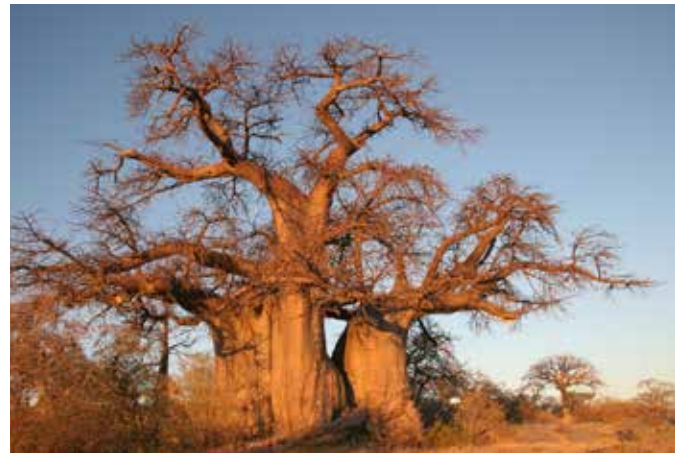


WEALTH ACCOUNTING AND VALUATION OF ECOSYSTEM SERVICES (WAVES)



**BOTSWANA
COUNTRY REPORT 2014**

Contents

| | |
|---|----|
| 1. WAVES in Botswana | 2 |
| 2. Macro-economic and Environmental Context in Botswana | 3 |
| 3. Policy Priorities and Workplan | 5 |
| 3.1 Policy Priorities..... | 5 |
| 3.2 Work Plan for WAVES in Botswana..... | 6 |
| 4. WAVES activities (May 2013- April 2014) | 9 |
| 4.1 Water accounts..... | 9 |
| 4.2 Mineral accounts..... | 12 |
| 4.3 Energy accounts..... | 14 |
| 4.4 Land/Ecosystem & tourism accounts..... | 14 |
| 4.5 WAVES Botswana Communication Strategy..... | 15 |
| 5. Institutionalization: Progress and Challenges | 15 |
| 6. Next Steps | 17 |
| 7. Results Framework: Review of the Monitoring and Evaluation Framework | 18 |

1. WAVES in Botswana

The overall goal of the Global Partnership for Wealth Accounting and Valuation of Ecosystem Services (WAVES) is to support partner countries to achieve sustainable development by systematically integrating natural capital in their development plans and national accounts systems; Through this, to mainstream natural capital valuation in both macro-economic indicators that monitor development progress, and natural resource management. WAVES is being led by the World Bank in partnership with UN agencies, other developed and developing countries, academics, NGOs and other partners.

The Government of Botswana has indicated a strong commitment to the WAVES Partnership and a Botswana Steering Committee for WAVES has been established, chaired by the Ministry of Finance and Development Planning (MFDP), Macroeconomic Policy Section.

Box: State of the Nation Address by the President of Botswana, HE. Khama (November 2013)

“...As Government we are thus committed to engaging both domestic and international stakeholders, in the private sector and civil society, to assist us in the conservation and sustainable development of our natural heritage. This is reflected in our championing of the “Gaborone Declaration”, which calls for a worldwide recognition of the intrinsic value of ecosystems through natural capital accounting. Internally, we are thus exploring practical measures to ensure that the true value of our own natural capital is integrated into our future national development planning.”

During the preparation phase (phase 1, July 2011 – March 2012), a ‘scoping out’ study was commissioned in September 2011 to compile a list of potential policy priorities and entry points for environmental accounting, review data availability and gaps, and institutional capacity. A broad range of possible priority policy objectives and activities was discussed at a National Stakeholders Workshop in November 2011, and a set of initial priorities identified. Through further consultations, options for a work plan for the 4-year Implementation Phase of WAVES in Botswana were developed and presented to a large multi-stakeholder workshop in the context of Rio+20 and Green Economy, January 2012. A proposed Phase 2 Work plan was compiled as a result of these consultations. The Work plan was approved at the meeting of the Steering Committee in March 2012.

Subsequently, WAVES Botswana made a presentation to explain Natural Capital Accounting at the May 2012 meeting of the Botswana Economic Advisory Council (BEAC), a small group of ministers and senior private sector advisors chaired by the President of Botswana. Given the critical nature of water in this water scarce country, a key element of the presentation was the results of the water accounting work done in Botswana more than 10 years ago in the late 1990s. BEAC decided that there was an urgent need to update Botswana’s water accounts in order to get a picture of the current status of water supply and use and an indication of the time trends of water use. BEAC requested the update for its next meeting in November 2012, 6 months hence. Consequently, the WAVES Botswana Steering Committee decided that the first year of phase 2 of WAVES-Botswana (implementation) would focus all its resources on updating the old water accounts. A working group on water accounts was formed by the Department of Water Affairs (DWA), to update the previous water accounts, supported by a technical consultant in Botswana. DWA presented the initial update of water accounts to 2010-2011 at the November 2012 BEAC meeting. BEAC gave its approval to the rest of the WAVES work plan and asked that WAVES Botswana provide regular updates to be included in the briefing package for its biannual

meetings. In September 2013, the Steering Committee reviewed the progress with water accounts and decided that it was time to continue with the other components of the work plan: mineral accounts & macro indicators, and the land/ecosystem/tourism accounts.

To support the work, a Country Coordinator was recruited to oversee the implementation activities, and work closely with MFDP and other government staff members. She took up her post, seconded to the MFDP Macroeconomic Policy section in May 2013. The country coordinator recently left to take up another position and an Interim Coordinator has been hired until a replacement can be recruited.

2. Macro-economic and Environmental Context in Botswana

Between Independence in 1966 and the mid-1990s, Botswana was the fastest-growing economy in the world, with average annual GDP growth rates of over 10%. This prolonged growth took Botswana from being one of the poorest countries in the world in 1966 to middle-income status by the 1990s, with per capita income now around US\$7,600.

Natural capital—particularly diamond resources—has played the key role in Botswana’s development. Initial estimates suggest that natural capital currently accounts for roughly 31% of Botswana’s total wealth, dominated by minerals, mainly diamonds (World Bank, 2011). Protected areas, including a unique ecosystem that will soon be designated as a World Heritage Site (Okavango Delta) and the Makgadikgadi wetlands, form the basis of a valuable eco-tourism industry, and tourism has been targeted as a sector for growth and diversification in Botswana’s 10th National Development Plan (NDP10). Agricultural land is much less important commercially, but provides livelihoods for a large number of the predominantly poor, rural population.

Rapid economic growth has been built upon the foundation of the diamond mining industry, with Botswana now being the largest producer of diamonds by value in the world and a large share of the revenues accruing to government, which is a partner with De Beers in mining operations. Diamond mining is the largest single contributor to gross domestic product (GDP), and the mining sector as a whole accounts for 31% of economic output. The government is the second largest sector of the economy, after mining, and is the largest single employer. Government, however, depends on the mining sector for a large (though declining) of its revenue. Other important (large or fast-growing) sectors include trade & tourism, transport & communications, and finance & business services.

Despite its outstanding record of economic growth, Botswana has been less successful at creating jobs. The rate of job creation, especially in the formal sector, has generally lagged behind the economic growth rate and new entries into the labour market. The 2010 unemployment rate was 18%¹. The poverty rate, while high for a middle-income country, shows signs of improvement, but is still high. In 2002/3 the headcount poverty rate was 31%, while by 2009/10 this had fallen to 21%.

