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# Guatemala: Frequently asked questions

## What is natural capital?

Natural capital includes the resources that can be easily recognized and measured such as minerals and energy, forest timber, agricultural land, fisheries and water. It also includes services produced by ecosystems that are often 'invisible' to most people such as air and water filtration, flood protection, carbon storage, pollination for crops, and habitat for fisheries and wildlife. These values are not readily captured in markets, so there is no certainty of how much they contribute to the economy and livelihoods. These services are often taken for granted and we don't know what it would cost if we were to lose them.

## What are natural capital accounts (NCA)?

Natural capital accounts are sets of unbiased data for natural resources, such as forests, energy and water, which are not included in traditional accounting. They follow a protocol approved by the United Nations to ensure trust, consistency and comparison across time and across countries. To show the interaction of economic activity with the environment, the natural capital accounts should become part of the national accounts.

The concept of accounting for natural capital has been around for more than 30 years. However, progress in moving toward implementation has been slow. A major step towards achieving this vision came recently with the adoption by the UN Statistical Commission of the System for Environmental-Economic Accounts (SEEA). These provide an internationally agreed method, on par with the current System of National Accounts (SNA), to account for material natural resources such as minerals, timber, and fisheries.

The challenge now is to build capacity in countries to implement the SEEA and to demonstrate its benefits to policymakers.

## What is the difference between national accounts and natural capital accounts?

National accounts are data generated using internationally agreed protocols, which provide an integrated description on economic activity and performance in a country. They are used to measure the country's Gross Domestic Product (GDP). They also generate other well-known indicators for the country's performance such as balance of trade and household consumption.

While national accounts are limited to the production boundary of the economy, natural capital accounts go beyond that boundary to account for natural goods and services that aren't subject to market transactions and don't necessarily have well established market prices, such as clean air and rivers.



## So, what specifically do the national accounts miss out?

These accounts are useful in order to measure economic performance but are not designed to reflect other important variables that affect national wealth, such as positive and negative impacts of nature on the economy. A key gap is the approach to natural resources, such as forests, water, minerals or fisheries. Because natural resources are not included, traditional accounts are not able to reflect changes in natural wealth.

Economic activities that use these resources are registered as “positives” – i.e. investments or jobs, regardless of whether or not the resource base is being reduced or depleted. This is a problem for countries like Guatemala, where natural resources are the basis for economic development.

## How are natural capital accounts used?

Data on its own is important. It provides information that is standard, transparent and accessible to all stakeholders and is a first step towards fair negotiation. It can point at opportunities for investment (i.e. showing where the natural wealth stock is concentrated); highlight areas that require attention (i.e. where resources are being lost at a fast rate); it can be used to feed into prediction models (i.e. for climate change) or it can be taken by policymakers to introduce new laws or influence policy processes (i.e. the design of a government program, or a tax system).

## Is natural capital accounting new in Guatemala?

No. A group of institutions including the Bank of Guatemala, the Institute of Agriculture, Natural Resources and Environment (IARNA) and the National Statistics Institute (INE) have tracked the links between economy and environment from 2001 to 2010 (<http://www.infoiarna.org.gt/index.php/estacion-iarnaurl/472>), using the United Nations SEEA methodology. For example, they looked at changes in forests, water, energy and waste, as well as levels of public and private investment in the environment.

## What are natural capital accounts in Guatemala telling us?

During the period accounted, the total value of natural capital was estimated to be 1.1 trillion quetzals, equivalent to nearly US\$16,700 per capita, and considerably larger than the GDP per capita (about US\$5,000). The accounts also cast a long-term view over the changes in natural stocks. The data shows that while the country's GDP increased (<http://www.indexmundi.com/g/g.aspx?c=gt&v=67&l=es>) from US\$3.7 to US\$5.2 in the study period, the country's natural wealth has been in continuous decline. Some of the specific findings include:

- Using an integrated account of energy and emissions we are able to see the energy demand from different sources and their impact in terms of CO<sub>2</sub>, nitric oxide and methane across sectors, including industry and households. This can be used for example in developing strategies to tackle climate change mitigation.
- The water accounts looked at water supply and use. It shows how demand has grown over 20% in ten years and that agriculture is by far the main user of water. Water consumption can be linked to contribution to GDP: for example, general trade uses a relatively small amount of water (less than 5%) but contributes to nearly 50% of GDP. The links between water and GDP become particularly significant in times of drought when resource scarcity requires more careful water allocation.

