



Human well-being and nature: A critical connection

Our well-being is inextricably linked to nature; yet most of us never think about the economic and social value of the ecosystems, like wetlands, forests and coral reefs, that make up our natural environment. We just take them for granted. But they have tremendous value because they support some of the most important aspects of human well-being. Ecosystems provide food, clean and plentiful water, wood and craft materials, and medicinal plants. They also provide less obvious services like pollination, reducing flooding, regulating the climate and offsetting some of the worst effects of man-made climate change. We also use them for many recreational activities - like beach or river limes and forest hikes. These benefits of nature, or ecosystem services as they are called, are the link between the environment and development. The ability

of our ecosystems to provide these critical services decreases if they are destroyed or used so heavily that the ecosystems cannot function properly.

What are ecosystems?

An ecosystem is all the living and non-living things in a particular area and their interactions. For example, in the forests of the Northern Range you find people, plants and animals but also rivers, soils, rocks, sunlight and the air that we breathe. An ecosystem can be large or small – a huge rainforest like the Amazon or your back garden.

Often ecosystems are described by class - terrestrial and aquatic (freshwater or ocean) - or by sub-categories such as wetlands, coral reefs, forests or grasslands. Well-known examples of these in Trinidad and Tobago are the Nariva Swamp (wetland), Buccoo Reef (coral reef), the Northern Range (forest) and the Aripo Savannas (grassland).





Increasing evidence suggests the destruction of vital ecosystems and their services could be irreversible unless action is taken to bridge the gap between science and policy and reflect such evidence in our policies, institutions and practices. Those who are responsible for managing natural resources and who use them directly to earn a living are aware of their value, but this value is often not translated into economic terms and the ecosystems are not counted as economic and livelihood assets that can generate sustainable flows of benefits year after year. If our ecosystems continue to be degraded, income from agriculture, fishing, forestry and tourism will be reduced, poverty will increase and everyone's way of life will be affected.

Making the environment count in national planning and decision-making

The Project for Ecosystem Services (ProEcoServ) is a global initiative that aims to better integrate ecosystem assessment and economic valuation of ecosystem services into poverty reduction and national sustainable development planning. Trinidad and Tobago is one of five countries (along with Chile, Vietnam, South Africa and Lesotho) where ProEcoServ is being rolled out between 2010 and 2014.

The project will develop the capacity of decision makers, users and beneficiaries of ecosystem services to assess trade-offs and identify development choices that contribute to human well-being through strengthened biodiversity and ecosystem resilience.

ProEcoServ has three linked components:

- Support tools for policy making: Creation and application of locally appropriate tools and models to support development planning and policy making at all scales.
 - Assistance for policy implementation: Supporting policy makers to implement appropriate ecosystem and ecosystem service management approaches at national and transboundary levels.
 - Bridge between science and policy: Strengthening the link between science and policy making nationally and contributing to better understanding globally of science-policy linkages in the biodiversity arena.

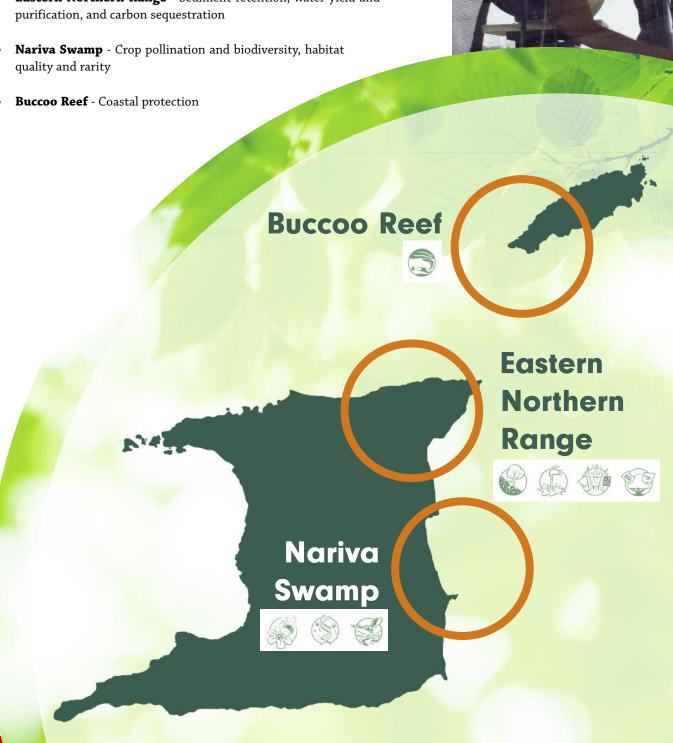
Livelihoods

It has become increasingly common to talk about people's 'livelihoods' in the context of sustainable development and poverty reduction. But too often this is assumed just to mean the way in which people earn money or produce goods to support themselves and their families. In the ProEcoServ project, we see livelihoods as being closely allied to human well-being, encompassing the capabilities, assets and activities required to achieve a good quality of life.

ProEcoServ in Trinidad and Tobago

In Trinidad and Tobago, the project focuses on bundling key ecosystem services from forests, wetlands and coral reefs to show how these interdependent services contribute to human well-being and the national economy at three pilot sites:

- Eastern Northern Range Sediment retention, water yield and purification, and carbon sequestration
- quality and rarity



Project activities include:

- Updating the Northern Range and Caribbean Sea Assessments to determine the nature and extent of changes in ecosystem services, drivers and the links to human well-being since the establishment of the baselines in these two studies.
- Modelling and spatial mapping of selected ecosystem services within each of the pilot sites.
- Valuation and assessment of trade-offs between and among the ecosystem services studied in the pilot sites and spatial mapping of these data.
- Development of scenarios for selected ecosystem services.
- Working with relevant government agencies to identify opportunities for integrating assessment and valuation of ecosystem services into national development strategies and legislation.
- Reviewing the national accounting system and developing and promoting approaches for including the value of ecosystem services.
- Development of a case study on Payment for Ecosystem Services.

Implementation

ProEcoServ is funded by the Global Environment Facility and implemented by the United Nations Environment Programme. The Trinidad and Tobago component of ProEcoServ is being led by the Department of Life Sciences, University of the West Indies, St. Augustine Campus with technical support from The Cropper Foundation.

Partners

A national Project Steering Committee comprising representatives of the partner institutions provides technical leadership and guidance to the work. The Steering Committee comprises the Ministry of Planning and the Economy, the Ministry of Housing and the Environment, the Ministry of Food Production, Land and Marine Affairs, the Tobago House of Assembly, the Environmental Management Authority, the Institute of Marine Affairs, the Sir Arthur Lewis Institute of Social and Economic Studies, the Caribbean Natural Resources Institute, and the Buccoo Reef Trust.























For more information on ProEcoServ and the Trinidad and Tobago component go to http://www.proecoserv.org/