WAVES

WORLD BANK GROUP

COSTA RICA

WEALTH ACCOUNTING AND VALUATION OF ECOSYSTEM SERVICES (WAVES)

COSTA RICA
COUNTRY REPORT 2014

Contents

1. Introduction

The Wealth Accounting and Valuation of Ecosystem Services (WAVES) initiative is a global partnership led by the World Bank and a broad coalition of United Nations agencies, governments, international institutes, non-governmental organizations and academics, aiming to promote sustainable development by integrating the value of natural resources and ecosystem services into national accounts. WAVES aims to contribute more informed decision making that can ensure genuine green growth and long-term advances in wealth and human well-being.

Costa Rica is one of the WAVES partners from the developing world. The country has followed a development path based on investment in human capital and the conservation of its abundant natural resources, with successful results. For instance, the country ranks 62 among 187 countries in the Human Development Index (HDI), with high level of human development.[1] Natural capital of Costa Rica has a value of US$9,473 per capita, similar to Gross Domestic Product (GDP) per habitant (World Bank, 2011). The country has a rich history of pursuing economic development while managing its natural capital sustainably, being the first country to implement a Payment for Ecosystem Services (PES) scheme to conserve its forests and protect water reservoirs. Furthermore, the country´s commitment to renewable energy development has being a key component of economic growth in last decades.

Despite these achievements, Costa Rica currently faces important challenges to its future development. A central issue is how to accelerate economic growth through a sustainable use of natural wealth. Urbanization, increasing demand for energy and agricultural growth are generating pressure on the country's natural resources. Land use conflicts in different regions are causing water degradation, water pollution and threatening coastal and marine resources. In addition, climate variability is affecting many regions of the country, its infrastructure and productive capacity. On the other hand, the country's future development is foreseen by government authorities with the growth of tourism, the conservation of forests, agricultural development, green industries promotion, renewable energy investments and the consolidation of a low carbon growth path (towards Carbon Neutrality) for 2021.

Therefore, Costa Rica is at a crucial moment to strengthen the foundations of sustainable development. In order to achieve this, sound knowledge and quantification of the main sources of national wealth and economic growth is required, particularly the value of the country's natural capital. Policy makers need more and better information about the alternative uses of land, the economic implications of water resources degradation, the value of services provided by ecosystems for leading industries and the effectiveness of different policy instruments for sustainable management of natural resources.

In this regard, the construction of natural asset accounts like water, forests and coastal-marine resources, the integrated accounting of energy and the valuation of ecosystem services for tourism, could support policy decisions for sustainable development. WAVES can therefore promote the valuation of natural capital, ecosystem services, and the integrated economic-environmental accounting to generate accurate information on the current use of natural resources for national policy planning. WAVES can also expand available information and indicators to monitor the progress of specific policy actions at regional or national level. In this way WAVES would contribute with better

[1] See UNDP (2013) *The 2013 Human Development Report. "The Rise of the South: Human Progress in a Diverse World."* New York: United Nations Development Programme.

analytical and decision-making tools for policy making in Costa Rica. In addition, given the global mandate of the WAVES Partnership, the platform provided for knowledge exchange and learning will be critical to learn from other countries and be able to share own experiences and best practices in developed and developing nations.

2. Context for Natural Capital Accounting

The wealth and sustainability of a country depend on the management and improvement of a portfolio of economic, social and environmental assets that constitute the total capital stock: physical capital (infrastructure, machinery, equipment), intangible capital (education, health, institutions), and natural capital (water, soil, forests, biodiversity). Ecosystems are natural assets that generate numerous environmental, economic and social benefits.

Natural resources, their importance and characterization have been extensively studied in Costa Rica. Several studies incorporate biophysical valuation or natural resource inventories, at a national, region or specific ecosystem level. Much of the academic and policy design work is related to water resources and forests. Others address issues related to biodiversity and climate change. There is also a vast literature related to the economic valuation of natural resources and ecosystem services. This knowledge base is a solid starting point for the construction of environmental accounts (a central component is the valuation of stocks and its variation in time).[2]

Notwithstanding, natural capital accounting is not being implemented in the country by the Central Bank of Costa Rica (BCCR), the responsible organization for the System of National Accounts (SNA). Still, there is an important previous experience in the country with natural accounting. During the 90s, initiatives to build environmental accounts were supported. Of particular relevance is the work "Accounts Overdue: Natural Resource Depreciation in Costa Rica" (Solórzano et al, 1991) developed by the World Resources Institute (WRI) and the Tropical Science Center (CCT), which estimated the value of natural resources in Costa Rica for 1970-1989. The depreciation of forests (deforestation), soil (nutrient loss) and fisheries (overfishing) was estimated at US$ 4.1 billion (at 1984 prices), higher than the annual average value of Gross Domestic Product (GDP) during 1970-1989. Natural capital degradation could have caused a lower average annual economic growth rate by -1.5% to -2% during those years.