The government of Botswana has always been keenly aware that in the long term it must use revenues from diamonds, a non-renewable resource, to diversify the economy. In recent years, the need for economic diversification to develop new sources of economic growth has become acute. The overarching development objectives, highlighted as in both the long-term Vision 2016 strategy, and in the medium term NDP10, stress economic diversification, job creation and poverty eradication. Several

¹ Results of the Botswana Core Welfare indicators Survey, 2009/10 (Statistics Botswana, 2011). Other official surveys, however, give higher unemployment rates of between 25% and 30%.

natural-capital based sectors have been targeted for a major role in achieving growth with diversification:

- diamond beneficiation; the global headquarters of the Diamond Trading Company has relocated from London to Gaborone;
- new mining activities, especially development of Botswana's vast coal reserves to alleviate regional energy shortages as well as for possible export,
- expanded ecotourism with an emphasis on greater participation by local communities and benefits to the Botswana economy
- expanding commercial agriculture through irrigation
- more efficient use of scarce water resources, which underpin all economic activities
- more efficient use of energy resources, especially electricity, with an assessment of the roles of coal and renewables

Optimizing use of Botswana's natural capital is key to achieving its long-term development objectives. Vision 2016 states:

"The natural resources of Botswana are one of its greatest assets. The strategy for protecting these resources must be based upon sound domestically based research. This should include the extent of mineral and water resources, the possible implications of increases in manufacturing, urbanization, tourist volumes or long-term changes in climate, and the effect of the use of water resources both within Botswana and in neighbouring countries...The results of the research must then be translated into effective measures that will protect the resource base and environment in a sustainable way so that they can be enjoyed by the citizens of the future" (p46).

Minerals and Energy: In addition to diamonds, Botswana possesses other mineral deposits, particularly coal. Several plans have been developed to mine more coal for generation of electricity, alleviating acute shortages² in the southern African region, and possibly for export. Mining coal for export would require vast investments in new regional rail lines and expanded port facilities-investments that would take decades to recoup. Furthermore, coal requires large amounts of water to utilize and it is not clear that sufficient water resources are available, or that the best use of this scarce resource is for large-scale coal mining.

Water Resources: Water resources are very limited and are expected to constrain future economic growth if not used efficiently. The country currently faces acute water shortages in south eastern Botswana and its capital Gaborone, which have led to severe water restrictions and supply interruptions. In Botswana rainfall is low, highly erratic and unevenly distributed. Surface and ground water resources are scarce. Three new dams have been constructed but further new large supply schemes are linked to international rivers and utilisation is subject to agreements with other riparian countries, where demand for water is also increasing fast. Climate change is expected to exacerbate the situation, leading to more droughts (and floods), increased stress on water resources and reduced primary land productivity. Integrated water resource management and careful assessment of trade-offs are critical for future economic development.

² Electricity supply constraints have led to frequent power outages and load shedding in 2013-14, and have necessitated permanent use of high cost diesel power plants, meant for meeting peak power demand.

Land and Ecosystems: Botswana’s rural land is used for agriculture (both subsistence and commercial) or under some form of protection & management for wildlife conservation, which supports an important and growing tourism industry and some subsistence use.

Botswana has rich and varied ecosystems that support large numbers of wildlife and form the back bone of the rapidly growing tourism industry. Protected areas designated for wildlife and biodiversity conservation constitute 19% of the land area and wildlife management areas (sustainable use and conservation) another 17%. No clear figures are available for the contribution of tourism to the economy, but two recent estimates give a range of 3-4% for direct contribution and roughly double that for total impact.

The agricultural potential of land is generally low due to semi-arid conditions and low soil fertility. Given both soil and water constraints, land is mainly utilized for livestock production; crops can only be grown commercially under irrigation. Agricultural land, particularly in communal areas, is generally underutilised due to lack of investments and low input production strategies. Large areas of land have been subject to environmental degradation.

3. Policy Priorities and Workplan

3.1 Policy Priorities

Optimizing natural resource use is key to achieving growth with diversification and poverty reduction, but the necessary economic information to transform these strategies into effective policies, investments, and other actions is often incomplete or missing. WAVES aims to provide technical support for environmental accounting in order to fill that information gap and improve economic decision-making in two ways:

1. Supporting a new way of assessing economic growth—beyond GDP—that takes Natural Capital into account in order to better assess prospects for long term development
2. Compiling information that can be integrated with the national accounts to optimize use of Botswana’s Natural Capital in the following four priority sectors: water, minerals, energy, land/ecosystems & tourism.

The policy objectives of WAVES Botswana are summarised below and a more detailed work plan is given in the subsequent table. The lead agencies, and policy inputs are also included in that table. As indicated above, Government prioritised water accounts (component 3) for the first year of the Implementation of WAVES Botswana, and other components were only started after that.

Component 1: Water Accounts: Managing scarce water resources to support long term growth, diversification and poverty eradication

Information to support implementation of the National Water Master Plan and associated water sector reforms, the National Master Plan for Wastewater and Sanitation and the IWRM plan; inform NDP 11 and Vision 2016/2030

Component 2: Minerals and Energy Accounts: Supporting Economic Growth and Diversification

Mineral and energy asset accounts generate information that contributes to policy dialogue on rent recovery, distribution and investment, and to provide the appropriate basis for long-term investment decisions, especially with regard to energy sources.

Information on energy use and supply accounts supports decisions regarding the optimal energy path for Botswana.

Component 3: Macro-economic indicators: Better monitoring of prospects for long term growth, Is Botswana on a growth path that is sustainable in the long-term?

New macro-economic indicators that integrate natural resource values and that are complementary to existing macroeconomic indicators, are developed to monitor sustainable development—Adjusted Net National Income (ANNI, Adjusted Net Savings (ANS), and Comprehensive Wealth.

Component 4: Land/Ecosystem/Tourism Accounts-balancing competing uses of ecosystem to optimize growth, job creation and poverty eradication

About 40% of Botswana’s land area is under some form of protection or management, and four major systems account for much of this: the Okavango Delta, Makgadikgadi Pan, Chobe area, and the Kalahari. Land/Ecosystem accounting provides the value of ecosystem services to support optimal management of different land use zones (e.g. Protected Areas, Wildlife management Areas, communal areas, Forest areas, agricultural). The work starts the 4 major areas under protection and will scale up to land use in the rest of the country

Tourism is a major component of the economic value generated and has been targeted as a sector to lead growth and diversification. Linking tourism and ecosystem accounts will help address the balance among competing users and identify strategies to increase benefits from tourism that accrue to local communities