- In terms of forest cover, the accounts show how in just 60 years the country has gone from nearly 7 million hectares of forests to just 3.7 million – losing nearly half of its forests in that period.
- In terms of solid waste, the accounts show that Guatemala generated 113 million tons of solid waste (i.e. garbage or refuse) in 2010, 80% of which is attributable to manufacturing industry and only 3% to households.
- The accounts were able to track public expenditure on the environment. This showed that public expenditure on environment has been in continuous decline since 2001.

## What is next for natural capital accounting in Guatemala?

The next steps aim to move natural capital accounting from being a technical exercise to influencing national policy level through:

- *Mainstreaming* natural capital accounting into the existing national accounts, rather than remaining as isolated technical exercises.
- *Compiling this information on a regular basis* to establish trends and provide feedback.
- *Designing new communication channels* to ensure that information reaches a wide range of individuals and organisations with an interest in accounting for natural capital at all levels.

## How can natural capital accounts help contribute to Guatemala's decision making?

Decision-making doesn't have to be a 'shot in the dark'. The unbiased informative nature of the accounts provides accessible information and knowledge of natural wealth and the way it changes. The long-term and integrated nature of the data collection will provide the necessary feedback channels to assess the impact of policies and design real-time coping strategies.

## Who will benefit from natural capital accounting?

The benefits of clearer, up-to-date, structured information on natural wealth, which is freely available, will be felt by many. In terms of potential applications, the government and its institutions will have better data and be able to design and monitor policies; the private sector will have a better understanding of the ecosystem flows and stocks they need for their long-term economic viability; local governments and communities will have a clearer idea of the stock of wealth they possess and the importance of protecting it; the cooperation and international community (such as UNDP, the Food and Agriculture Organization (FAO), Organization of American States (OAS), and GIZ,) will be able to implement better informed strategies more likely to have positive impacts without duplicating efforts.

## The policy arena: how does natural capital accounting help the government?

There has been strong interest from government institutions on ways to improve their knowledge base of natural wealth. The design of sustainable development strategies benefits from information on how natural resources are used by sectors (e.g. urban, irrigation, energy, agriculture), which can help design integrated policies, prevent conflicting instruments and maximise overlaps. Data can help in feeding models to predict the impacts of policies, to gauge impacts across sectors, winners and losers, and potential mitigation and coping strategies that may be required. Specific examples of how natural capital accounting can help policies are below.

## How can natural capital accounting contribute towards the fight against malnutrition and hunger?

The Guatemalan Government's efforts to end hunger and malnutrition require precise information on how the use of natural resources affects food security. The country has announced (<http://scalingupnutrition.org/news/guatemalas-zero-hunger-plan-receives-funding-boost#.VA82Cst0zIU>) it will collect information on 58 indicators, and natural accounts can provide information on livelihoods, access to agriculture inputs (i.e. quality of soils,) food production, water access, and areas where the policy may be in conflict with other resource users.

## How can national data help the climate change agenda?

Guatemala passed a new Framework Law on Climate Change in 2013, which links the government's agenda on sustainability and competitiveness with climate change. Specific initiatives include REDD+ and the government's carbon neutral policies. Natural capital accounting can provide information on energy demand and supply (for example, firewood and industrial emissions,) and forest cover and degradation, which can be used with other indicators like land tenure arrangements to inform negotiations between parties, including communities, the private sector, and the international community.

## Can natural capital accounting help the green growth agenda?

Green growth is being prioritized in the Ministry of Environment's agenda. Natural capital accounts can provide information on environmental impact from growth (for example reduction of CO2 emissions per unit of GDP) and flows of investment from different institutions and sectors. The information on waste produced by sector, or water used as input can also inform the degree of "greening" of the economy.