Another important work was "Gastos Ambientales en Costa Rica, 1991-1995" (Barrantes, 1997), by the Tropical Science Center (CCT), the National University (UNA) and logistical support from the Central Bank of Costa Rica (BCCR). Government environmental expenditures were estimated (1991-1995), including actions related to forest and non-forest ecosystems, water resources, protection of air and climate, solid waste treatment, noise control, and soils. The exercise followed the methodological principles of SEEA-1993, with some adaptations to facilitate data collection. Years later, the study was updated and included environmental expenditure by the private sector (Barrantes, 2003). On average, during the 90s Costa Rica´s environmental expenditures accounted for 0.5% of GDP per year.

From these past experiences the following lessons have been learned: a) environmental accounting requires solid institutional support, with interdisciplinary working teams, because coordination is a central input for success; b) a clear dimension of the scope of work and an adequate budget are

[2] For further details see the Costa Rica scoping study for WAVES.

necessary conditions for long term activities; c) limited technical capabilities and expertise in the field of integrated environmental-economic accounting should be addressed with priority (capacity building needs); and d) the lack of an official fully-developed environmental information system makes the construction of environmental accounts difficult.

The implementation of natural accounting in Costa Rica will be led by an interdisciplinary and inter-organizational team, comprised of the Central Bank of Costa Rica (BCCR), the Ministry of Environment and Energy (MINAE), and the National Statistics Office (INEC). These three organizations will coordinate the work with other public (and private) stakeholders responsible for data generation and management.

Currently, the Central Bank (BCCR) is working on the updating of the System of National Accounts, based on the SNA 2008 international statistical standard. The project time span is 2012-2015. The activities developed through WAVES for a modular (partial) implementation of the System of Environmental-Economic Accounting (SEEA 2012) will be aligned with the BCCR´s work. The SEEA 2012 framework follows a consistent accounting structure with the SNA 2008. This consistency allows the integration of environmental and economic statistics.

In addition, the Ministry of Finance (MH) is starting its work with public environmental expenditures accounting. A general objective is to make a better estimation and monitoring of government expenditures in the country, from a fiscal policy perspective. Moreover, the Ministry of Planning (MIDEPLAN) is incorporating a natural resources wealth framework into the National Development Plan guidelines. From a legislation perspective, relevant environmental law bills are under discussion at the Congress (water, natural capital, climate change), with articles related to economic valuation of natural resources and its importance for policy decision making. Therefore, it is expected that these institutional and legislation advances would contribute in the medium term to strengthen Natural Capital Accounting (NCA) in the country.

3. Priority Accounts: Water Resources and Forests

During 2012/2013, a series of technical studies, interviews with experts, and workshops helped define the policy questions and work plan for WAVES-Costa Rica. A feasibility study and a policy entry points report defined priority policy areas for environmental accounting support. According to the study, three natural asset accounts could be developed in a first stage: Water, Forests (carbon sequestration) and Marine resources. Energy and Tourism satellite accounts could be approached in the longer term. After this, the discussion focused on which accounts were more relevant and technically feasible, to start environmental accounting work in the country.

The work of WAVES-Costa Rica will be based on the development of two natural capital accounts: a Water Account and a Forest Account. The selection was made during a multi-stakeholder inter-agency workshop held on May 2012 in San José, with the participation of representatives from government, the academia, nongovernmental organizations and civil society. The Ministry of the Environment and Energy (MINAE) validated this decision, stressing the key role of water resources and forest management for sustainable development of the country. The construction of the two accounts would make important contributions to the National Plan for Integrated Management of Water Resources and the National Plans for Deforestation Reduction and Forest Development.

Water Account: Contribution to the Implementation of the National Plan for Integrated Management of Water Resources

Costa Rica has abundant water resources. The country´s annual water supply is estimated at 110 km^3 (73 km^3 of surface runoff and 37 km^3 of natural recharge to aquifers; MINAET, 2008). Total annual withdrawals to meet domestic demand are estimated at 24.5 km^3. Hydroelectric generation accounts for 80% of total demand, followed by agriculture with 16%, and the use for human consumption, tourism, industry and services with less than 4%. It is estimated that 88% of withdrawals to meet the national demand for consumptive uses (other than electricity generation) come from groundwater sources, a fact that highlights the strategic relevance of a sustainable use of aquifers in the country.[3]

Despite the relative abundance of water resources in Costa Rica, water is not being used in a sustainable way. The degradation of watersheds (and consequently the coastal ecosystems) is getting worse in recent years. Only 5% of the country's wastewater is treated before being deposited in rivers, while just 2.4% of the population has access to a treatment plant of wastewater. These figures are among the lowest rates in Latin America.[4] Recent analysis shows that 57% of rivers and estuaries of the country have high levels of pollution, which affects the use of water for human consumption, irrigation in agriculture, or recreation. Additionally, it threatens marine biodiversity and several major tourism attractions.[5] Poor land use planning and the intensive use of pesticides have contributed to water resources degradation as well. Regarding hydropower generation, it is estimated that 75% of its potential has not yet been exploited (ICE, 2009). Erosion of soils, deforestation, high sediment production and other consequences of the degradation of watersheds are affecting electricity generation. The sustainable management of watersheds is essential to maintain not only the quality of water resources but hydroelectric production, a key to future sustainable energy use.

