisations, civil society and international development actors.

Entry points for Sida’s support for biodiversity and ecosystem services are:
- Integrating and mainstreaming ecosystem services and biodiversity in national development planning, and monitoring progress in turning policy into action
- Fostering learning and awareness about the benefits humans obtain from nature - the interlinked social ecological systems - as a contribution to resilient societies.
- Strengthening the rights of local communities and indigenous people over land, resources and ecosystem services.
- Promoting sustainable rural development – including changing the food and agriculture systems to sustainable agriculture, using biodiversity as an asset for rural poverty reduction, thus minimizing vulnerability and risk, and improving food security, nutrition and health.
- Encouraging urban planning that integrates nature based solutions, considering biodiversity and ecosystem services, such as water and food supply, the regulation of local temperature, and flood risk reduction.
- Linking climate change mitigation and adaptation with ecosystem management, to manage climate change risks.
- Developing innovative financial mechanisms for the conservation and sustainable use of biodiversity, and safeguards for protection of indigenous peoples’ and local communities’ access to resources, livelihoods and other needs.
- Protecting and restoring ecosystems that provide essential services, taking into account livelihoods and human well-being, and threatened species.