3.2 Work Plan for WAVES in Botswana

| Timeframe | Activities |
|---|--|
| <p>Component 1 – Water Accounts: Managing scarce water resources to support long term growth, diversification and poverty eradication</p> <p><i>Construct Water Accounts to support full integration of water resource management concerns in development planning</i></p> <p><i>Contribute to National Water Master Plan Review implementation, National Water Tariff discussion, IWRM Strategy implementation, Water sector reforms, Midterm review of NDP10, NDP11 process, and Vision 2016/2030</i></p> <p><i>Lead Agency: Dept of Water Affairs (MMEWR) chairs Technical Working Group that includes Water Utilities Corporation, Statistics Botswana, Department of Mines, Ministry of Agriculture, Dept of Geological Survey, Ministry of Lands and Housing, and others as needed</i></p> | |
| <p><i>Year 1: 2012/13</i></p> | <p>Phase 1: i) Develop a Water Accounts framework based on the SEEAW and water sector reforms and ii) Update the water use accounts for 2010/2011 for BEAC and link to water accounts compiled under earlier Natural Resource Accounting Programme to create a time series of water use accounts</p> |
| <p><i>Years 2 & 3: 2013/14 – 2014/15</i></p> | <p>Phase 2: i) Update water accounts for 2011/2012; ii) construct stock accounts for surface water; iii) identify policy needs of DWA and how water accounts supports other units of DWA notably IWRM unit and International Rivers unit; and iv) scope out issues for spatial disaggregation of water accounts</p> <p>Provide initial policy briefs on trends for water use and resources; policy options for dealing with water scarcity</p> <p>Phase 3: i) update accounts and create the institutions for continuous updating of the accounts in the new Water Accounting Unit of DWA; ii) construct monetary accounts; iii) construct spatially disaggregated accounts; iv) construct framework for accounts for recycling and reuse of water (likely to become more important in</p> |

| Timeframe | Activities |
|--|---|
| | <p>the future; v) case studies of important sectoral use and options for more efficient water use in irrigation and mining</p> <p>Policy analysis and briefs on national, subnational and sectoral water issues for input to Sector Reform, National Water Master Plan Review, NDP 11, IWRM, and other policy initiatives</p> |
| Year 4+: 2015/6+ | Phase 3 continues with policy analysis, monetary valuation of water accounts, and construction of accounts for wastewater/recycling of water |
| <p>Component 2 – Minerals and Energy Accounts: Supporting Economic Growth and Diversification</p> <p><i>Construct mineral accounts to ensure comprehensive inputs to macro-economic indicators. Construct energy accounts to assess optimal energy mix for Botswana. What is the best use of Botswana’s coal-is it a strategy for diversification? Renewable energy policy contributes to Midterm Review of NDP 10, NDP11, and Vision 2016/2030, energy strategy, Coal Roadmap, and others.</i></p> <p><i>Lead agency: MFDP chairs Technical Working Group Mineral Accounts and Macroeconomic (uses existing MFDP Working Group on Macroeconomic Forecasting) with members from MFDP, Statistics Botswana, Bank of Botswana, Ministry of Minerals Energy and Water Resources, University of Botswana, BIDPA and others as needed</i></p> <p><i>Note: A combined TWG is used for both the Macroeconomic Accounts and the Mineral Accounts, given their close relationship. This TWG makes use of an existing TWG established by MFDP for Macroeconomic Policy and Forecasting, adding WAVES to the scope of that Group’s responsibilities.</i></p> | |
| Year 1: 2012/13 | No work started, as Water accounts were prioritized in this year |
| Years 2 & 3: 2013/14 – 2014/15 | <p>Phase 1: Preliminary mineral accounts constructed using readily available data and linking to mineral accounts compiled under the Natural Resource Accounting program in the 1990s and early 2000s, to create a time series from 1980.</p> <p>Phase 2: More accurate and comprehensive mineral accounts including full range of mineral based on i) data collection and compilation of accounts for produced capital; and ii) addressing methodological issues arising from the Phase 1 accounts , such as long term pricing, discount rates, treatment of new discoveries and environmental issues.</p> <p>Policy analysis of mineral and energy asset accounts</p> |
| Year 4+: 2015/6+ | <p>UNDER CONSIDERATION BY STEERING COMMITTEE: Energy flow accounts (supply and use) constructed</p> <p>Case studies of several large companies to determine the impact on the costs and competitiveness of these companies of unreliable grid electricity</p> <p>Policy analysis of alternative energy strategies and the cost-effectiveness of renewable energy, energy conservation incentives</p> |
| <p>Component 3 –Macro-economic indicators: Is Botswana on a growth path that is sustainable, is growth really long-term growth?</p> <p><i>Construct indicators "Beyond GDP"-- Adjusted Net National Income (ANNI), Adjusted Net Savings (ANS), Comprehensive Wealth</i></p> <p><i>Contributes to Midterm Review of NDP 10, NDP11, and Vision 2016/2030.</i></p> <p><i>Lead agency: MFDP chairs Technical Working Group Mineral Accounts and Macroeconomic with members from MFDP, Statistics Botswana, Bank of Botswana, Ministry of Minerals Energy and Water Resources, University of Botswana, BIDPA and others as needed</i></p> <p><i>Note: A combined TWG is used for both the Macroeconomic Accounts and the Mineral Accounts, given their close relationship. This TWG makes use of an existing TWG established by MFDP for Macroeconomic Policy and Forecasting, adding WAVES to the scope of that Group’s responsibilities.</i></p> | |
| Year 1: 2012/13 | No work started, as Water accounts were prioritized in this year |
| Years 2 & 3: 2013/14 – 2014/15 | Phase 1: Preliminary estimates of wealth based on available data, including preliminary mineral accounts (Component 2) and linking to wealth accounts compiled under the Natural Resource Accounting program in the 1990s and early |

| Timeframe | Activities |
|--|---|
| | <p>2000s, to create a time series from 1980.</p> <p>Phase 2: Improvement of macro-economic indicators as more accurate and comprehensive data become available on mineral accounts and a time series for produced capital is developed</p> <p>Policy analyses of key issues such as i) options for the use of mineral revenues and an appropriate fiscal rule for such revenues; and ii) sustainability of the economy and prospects for maintaining long term growth</p> |
| Year 4+: 2015/16+ | <p>Phase 3: Further improvement of wealth and macro-economic indicators to include asset accounts for land and ecosystems as they become available from those work components. Institutionalization of reporting on macroeconomic indicators in MFDP</p> |
| <p>Component 4 – Ecosystem/land/tourism accounts—optimizing management of land and ecosystems to contribute to long term growth, diversification and poverty alleviation</p> <p><i>Contribution to NDP11, Vision 2016/2030, monitoring and management plans for 4 specific ecosystem sites (Okavango, Makgadikgadi Pans, Chobe, Kalahari) poverty eradication efforts, tourism & agricultural diversification & growth</i></p> <p><i>Lead Agency: Dept of Environmental Affairs (MEWT) and Ministry of Lands & Housing co-chair the Land/Ecosystem Technical Working Group that includes MEWT, MLH, MFDP, Statistics Botswana, Ministry of Agriculture, Bank of Botswana, Botswana Tourism Organisation, Kalahari Conservation Society, Univ of Botswana, and others as needed</i></p> <p><i>Note: This TWG works closely with a Working Group on Tourism Statistics already established by the govt of Botswana (chaired by the Dept of Tourism, MEWT) because of the close linkages between Ecosystems and Tourism in Botswana.</i></p> | |
| Year 1: 2012/13 | <p>No work started, as Water accounts were prioritized in this year</p> |
| Years 2 & 3: 2013/14 – 2014/15 | <p>No work started in 2013/2014 due to lack of updated Tourist arrival statistics, and turnover of key staff</p> <p>2014/2015: Scoping study for land/Ecosystem/Tourism accounts to develop detailed workplan and identify roles and responsibilities of different agencies</p> <p>Design framework for comprehensive land and ecosystem accounting in Botswana</p> <p>Provide initial ecosystem accounts and gaps analysis for 2 of the 4 major ecosystem sites (Okavango Delta and Makgadikgadi Pans) based on previous studies and existing data</p> <p>Review previous tourism satellite accounts and design framework for expanded tourism surveys</p> |
| Year 4+: 2015/6+ | <p>Update data for ecosystem accounts for Okavango Delta and Makgadikgadi Pan</p> <p>Design input to BioChobe study for economic valuation and ecosystem accounting and carry out valuation of ecosystem services in the Chobe area</p> <p>Apply ecosystem accounting to Kalahari ecosystem</p> <p>National tourism surveys—contribute to ongoing surveys and conduct supplementary WAVES survey (tourist expenditures and tourist enterprises)</p> <p>Develop method to scale up from the case studies comprehensive, national land and ecosystem accounts, biophysical and monetary (incorporating values from ecosystem studies and additional land)</p> |