The National Development Plan 2011-2014 indicates that aquifers are highly vulnerable, threatening water supply for human consumption and productive activities. Low coverage of sewerage networks and the use of nitrogen fertilizers and agrochemicals threaten groundwater sustainability, and represent considerable environmental risk factors. One consequence of the limited land use planning has been the unsustainable exploitation and pollution of aquatic and terrestrial ecosystems and the deterioration of water quality. National water resource management reveals coordination and planning failures (MIDEPLAN, 2010).[6]

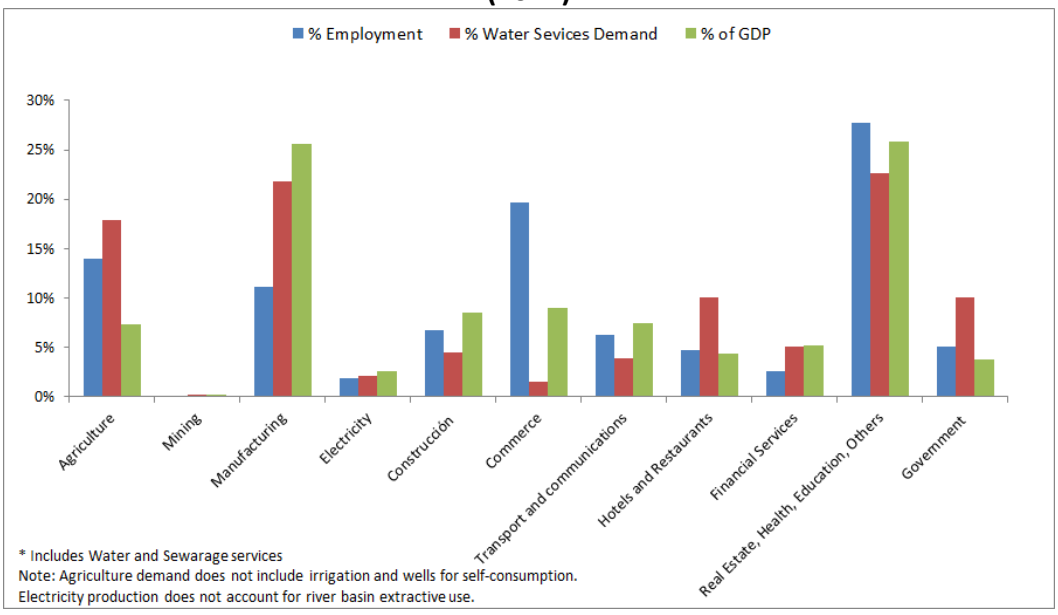
In response to problems with water resources management and to promote sustainable water resources use, policy guidelines have been established with the National Plan for Integrated Management of Water Resources (PNGIRH). One of the central goals of the PNGIRH is to complete the inventory of surface waters, aquifers, aquifer recharge areas and springs in the country. Additionally, it seeks to consolidate a program of monitoring water bodies' quality and strengthen the strategic management of groundwater. It also plans to consolidate interagency coordination and align the work of water management related organizations at a national, regional and local level (MINAET, 2008).

[3] IMTA (2008) *Elaboración de Balances Hídricos por Cuencas Hidrográficas y Propuesta de Modernización de las Redes de Medición en Costa Rica*. BID- Departamento de Aguas, MINAE.
[4] UNDP (2013), Op. cit.
[5] Mora, D. (2012) *Calidad sanitaria de los esteros y/o desembocaduras de ríos en los litorales de Costa Rica: 1996-2011*. Laboratorio Nacional de Aguas. San José: Instituto Costarricense de Acueductos y Alcantarillados (AyA).
[6] The Water Law bill (File 14585, 2005) would replace the current law that dates from 1942.

The PNGIRH will be strengthened with the new Water Law, recently approved by the Congress.[7] The Law aims to regulate the protection, exploitation and sustainable use of continental and sea water in such a way as to ensure universal access, fair and equitable, in quantity and quality. A central principle of new legislation is the economic value of water. Article 2 declares water as an economic good with value in all its diverse competing uses. The Law states the responsibility of government authorities to use economic valuation of water resources as a working tool for policy decisions. Moreover, the Law creates the National Information System for Integrated Management of Water Resources (SNIGIRH), managed by the Department of Water at MINAE. The SNIGIRH will integrate and improve available data and information related to water resources in the country.

A key issue is the use of water for production and the demand from leading industries in the country. Available data for 2011 show that manufacturing and services account for a significant share of national production and employment, and water demand as well (Figure 1). However, these figures do not yet account for all the consumption of water by agriculture (might be significantly higher when incorporating irrigation and self-consumption) and hydropower generation (82% of national electricity supply). This example highlights the need for better accounting of water resources in the country.

Figure 1 Costa Rica: Share of Industries in GDP, Employment and Water Services Demand* (2011)



Source: Own elaboration with data from the Central Bank of Costa Rica (BCCR)

With the support of WAVES, a Water Account will be constructed, to organize the hydrological and economic information of the country in a coherent and consistent framework and thus contribute with the PNGIRH, to have comprehensive information on: [8]

[7] Asamblea Legislativa de la República de Costa Rica. Departamento de Comisiones. Comisión Permanente de Ambiente. Ley para la Gestión Integrada del Recurso Hídrico. Expediente No. 17,742. Dictamen afirmativo unánime. March 27, 2014.

[8] UNSD (2012) *System of Environmental-Economic Accounting for Water (SEEA-Water).* United Nations Statistics Division. New York: United Nations.

- Stocks and flows of water resources within the environment with a regional and watershed classification.
- The economic pressures on the environment in terms of water abstraction and wastewater emissions released to the environment or removed from wastewater.
- Water supply and water use as an input for production and human consumption.
- Costs of collection, purification, distribution and water treatment and service charges paid by users.
- Financing of these costs.
- Payments for water extraction permits or wastewater discharge.
- Existing water management infrastructure and the investments made each accounting period.
- Quality of water resources in its entirety (best practices for water use and conservation).

Forest Account: Contribution to National Plans for Deforestation Reduction and Forest Development

According to the National System of Conservation Areas (SINAC), forests have the highest coverage of land use in the country with approximately 52.4% of total area (including forest, wetlands, mangroves, heath and grasslands).[9] Since the 70s, Costa Rica has invested significant resources in protecting forests and biodiversity through SINAC and the National Forestry Financing Fund (FONAFIFO). The country has 25.9% of its territory classified as a protected area, distributed in the various categories of management: national parks (46.4%), national wildlife refuges (17.5%), reserves forest (15.9%) and protective zones (11.6%). Since 1997 nearly US$300 million have been allocated to reduce deforestation through the system of Payments for Environmental Services (PES) with over 10,000 contracts with private forest owners.[10] The policies of forest conservation, protection of national parks and PES, among others, have consolidated a forest sector that contributes significantly to the mitigation of greenhouse gas (GHG) emissions. Pratt et al (2010) argue that the PES could contribute significantly to the mitigation of GHG emissions over the next 20 years and be a key component of the National Climate Change Strategy (ENCC).

To realize its full potential and continuously contribute to deforestation reduction, the PES requires incorporating 250,000 additional hectares per year until 2030. Based on the PES, the REDD+ (reduced emissions from deforestation and forest degradation, including forest conservation, sustainable management of forests and enhancement of forest carbon stocks) strategy of the government of Costa Rica is seen as the third generation of policy actions to reduce deforestation in the country. The strategy seeks to continue conservation efforts, strengthen the forest industry and promote the responsible use of wood and derived products, and increase the country's forest area. It is estimated that the REDD+ will require investments of around US$34 million annually to maintain the actual PES contracts, promote the recovery of forest cover through natural regeneration and reforestation, and consolidate the expansion of PES in mature forests (MINAET and FONAFIFO, 2010).

The REDD+ strategy is a key component of the National Plan for Forest Development (PNDF) 2011-2020. The Plan is based on seven strategic areas (forest land management, positioning the forestry sector, competitiveness of forestry industry, sustainability of forestry, coordination, organizational efficiency and effectiveness, innovation and sustainability of funding, and climate change, mitigation and adaptation). The PNDF highlights the need of a solid and innovative policy framework that recognizes

[9] Mapa de Tipos de Bosque de Costa Rica, 2013. Inventario Nacional Forestal. San José: SINAC.
[10] Own estimation with data from FONAFIFO, www.fonafifo.go.cr, retrieved on January 30, 2014.

the value and importance of forests to society. The Plan makes visible the relationships and connections of forests with other development agendas such as clean energy production, the provision of water for human consumption and agriculture, tourism and other land uses that maintain a close link to forests (MINAET, 2011).

The PNDF indicates that in order to maintain and increase forest cover it is necessary to make it profitable and sustainable through the recognition of their positive externalities. There is the need to accurately estimate the value of all ecosystem services provided by forests, like safe water supply for hydroelectric generation, control of land degradation and sedimentation to prevent damages to infrastructure, protection of biodiversity and its use in productive activities such as tourism (recreation, landscaping) and sustainable agriculture (buffer zones, pollination), and their roles as natural barriers to extreme hydro meteorological events (droughts, floods, storms). The estimation of the value of forests in an integrated way can orient policy design and financial engineering in the long term.

WAVES would significantly contribute to inform policy decisions on the REDD+ strategy and PNDF 2011-2020 with the construction of a Forest Account that incorporates physical and monetary values, with an emphasis on ecosystem services. The new national forest inventory with data for 2013 will be a key tool both for advancing the REDD+ strategy and to serve as a basis for the construction of physical accounts of forests. Moreover, Costa Rica has extensive experience with the mapping of forest cover (1997, 2000, 2005 and 2010), the establishment of forest inventory plots and estimation of biomass and allometric equations to analyze the dynamics of forests. There are also numerous studies on the impact of PES in the conservation of forest land in Costa Rica and the multiple environmental services these provide to different sectors.