4. WAVES activities (May 2013- April 2014)

WAVES activities has carried out substantial work on water accounts, mineral accounts and fiscal policy indicators, has carried out a scoping study for energy flow accounts, and has begun planning for land/ecosystem/tourism accounts. The work is summarized below. Technical reports and policy briefs for i) water accounts, ii) mineral accounts and fiscal policy indicators, and iii) the scoping report for energy accounts have been published and are available. These reports provide detailed results, policy recommendations and, in the case of water accounts, a roadmap for the next phase of the work.

4.1 Water accounts

The Technical Report on Water Accounts now includes a time series of use of water by industry from 1993-2012; stock accounts for surface water stored in dams; analysis of water productivity and water allocation; preliminary monetary accounts and economic analysis of the allocation of water by sector. A policy brief and flyer that summarizes the main results have been prepared and disseminated in March 2014 at the annual Water 'Pitso' a large, 2-day multi-stakeholder workshop on water issues.

A critical achievement of the work on water over the past year and a half is the agreement on a roadmap for water accounting in Botswana, which is described in the technical report on water accounting.

Activities in the past year include

- a. Presentations:
 - Conference on African Sustainability (the follow-up to the African Heads of State Summit and the Gaborone Declaration in May 2012): Environmental Sustainability 2013
 - Water 'Pitso' (workshop) March 2014
- b. Development and Finalisation of the Water Accounting Report in October 2013.
- c. Development and Finalisation of the Water Accounting Policy brief in December 2013
- d. Institutionalisation:
 - Monthly Meetings with the Water Accounting Working Group led by the Deputy Permanent Secretary, MMEWR
 - Agreement to establish a 3-person Water Accounting Unit within Dep. of Water Affairs. The proposed unit is part of the proposed new DWA structure has been submitted for approval to the Directorate of Public Service Management.
 - Operational technical working groups for irrigation, water reservoirs and water service providers established.
- e. Capacity building:
 - Weekly technical training sessions with DWA and WAVES Botswana staff (November 2013 – February 2014)
 - 5 staff from government attended a 3-day regional training workshop in water accounting offered by UN Statistics Division in Mauritius, May 2013
 - DWA staff Water Accounting training seminar (July 2013)
 - MFDP seminar on Water Accounts and Development Planning (November 2013)

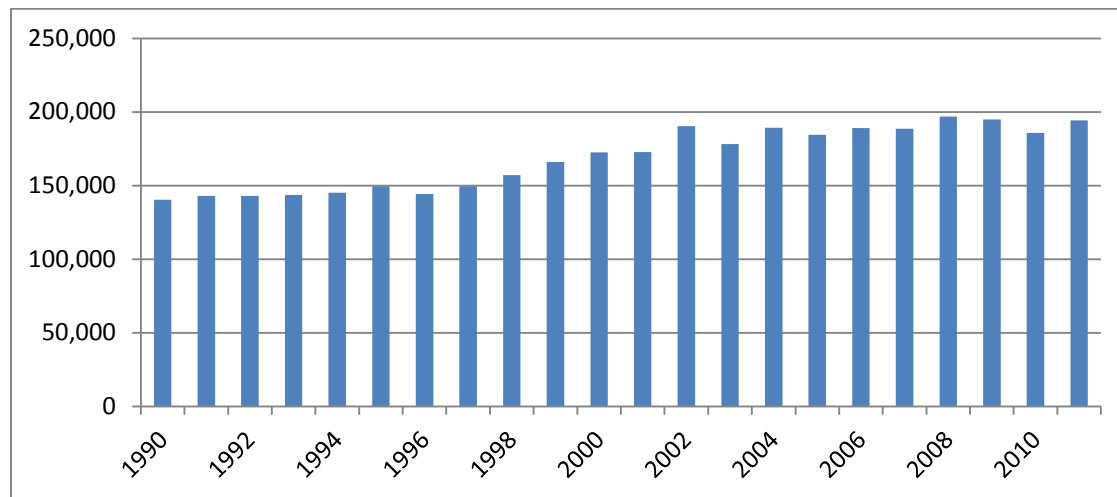
Highlights of Results from Water Accounting

The water accounts include physical water supply and use accounts, and stock accounts for large reservoirs. A few highlights from the flow accounts are presented here; additional results can be found in the technical report:

- **Water resources availability:** Safe yields of reservoirs (96L/p/day) are well below per capita water use (267 L/p/day); there will be growing reliance on transboundary water resources, whose abstraction is subject to the SADC Protocol on Shared Water Courses.
- **Water abstraction and use:** Groundwater remains the largest source of water country-wide, but its share is decreasing; mines and livestock and rural settlements depend on groundwater; Abstraction for own use exceeds the abstraction by water service providers;
- **Water use productivity:** Economy-wide, Botswana Pula 0.37 of value added is created per 1000 m³ although this varies enormously by sector
- **Water losses:** In 2010-12, water losses are just over 25%:

Botswana's water accounting efforts date back to the 1990s. The combination of earlier work with the current water accounting offers opportunities to identify long term water trends (Fig 1). Water use has increased, but not as fast as population, so per capita water use has slightly declined (by about 12%).

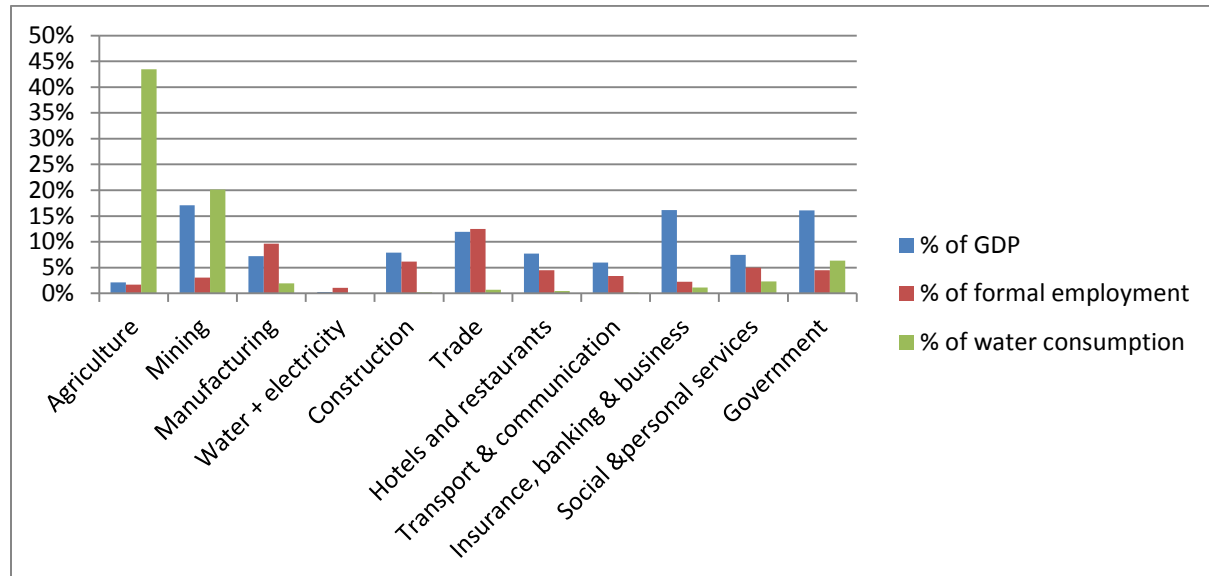
Figure 1: Trend in water abstraction (000 m³)