WAVES work will contribute to strengthen the solid basis of knowledge and policy experience of forest management in the country through:

- The construction of Forest assets physical accounts (stock) by covered area (primary forest, plantations, regenerated areas, etc.), with additions (afforestation, natural expansion) and reductions (deforestation, natural regression), with closure balance at the end of each accounting year.
- A monetary valuation of forest stock, additions and reductions, plus revaluations.
- The biophysical and monetary accounting of ecosystem services of forests, highlighting carbon storage and flows of water for human consumption, industrial use and hydropower generation, sediment control and soil conservation, among others.
- The elaboration of accounts for cultivated timber resources, natural, wood use, or non-timber.
- The estimation of biomass and biomass change over time to calculate the carbon storage and contribution to the mitigation of GHG emissions in the country.
- An assessment of sustainable funding sources for the conservation of forests, by estimating the value of all ecosystem services, along the REDD + strategy, to support the estimation of the economic returns of forest conservation investments.

The new Forest Cover Map 2013 and National Forest Inventory stress the need for NCA for better informed policy decisions (Figure 2). Costa Rica has made significant investment in the past two decades to stop and revert deforestation and recover its forest assets. The combination of public policy and private action mechanisms have contributed to create a national forest capital that is not being valuated and accounted for in macroeconomic indicators. Moreover, the economic valuation of ecosystem

services provided by forests has been widely studied in academic literature but not integrated into policy design and decision range of action.

Figure 2 Costa Rica: Map of Forest Cover Classification (2013)

Source: Sistema Nacional de Áreas de Conservación (SINAC)

4. Project Development

Phase I Activities (2012-2013)

During WAVES Phase-I (2012-2013), several activities took place. The dialogue with leading agencies, including the Ministry of the Environment and Energy (MINAE), the Central Bank of Costa Rica (BCCR), the National Statistics Agency (INEC), the Ministry of Planning (MIDEPLAN) and the Ministry of Finance (MH), was a key part of the process, since environmental accounting was not part of the policy agenda of the country. Discussions were centered on policy and technical issues, possible institutional arrangements, and the composition of steering and technical committees. Two technical workshops (May 2012 and December 2013) supported by the World Bank were the formal channels for WAVES discussion and conceptualization. In addition, meetings and conference calls with World Bank representatives and relevant organizations and stakeholders were organized during this period of time.

The elaboration of a scoping report based on a literature review and interviews with more than 50 experts from academia, government and private organizations served as analytical base for the

identification of possible natural assets accounts that could be constructed to contribute with national policy objectives. As indicated before, an outcome from a WAVES-Costa Rica workshop (May 2012) was the selection of two accounts: Water and Forests.

Besides local events and meetings, WAVES promoted the participation of Costa Rican delegates in international activities. For instance, representatives from the Ministry of the Environment (MINAE) and the Central Bank (BCCR) participated of WAVES Second Partnership Meeting on April 2012. Another group of high level officials followed up for the Third Partnership Meeting on April 2013. In addition, a Costa Rican delegation was involved in the 50:50 Campaign[11] at RIO+20 (in June 2012), with the participation and support from President Laura Chinchilla to natural capital accounting initiatives. MINAE ratified the support to WAVES initiatives and stressed the relevance of environmental accounting for Costa Rica.

A discussion on the definition of the institutional structure to develop water accounting in the country took place in the final months of 2012. The creation of an inter-agency working group on water statistics was a key outcome of this process, following capacity building activities in November 2012. Since then, different tasks have been coordinated, including the updating of the inventory of water statistics, based on a deep review of available water balances and time series of relevant variables. This work is part of the activities to define the statistical data to be included in the National Information System for the Integrated Water Resources Management (SINIGIRH).

The formalization of the National Environmental Indicators System (SINIA) was supported and achieved in April 2013, with the goal of contributing to the creation of an official integrated platform for environmental statistics in the country. SINIA is part of the National Statistics System (SEN) administered by INEC. WAVES work will focus on the components related to water and forests statistics. SINIA will integrate the required environmental information to complement the Central Bank´s (BCCR) data bases and information structure used for the implementation of the System of National Accounts 2008. SINIA will be particularly relevant for the physical accounts development.

Steering Committee

WAVES Costa Rica is led by a Steering Committee (SC) formalized in September 2013, consisting of the Ministry of Planning (MIDEPLAN), the Ministry of Finance (MH), the Ministry of Environment and Energy (MINAE), the Central Bank of Costa Rica (BCCR), and the National Institute for Statistics and Census (INEC). Main tasks of the SC are: i) overall management and coordination; ii) work plan supervision; iii) budget elaboration and expenditure programming; and iv) validation of project outputs and institutional development of environmental accounting. The SC members are high level officers, namely the Vice-Ministers (MINAET, MH, and MIDEPLAN), General Manager (BCCR) and General Director (INEC), or their appointed representatives. They will meet twice a year. They will designate their organization ´s representatives and staff for permanent coordination with The World Bank, WAVES partners and interagency working groups. Policy priorities in terms of specific requirements for the construction of the accounts will be defined by the SC.