The sectoral shares in water consumption, formal employment and value added are shown in Figure 2. It becomes clear that agriculture accounts for a large share of water consumption, accompanied by a low share in employment and value added. In contrast, service sectors consume little water but generate larger shares of value added and employment. However agriculture continues to provide informal employment to a large number of people and acts, in part, as a social safety net. Moreover, in some uses and locations, notably for livestock, agriculture may represent the best economic use of water. Crop irrigation presents different policy challenges that will be addressed in the next phase of the work on water accounting. The opportunity costs of agricultural water consumption need to be carefully considered in development planning. Water consumption and requirements should be considered as part of the economic diversification drive and trade policies; from an IWRM perspective, diversification

should favour the service sectors and trade policies must recognise Botswana's comparative disadvantage in water resources.

Figure 2: Sector shares in Water use, GDP, and formal employment , 2012



Five main policy messages have emerged from the water accounts:

1. There is an urgent need to increase water use productivity and efficiency;
2. Waste water provides a potential additional source of water that is currently under-utilized and can be developed
3. Economic efficiency should be considered in allocation of water; but this needs to be balanced with people's basic water needs, ecological water requirements and the development of strategic sectors;
4. There is an urgent need to reduce water distribution losses, currently estimated to be around 25%. The WUC target of 15% needs to be rigorously pursued
5. Water bills need to be kept affordable but this needs to be balanced with the need for fiscal sustainability of the Water Utilities Corporation; and
6. Data need to be collected and analysed regularly to contribute to informed decision making, and water accounts provide a good framework for the data.

These message have been amplified in a speech by the Minister and in a policy brief developed within the Ministry.

Excerpt from speech by Honourable Mr. K. Mokaila, Minister of Mineral, Energy and Water Resources, at the March 2014 Water Pitso.

"...In line with the Water Policy, my ministry is also implementing a project on Wealth Accounting and Valuation of Ecosystems (WAVES) partnership program. With a growing population, decreasing water resources and increasing demand for water, there is an urgent need to judiciously account for every drop of water that is available in Botswana. Through WAVES program, Botswana Government is committed to accurately assess water resources; how much water is there; where to use this water; what is the situation right now; what is the sustainable capacity of this resource and what implications are for sustainable

development in Botswana. WAVES has completed a report on Phase 1 and 2 of the water accounts and the report will assist the Government to better manage its scarce resource. Ladies and gentlemen, you will get an opportunity to learn more about this initiative during one of the sessions in this Pitso.”

4.2 Mineral accounts

Over the past year, the work component on mineral accounts and macroeconomic policy was started. This first phase of the work was fairly limited in scope and made use of existing data to up-date physical and monetary stock accounts for the three main minerals (diamonds, copper-nickel and coal), including estimation of mineral resource rent, rent capturing, calculation of the sustainable budget index (SBI).

Presentations and training:

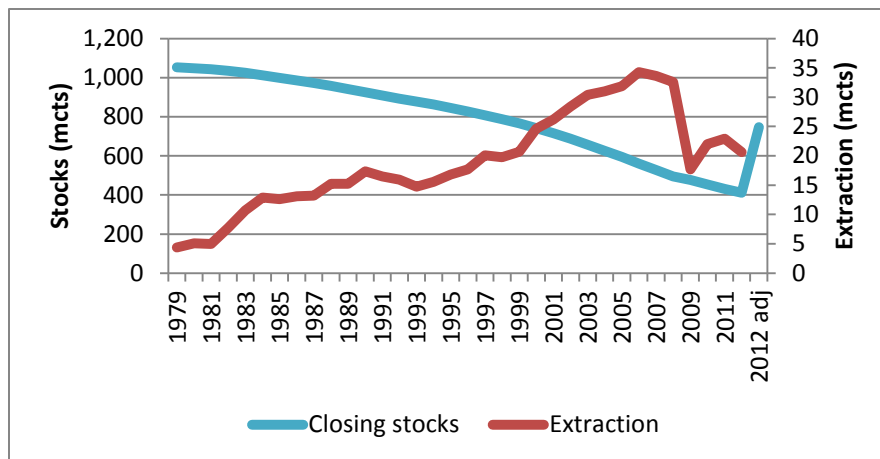
- Presentation on mineral accounts and fiscal policy to workshop and Steering Committee, August, 2013.
- MFDP seminar on Mineral Accounting and Macro-Economic Planning (November 2013)

Highlights of Results from Mineral Accounts and Macroeconomic Policy Report

In the 1990s and early 2000's Botswana's Natural Resource Accounting Programme compiled mineral accounts. In the first phase of the WAVES work on mineral accounts and macroeconomic policy, these earlier mineral accounts were up-dated and expanded, covering several decades up to 2012. Stock and monetary accounts were constructed for diamonds, coal and copper/nickel. Most of the monetary figures were estimated extrapolating from past trends, and several difficult methodological issues remain to be resolved. These will be addressed in the next phase of the work on mineral accounts and macroeconomic policy. Highlights are reported here, and more information can be found in the technical report.

Annual mineral extraction has generally increased but sharply declined, especially for diamonds, during the 2008 global crisis (Figure 3).

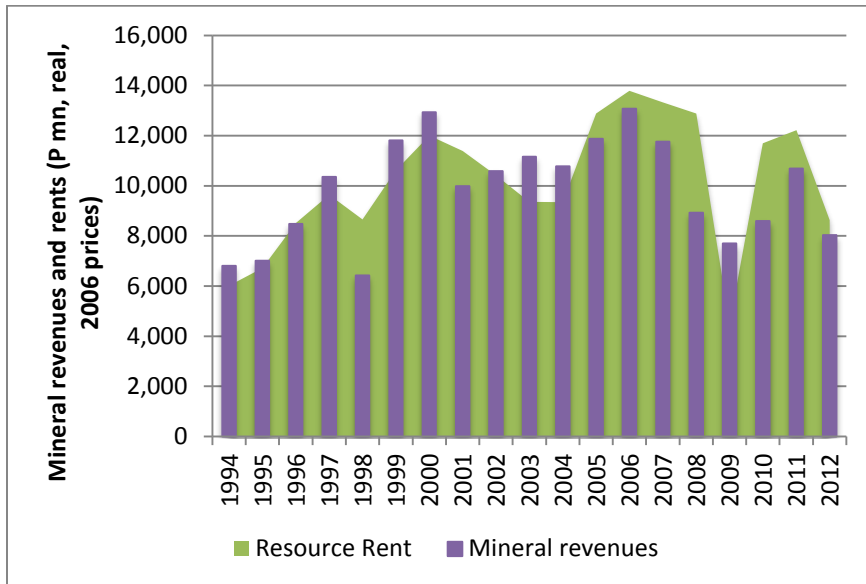
Figure 3: Diamond extraction and stocks (mcts)



Estimates of resource rent and the share of rent recovered by government indicate that government has managed to capture a large share of rents since 1994 (Fig. 4). This is a remarkable achievement. The declining rent in real terms and as part of GDP demonstrates the need for economic diversification and prudent public fund management. Government uses the Sustainable Budget Index to monitor the use of mineral revenues. The Sustainable Budget Index (SBI) is the ratio of non-investment spending to

recurrent³ revenues. A SBI figure of less than 1 indicates that mineral revenues are not used for recurrent expenditures and is sustainable. The SBI is currently well below 1 after a brief period of exceeding 1 between 2001-2005.