[11] A World Bank Group-facilitated initiative that provides a unique opportunity for the public and private sectors to join forces, demonstrating on a global stage the importance of taking collective action in support of including natural capital in economic decisions or business operations.

Technical Committees

Two Technical Committees (TCs) will work in coordination with the Steering Committee to develop the WAVES initiatives in Costa Rica. The TCs will be responsible for data base and information management, statistics validation, and interagency technical work. The TCs will work in coordination with consultants, World Bank staff and WAVES-Costa Rica project coordinator. The TCs will follow the interagency and coordination structure established by the National System of Environmental Indicators (SINIA). In this way data quality, required staff time and necessary working channels will be in place for environmental accounting work. All involved organizations will participate with one or two representatives in all work meetings (programmed on a regular basis).

The Water Technical Committee (WTC)[12]described in Figure 3, is integrated by representatives from INEC (responsible for the National Statistics System SEN-INEC), the National Center for Geo-environmental Information at MINAE (CENIGA-MINAE, responsible for SINIA), the Department of Water at MINAE (responsible for the National System of Water Resources Information, SINIGIRH), the Costa Rican Electricity Institute (ICE), the National Meteorology Institute (IMN), the National Water and Sewerage Institute (AyA), and the National Irrigation Service (SENARA). Academic organizations will be involved as well. In addition, consultations with forests and energy (hydropower) related organizations will be made in order to integrate cross-sectional issues related to forest protection and water resources.

The Forests Technical Committee (FTC), described in Figure 4, will be integrated by representatives from INEC (responsible for the National Statistics System SEN-INEC), the National Center for Geo-environmental Information at MINAE (CENIGA-MINAE, responsible for SINIA), the Forests Information System at MINAE, the National System of Conservation Areas (SINAC), the National Forestry Office (ONF), the National Forestry Financing Fund (FONAFIFO), the Costa Rican Forestry Chamber (CCF), the Ministry of Agriculture (MAG) and FUNDECOR. Relevant academic organizations will be participated of the process as required.[13]

[12] Comité Técnico Interinstitucional para las Estadísticas del Agua (CTI), officialized by INEC in June 2013.

[13] The consolidation of the FTC is under way. The Central Bank (BCCR) has organized workshops and working sessions with representatives from the National System of Conservation Areas (SINAC) and the National Forestry Financing Fund (FONAFIFO), both main producers/users of forests information in the country. As a general outcome, key data sources and quality issues have been addressed and an inter-institutional working group is under development.