Figure 4. Resource rent and mineral revenues (Pula million)



Public finance policy has aimed to convert mineral revenues into other assets. This objective has largely been achieved, with recurrent spending financed from recurrent revenues, and mineral revenues used to accumulate other assets. Public sector asset accumulation has largely resulted from investment in physical capital and human capital. However, there are concerns about the quality of some public sector investment decisions, and whether the resulting assets will generate sufficient future income to replace income from mineral assets.

A first estimate of fiscal policy indicators is shown in the table below, for Botswana’s National Wealth. The construction of macroeconomic indicators, like Adjusted Net National Income or Adjusted Net Savings, depends on the availability of the asset accounts for minerals and other natural resources. In the next phase of the work, as the asset accounts are more fully developed, the macroeconomic indicators will be constructed.

³ Expenditures on education and health care are treated as investments in human capital and not as recurrent expenditures (similar to the net genuine savings index calculations).

Table 1. Estimates of Botswana's National Wealth in 2012

| Type of wealth | | Value (Pula billion) |
|--------------------------------|----------------|----------------------|
| Mineral wealth | Diamonds | 127.3 |
| | Copper-nickel | 6.9 |
| | Coal | n/a |
| | Other | n/a |
| Produced capital | Public sector | 120.7 |
| | Private sector | n/a |
| Intangible capital | | n/a |
| Financial capital (IIP) | | 84.3 |

4.3 Energy accounts

In the original work plan for WAVES Botswana, only energy stock accounts (coal) were included; energy flow accounts (supply and use by sector) were not included. Over the past year, there have been considerable difficulties in the energy sector, due to a shortage and unreliable supply of electricity. Based on the example of the usefulness of the water accounts, the MMEWR requested that energy flow accounts be constructed. A two weeks scoping mission took place in March 2014 with a technical expert provided by UK's Department of Environment Food and Rural Affairs. The scoping report was discussed in the April Steering Committee meeting and will be further considered. Energy Flow Accounts can contribute to the development of energy policy in Botswana in four key areas:

- i. Energy planning and modelling of future demand;
- ii. Monitoring of improvement of sectoral energy efficiency;
- iii. Policies geared towards increasing the diversity of energy supply and improving energy security, in particular the development of renewable energy resources; and

Energy Balances were produced in the past by the Department of Energy but the last one dates back to 2008. A step wise approach towards the construction of physical energy supply and use accounts was proposed in the scoping report. For the MMEWR, there is an urgent need for information on electricity use by economic sector from Botswana Power Corporation and measures that users have taken to compensate for unreliable electricity supply. Many companies as well as households have introduced backup generators to compensate for power interruptions, increasing their energy costs. The major policy issues that need to be addressed immediately are i) the impact on the competitiveness of Botswana's industries posed by an unreliable electricity supply, and ii) the cost effectiveness of renewable energy resources, given the likelihood that electricity supply will continue to be unreliable.

4.4 Land/Ecosystem & tourism accounts

Land/ecosystem/tourism accounts are much more complex than the other accounts, and require a multi-disciplinary Technical Working Group including many different agencies. Furthermore, the SEEA provides only 'best practice' guidelines because this is a relatively new area for accounting. A scoping study is needed to develop a roadmap for ecosystem accounting and define the roles and responsibilities of each agency. The first step in this process has been taken--a Technical Working Group comprising Land, Ecosystem and Tourism components has been established and initial seminars were

provided in August and December 2013. Meetings were hosted by the Ministry and Lands and Housing, and by the Department of Tourism. The government has already established a Technical Group on Tourism Statistics, and this is part of the overall TWG.

At the meeting in December with the Working Group on Tourism Statistics, it became clear that statistics for tourist arrivals have not been updated since 2009 (data from tourist entry/departure forms are available but have not been entered into the database). Ecotourism is a critical component of the ecosystem accounts, and a key component of Botswana's strategy for economic growth and diversification. But without up-to-date tourism statistics, it would not be possible to estimate the value of ecosystems and assess economic trade-offs for different use options. The scoping exercise for ecosystem accounts was postponed and clarification sought from the Ministry of Environment Wildlife and Tourism about tourism statistics. By March, the Ministry had decided to allocate funds for data entry, tourism statistics are expected to be available by mid-2014 and a scoping mission will be scheduled for June or July 2014.

4.5 WAVES Botswana Communication Strategy

A communication team, consisting of the WAVES Secretariat Communications Officer and two consultants from the International Institute for Environment and Development (IIED), visited Botswana to identify the needs for effective communication with all stakeholders as well as effective dissemination of the WAVES results. The team visited stakeholders, organised a stakeholders workshop and met with those involved in the mineral and water accounts. IIED will be working with the World Bank TTL and the country Coordinator to develop a communications strategy for WAVES Botswana. A local Communications Officer will be hired by IIED and will work closely with the team.

5. Institutionalization: Progress and Challenges

Institutionalization is based on four components

- Continuing strong support from the highest levels of government.
- Mainstreaming in NDP11.
- Technical Working Groups established to lead the work.
- Commitment to staffing by lead ministries, and other institutional actions needed to institutionalize NCA in Botswana.
- Training and capacity building.

High-Level Support for NCA from Government

There is continuing strong support from the highest levels of government indicated by, for example,

- Speech for the Mid-Term Review of NDP10 in support of WAVES and NCA given by the Minister of Minerals, Energy and Water Resources.
- State of the Nation Address given by H.E. President Khama to Parliament in November 2013 in support of NCA and WAVES.
- follow-up conference to the African Sustainability Summit ('Gaborone Summit') hosted by the Ministry of Environment Wildlife and Tourism in October 2013 that calls for NCA

- Opening speech by the Minister of Minerals, Energy and Water Resources calling for water accounts at the national Water ‘Pitso’ (Workshop), a large annual multi-stakeholder meeting on water issues in March 2014.
- The Botswana Economic Advisory council (BEAC), chaired by the President, includes an update on WAVES as a regular part of its briefing for biannual meetings.

Mainstreaming NCA in NDP11

The strongest support for institutionalization of NCA will come from mainstreaming NCA in the next 5-year National Development Plan, NDP11 (2016-2021). NDP11 is a legal document that identifies the goals and activities of each ministry, and the approved budgets and investment projects to support them. The process for designing NDP11 is led by MFDP and has recently started. MFDP is committed to mainstreaming WAVES Natural Capital Accounting in NDP11, and has strong support for mainstreaming NCA from key ministries and agencies—MMEWR, MEWT and the National Strategy Office.