Figure 3 Costa Rica: Technical Group on Water Statistics

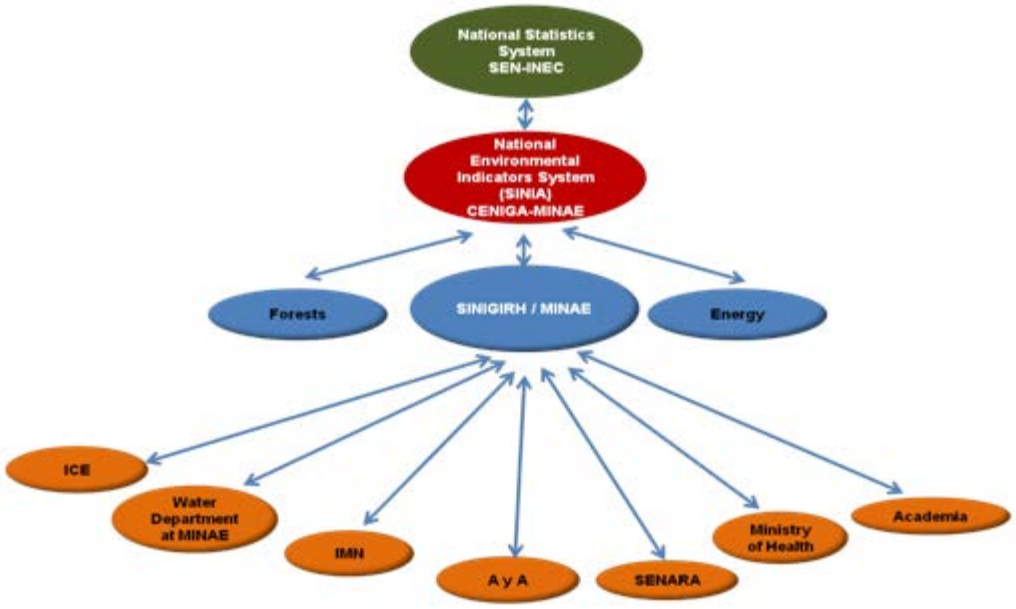
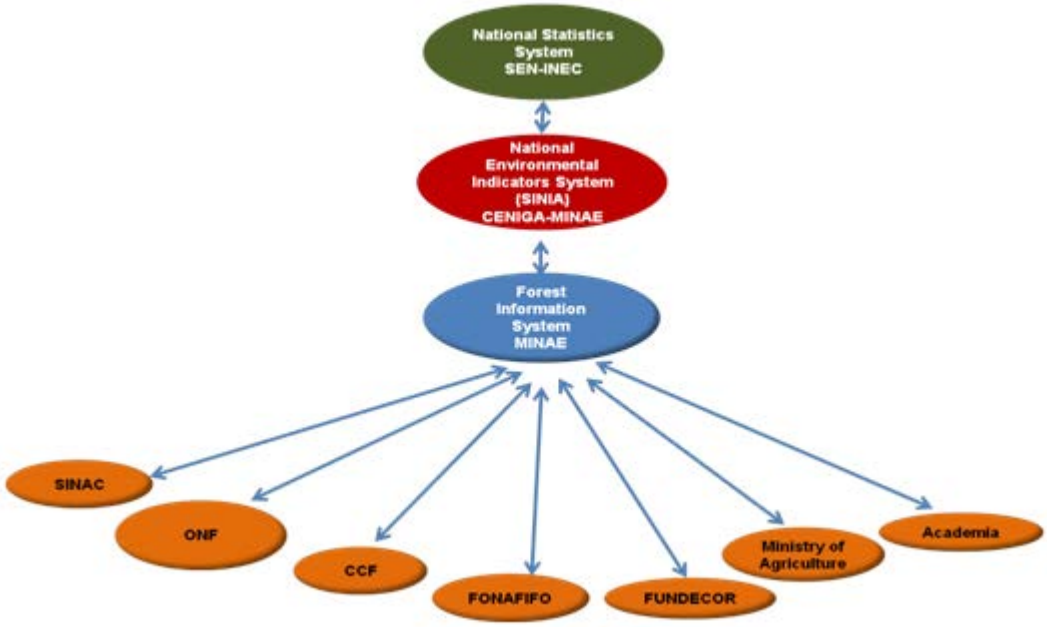


Figure 4 Costa Rica: Technical Group on Forest Account



Project Coordination

The Ministry of the Environment (MINAE) is the lead agency for the implementation of WAVES in Costa Rica and will coordinate and articulate the process in the country, with the technical support from the World Bank. In addition, a Project Coordinator (PC) will work together with MINAE and the Steering and Technical Committees, to support with the planning, drafting and implementation of activities for the construction of the two natural asset accounts.

Phase II Activities: Work Plan (2013-2016)

The Water and Forests accounts will be constructed in the 2013-2016 period. An initial budget of US$1.5 million has been pledged for the project. A summarized work plan is included in the Annex. This Plan will be subject to possible adjustments during the working and learning process.

On April 6 2014, the Citizens Action Party won Costa Rica's presidential election, breaking the two-party system that had dominated the country for decades. Changes on government key players are expected, which will potentially have an effect on the WAVES implementation process and changes to the overall work plan might occur.

5. Summary of progress

Starting in January 2014, the Central Bank of Costa Rica environmental accounts team has participated in meetings and hosted mini-workshops to present and discuss the SEEA 2012 framework and WAVES work with various governmental departments and institutes responsible for the production of primary official data and information related to water and forest resources.
The preparation phase has been completed and the NSC was established. The NSC and stakeholders discussed a feasibility study and a policy note in two technical workshops. A short-term work plan (January 2014–June 2014) was approved by the NSC and WAVES Secretariat in December 2013 and is being implemented. Work to develop water and forest accounts started in January 2014.

WATER ACCOUNTS

Preliminary water account modules have been compiled to organize the hydrological and economic information of the country in a coherent and consistent framework. Water statistics from national accounts, hydrological balances, water use and pollution data bases, and water companies' financial statements, among other sources, are used to collect and process required information for the account.

FOREST ACCOUNTS

A preliminary forest account that incorporates physical and monetary values is being developed, based on information from national accounts, FONAFIFO operations (payment for ecosystem services contracts; economic valuation of alternative land use), and biophysical data from SINAC (2013 national forests map and inventory).

OUREACH EFFORTS

- New York, United States: Representatives from MINAE and WAVES-Costa Rica participated in the international conference "Global Implementation Programme for the SEEA," held in June 2013.

- Rio de Janeiro, Brazil: Representatives from INEC and BCCR participated in the "Developing Programmes for Implementing the 2008 SNA, the 2012 SEEA, and Supporting Statistics in the Latin American Region" workshop, in September 2013.

- San José, Costa Rica: A two-day training workshop on the System of Environmental-Economic Accounting (SEEA 2012) was conducted by WAVES on December 11–12, 2013. More than 20 representatives from BCCR, MH, and MIDEPLAN attended.