Technical Working Groups for NCA Established

Technical Working Groups have been established for all accounts. Each TWG is led by a senior government official at the level of Deputy Permanent Secretary, who is also a member of the WAVES Steering Committee. These TWGs include members from all relevant ministries and agencies needed to construct the accounts and to use them for policy analysis.

To help ensure institutionalization and mainstreaming, WAVES Botswana makes use of existing Technical Working Groups already established by government wherever possible. The existing Working Group for Macroeconomic Policy and Forecasting, chaired by MFDP, will take over the role of Technical Working Group for Mineral Accounts and Macroeconomic Indicators. The existing Working Group for Tourism Statistics, chaired by the Dept. of Tourism MEWT), has taken on the role of guiding tourism accounts for the Land/Ecosystem/tourism accounts.

Staff commitments for NCA in ministries: Water accounts

Staffing Commitments in DWA: Over the past few years, MMEWR has been reviewing options for restructuring the Ministry and has now finalized a plan that includes a 3-person Water Accounting Unit for the Department of Water Affairs. This proposal has been submitted to the Directorate of Public Service Management and is expected to be approved. This will ensure that staff currently assigned to work on the water accounts can continue to do so on a permanent basis.

Water Utilities Corporation and Statistics Botswana: Actions to Make Information Generation Simple and Routine

Institutionalization of water accounting will succeed when it becomes simple to regularly update the accounts. Water use accounts by industry are the most critical. A key step in this process is coding the client billing database maintained by the parastatal, Water Utilities Corporation (WUC), to the classification of industries used by Statistics Botswana, the International Standard Industrial Classification (ISIC). This was done manually for the first update of the water accounts and was very time consuming. WUC has agreed to add the codes assigned to each client billing record so that the water accounts can be automatically generated every year.

Collaboration with Statistics Botswana is key for long term success. Statistics Botswana is in the process of updating its Business Register and will use the coding of the WUC client database to assist in this. The

coding will be re-examined when the update of the Business Register is complete, resulting in a more accurate coding, and the subsequent water accounts.

Staff commitments for NCA in ministries: Other accounts

The other accounts are in an early stage of development and 'proof of concept' relative to the water accounts so no commitments to institutionalization have been made yet. Issues of exactly what part of the accounts will be institutionalized, how often accounts will be generated and the roles and responsibilities of each organization will be determined as there is more experience with the accounts.

Training and Capacity Building

A great deal of training and capacity building has already taken place, particularly for the water accounts. Additional training is planned for the rest of the work program. The following training events are currently planned for Botswana in 2014/2015:

NDP11 and NCA: a briefing on NCA and progress so far with WAVES is planned in May for the team of Permanent Secretaries leading the NDP11 process. A PowerPoint presentation is under preparation for this. Other briefings and seminars will be provided as requested by the PSs.

Water accounts: Regular training seminars at DWA will continue.

A 2-week training course on how to implement water accounts in Botswana will be developed and offered at the University of Botswana (or other university) in 2014.

A training workshop with an international expert to review the water accounts will be held in 2014

A presentation will be proposed for the 2015 Water Pitso.

Mineral Accounts and Macroeconomic Policy: seminars for Ministry of Finance and Development Planning senior management as well as technical working groups will be held in May-July (depending on the meeting schedule of the various groups); training for Statistics Botswana; training for the Technical Working Group.

Land/Ecosystem/tourism accounts: a week-long training course was recently piloted in WAVES Philippines. As part of the scoping mission this training course will be offered in Botswana to the Technical Working Group. Other training will be provided as needs are identified during the scoping mission.

Energy Accounts: as determined by the Steering Committee

Regional training course on NCA: WAVES is planning a regional training workshop on NCA for Africa in 2014/2015, which Botswana will participate in.

6. Next Steps

Continued implementation of mineral and water accounts

The mineral accounting work (1 year) focuses on four component: improvement of the mineral accounts based on SEEA, preparation of macro-economic indicators based on SEEA, policy analysis and communication of the results and capacity building, dissemination and support for institutionalisation. The water accounting work (2 years) will focus on four components: up-dating and expansion of the

accounts with partial monetary accounts and with wastewater, policy analysis and dissemination of results and finally capacity building completion of institutionalisation and capacity building.

Starting Land/Ecosystem/Tourism accounts

Once the new coordinator is in office, a scoping mission will be designed to assess the need for such accounts, the policy issues to be addressed, the data availability and gaps, institutional set up and training/ capacity building needs.

Proposal for Energy accounts

A proposal is under review by the Steering Committee for a 1st phase of energy accounts over a 1-year period that would focus on:

- a. Development of electricity supply and use accounts, led by DoE and supported by BPC and other stakeholders;
- b. Case study of 2-3 large companies to assess the impacts of power insecurity, the costs of mitigation measures taken, the impact on company competitiveness, and the implications of continuing energy insecurity for i) Botswana's international competitiveness and ii) the economic feasibility of alternative energy sources like solar power

This proposal is contingent on approval by the Steering Committee and identifying funds to this work either by reallocation within the current budget or seeking additional funds.

Capacity building and institutionalisation

7. Results Framework: Review of the Monitoring and Evaluation Framework

WAVES Secretariat and the Steering Committee agreed to a Monitoring and Evaluation Framework in July 2013. The M&E Framework has 4 components, corresponding to the four Project Development Objectives (PDOs) of WAVES:

PDO 1: Implement natural capital accounting at national or sub-national level in several developing and developed countries.

PDO 2: Incorporate natural capital accounting in policy analysis & development planning

PDO 3: Develop standardized guidelines for ecosystem accounting for global implementation

PDO 4: Promote adoption of natural capital accounting beyond the WAVES partner countries

The first two PDOs are reported at both the global level and the country level. The global level results are included in the Annual Report. Country level results will be provided as part of the progress report for each country. The M&E framework for Botswana includes a proposed extension of the end-date by one more year. The main reason for this is the delay in starting the ecosystem accounts, as will be discussed below. It should be noted that the extended time frame does not imply additional funding.

PDO1 Implementing natural capital accounting

In terms of PDO1, institutionalization (PDO1.a), is on track with its targets. Botswana completed the milestones for the Preparation Phase (PDO1.1) early on and has met its targets for constructing asset accounts, flow accounts, and macroeconomic indicators of sustainability (PDO1.2, PDO1.3, and PDO1.5). Construction of ecosystem accounts (PDO1.4) has started more slowly than originally planned. The delay, as explained in the report was largely due to the unavailability of updated tourist statistics.

Moreover, extensive consultation and discussion is needed about the scope and linkages of land, ecosystems and tourism accounts, including institutionalization in Botswana. This data gap has now been addressed and the first step, a scoping study is expected to be in June or July 2014. In the next year, we expect to have preliminary results for at least one of the pilot sites in Botswana, building on existing work for the Okavango Delta. The late start on ecosystem accounts plus the need for extensive consultation are the main reasons for proposing an additional year for Botswana to complete the ecosystem accounting element of the work program.