- San José, Costa Rica: Videoconference and follow-up technical discussions of the BCCR natural accounts team with Ricardo Martínez-Lagunez (UNSD adviser) on two training tools: The Unu-Water Exercise: A Step-by-Step Introduction to Environmental-Economic Accounts for Water (SEEA-Water) and Guidelines for the Compilation of Water Accounts and Statistics. March 2014.

San José, Costa Rica: Participation in the EcoEco Alternatives 2014 Congress "Varieties of Ecological Economics: Advancing Towards Alternatives for People and Ecosystems in Latin America" at the

Universidad de Costa Rica, March 6–8, 2014. Presentation of WAVES initiative during the “Natural Capital” working session.

San José, Costa Rica: Participation of national accounting staff from BCCR at the official presentation of the National Forest Map 2013, organized by MINAE. The National Forest Inventory 2013 will be officially presented in May 2014.

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Annex 1. COSTA RICA: Global Results-Based Monitoring Matrix – PDO 1

OBJECTIVES & OUTCOME (RESULTS) INDICATORS	**Base-Line June 2011**	Prep year June 2012	Yr 1 Jun-13	Yr 2 Jun-14	Yr 3 Jun-15	Yr4 Jun-16	Yr5 Jun-17 (proposed)
PDO 1. To implement natural capital accounting in partner developing and developed countries							
Outcome Indicators:							
a. Country with a commitment to institutionalize natural capital accounting based on lessons learned from the WAVES program	none				**TBD under new government		
Intermediate Outcomes Indicators							
1.1 Country has completed the milestones for the WAVES Preparation Phase*	none			All milestones achieved			
1.2 Country with asset accounts for selected natural assets	none			Preliminary national forest accounts	National forest accounts	Updates accounts, **TBD with new government	Update existing accounts
1.3 Country with flow accounts for selected natural resources	none			Preliminary national water flow and forest product accounts.	National water flow accounts and forest product accounts**, TBD with new government	Updated water, forest accts; monetary water accts**, TBD with new government	Update existing flow accounts
1.4 Country with experimental ecosystem accounts	None						
1.5 Country with macroeconomic indicators based on NCA	None				Macroeconomic indicators developed	Update macro indicators	Update macro indicators
1.6 Country with capacity for maintaining NCA (evidenced by dedicated government staff for NCA and regular reporting	None			(2 staff in Central Bank for NCA), TWGs for water, forest accts	Training continues through in-country, regional	Training continues through in-country,	Training continues through in-country,

OBJECTIVES & OUTCOME (RESULTS) INDICATORS	Base-Line June 2011	Prep year June 2012	Yr 1 Jun-13	Yr 2 Jun-14	Yr 3 Jun-15	Yr4 Jun-16	Yr5 Jun-17 (proposed)
mechanism for production of natural capital accounts)				established and receiving training	and other training workshops, and by working with int'l experts on the accts	regional and other training workshops, and by working with int'l experts on the accts	regional and other training workshops, and by working with int'l experts on the accts

* National Steering Committee (NSC) established, Feasibility study approved by NSC and WAVES Secretariat, Stakeholder consultation on draft work plan, Work plan approved by NSC and WAVES Secretariat

** Costa Rica has a new government in 2014 and the work plan will be discussed with the new government to develop it further.

Annex 2. COSTA RICA: Global Results-Based Monitoring Matrix – PDO 2

OBJECTIVES & OUTCOME (RESULTS) INDICATORS	**Base-Line June 2011**	Prep year June 2012	Yr 1 Jun-13	Yr 2 Jun-14	Yr 3 Jun-15	Yr4 Jun-16	Yr5 Jun-17 (proposed)
PDO 2. To incorporate natural capital accounting in policy analysis and development planning in core implementing countries							
Outcome Indicators:							
a. NCA informs policy dialogue on growth, environment and poverty reduction, evidenced by citing NCA or using NCA indicators and data in, development plans, sector strategies and plans, executive orders, legislative documents, and the broader policy analysis literature (may include World Bank ESW, AAA and project formulation documents)	none			Legislation calling for NCA proposed to Congress	Follow-up on proposed legislation with the new govt.	*-TBD with new government	*-TBD under new government
Intermediate Outcomes Indicators							
2.1 Country has policy notes and analytical work based on NCA.	None			1st draft technical report on national forest and water accounts	*Policy notes and technical reports on forest and water accounts, TBD	*-TBD with new govt	*-TBD with new govt
2.2 Country with capacity for using NCA in policy dialogue (evidenced by government staff trained in using NCA)	None		SEEA Training workshop for 20+	3 staff attended UNSD-WB training in SEEA (Brazil), 2 attended Colombia workshop; 2-day training by int'l expert for 15+ policy-makers	Forest accounting workshop for 30+ people; Water accounting workshop for 30+ people; 1-week ecosystem accounting workshop for 30+ people	Regional and national training workshops, TBD	Regional and national training workshops, support from international experts

*Costa Rica and Madagascar have new governments in 2014 and discussion will take place in 2014-2015 to identify the new development priorities and how NCA can contribute.

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