Regarding development of capacity for compiling accounts (PDO1.6), there are very strong training and capacity building program in place, and Botswana has been able to take advantage of both domestic and regional training opportunities. The proposal to develop a university-based 2-week course in water accounting, a model which may be followed for other accounts, provides a strong institutional base for on-going capacity building that can be maintained over time. In addition, the institutional basis for compilation of accounts, in terms of staff commitments, institutional responsibilities and Technical Working Groups have all been established.

PDO 2: Incorporate natural capital accounting in policy analysis & development planning

With PDO2, Botswana is also meeting or exceeding their targets. In terms of outcome indicators (PDO2.a), Botswana has played an important regional role in promoting NCA, with strong support from the President as well as the Minister of Mineral, Energy and Water Resources, and the Minister of Environment, Wildlife and Tourism. There is commitment from the Ministry of Finance and Development Planning to mainstream NCA as a tool for economic growth in the next National Development Plan, and NCA has been recognized as an important tool for resources management across key ministries and agencies evidenced by its inclusion in key policies and management plans. In Botswana, the results of the NCA program are being used to inform dialogue on the new Country Partnership Framework, which is expected to be finalized next year.

The intermediate indicators, PDO2.1 and PDO2.2, are critical to provide the technical background and communicate results to policy-makers in order to achieve PDO2.a. Botswana has started providing these reports and policy briefs with the support of an in-country communications plan and staff (with a major role played by IIED, as described in the Annual Report). Finally, WAVES will only succeed with in-country capacity to use the accounts for policy analysis. In-country capacity is being developed in several ways: first, most of the work is being carried out by government staff with technical support and training from experts. Botswana is fortunate to have strong domestic technical expertise, so that there is a large component of 'learning by doing', but also draws on international experts. In addition, there is formal training through seminars, workshops and training courses, offered possibly through the University of Botswana. Learning from peers through regional and international workshops is also critical, and participation in regional and international workshops is an important component.

Country 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 has committed to institutionalize natural capital accounting based on lessons learned from the WAVES program | None | none | | Target: Water accounts partially institutionalized Achieved: Department of Water Affairs proposes unit for water accts with 3 staff | Target: DWA unit approved | Target: Staff commitments for additional accounts in respective government agencies (minerals, finance , energy); included in NDP11 Agreement on regular reporting on key indicators for water, minerals and macro indicators | Target: 5 |
| Intermediate Outcomes Indicators | | | | | | | |
| 1.1 Country has completed the milestones for the WAVES Preparation Phase* | None | Fully achieved | | | | | |
| 1.2 country has asset accounts for selected natural assets | None | | Target: partial asset accounts for water Achieved: Physical accts for surface water | Target: Preliminary mineral accounts Achieved: surface water stock accts, subsoil asset accts (phase 1) | Target: Phase 2 mineral accounts, prelim groundwater water stock accts; prelim. land accts for 1 ecosystem site (Okavango) | Target: Land accts for 3-4 ecosystem pilot sites; subsoil assets updated; water stock accts by region | Target: update existing accounts; land & ecosystem pilot accts scaled up to regional/national level Colombia - TBD |

| | | | | | | | |
|---|------|--------------|---|--|--|--|--|
| 1.3 Country has flow accounts for selected natural resources | None | Target: none | Target: Prelim water accts for 2010-2011 | Target: Updated flow accts for 2012, time series from 1992 Achieved: Updated flow accts for 2012, time series from 1992; Prelim energy balances | Target: | Target: 5 countries | Target: 5 countries |
| 1.4 Country has experimental ecosystem accounts (if intended in country work-plan) | None | Target: none | Target: none | Target: Scoping study for ecosystem accounts completed Achieved: scoping study to take place in June or July 2014 | Target: Scoping study completed + prelim results for 1 of 4 pilots | Target 3 add'l pilot ecosystem sites | Target: scale up pilot site ecosystem accts to national level |
| 1.5 Country has macro-economic indicators derived from the SEEA accounts (if intended in country work-plan) | None | Target: None | Target: none | Target: Prelim macro indicators estimated Achieved: Prelim Macro indicators estimated | Target: Revised Macro indicators estimated with input from mineral accts and other; | Target: Macro indicators updated and further improved with results from land/ecosystem accts; country agrees to report on indicators | Target: Macro indicators updated and further improved with results from land/ecosystem accts; |
| 1.6 Country has capacity for maintaining NCA (evidenced by dedicated government staff for NCA and regular reporting mechanism for production of natural capital accounts) | None | Target: none | Target: Water accts, TWG est.; initial training of staff in water accounting Achieved: TWG established; Water acc'ting seminars in DWA; 5 staff attend 3-day training course held by | Target: Dedicated unit for water accts in DWA Achieved: Water Accts unit in Department of Water Affairs created with 3 staff trained; Technical Working Groups (TWG) for all accts established and receiving training; Water acc'ting seminars in DWA; initial training seminar on energy accts | Target: Water acc'ting seminars in DWA; training course in water acc'ting as part of Univ course for 15-20; initial training of 20+ staff for ecosystem acc'ting; training of 15 stff in MFDP on minerals/macro; training continues through in-country, regional and other training workshops, and by working with int'l experts on the accts; Staff attend regional | Target: Water acc'ting seminars in DWA; 2-week training course in water acc'ting as part of Univ course for 15-20; training of 20+ staff for ecosystem acc'ting and valuation; training of 15 staff in MFDP on minerals/macro; training continues through in-country, regional and other training workshops, and by working with int'l experts on the accts; Staff | Target: Water acc'ting seminars in DWA; 2-week training course in water acc'ting as part of Univ course for 15-20; training of 20+ staff for ecosystem acc'ting and valuation; training of 15 staff in MFDP on minerals/macro; training continues through in-country, regional and other training workshops, |

| | | | | | | | |
|--|--|--|---------|--|--------------------------|---|---|
| | | | UNStats | | training workshop on NCA | attend regional training workshop on NCA and training of trainers workshop by UNStats | and by working with int'l experts on the accts; Staff attend regional training workshop on NCA and training of trainers workshop by UNStats |
|--|--|--|---------|--|--------------------------|---|---|

* 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

Country 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 | Target: None Achieved: President calls for water accts; Govt hosts Heads of State Summit on African Sustainability, resulting in Gaborone Declaration to implement NCA signed by 10 countries | Target: Govt recommends NCA in Mid-Term Review Of NDP10 Achieved: Mid-term Review of NDP 10 calls for NCA in NDP 11; President's BEAC calls for NCA and includes progress on NCA in briefing pack for its biannual | Target: 2 countries Achieved: Pres. State of Nation Address calls for NCA; National water policy and IWRM policy call for NCA; Govt policy brief on water mgmt. call for water accts as mgmt. tool; Botswana hosts follow up to 2012 Gaborone Summit to establish secretariat for NCA. MFDP and key ministries leading prep of NDP 11 ask for briefings to mainstream NCA in NDP11 NCA informs draft of World | Target: MFDP commits to mainstreaming NCA in draft of NDP 11; NCA informs World Bank CPF | Target: NDP11 w NCA adopted by govt. as mgmt. tool; Ecosystem accounts inform mgmt. plan for Chobe (one of the ecosystem sites); Water accts used to monitor IWRM and Natl Water Master Plan implementation, inform dialogue on sharing water from int'l rivers | Target: Ecosystem accounts inform national Land Mgmt, and Tourism Strategy; NCA used to monitor implementation of NDP11; Water accts continue to use as in Yr.4 |

| | | | | | | | |
|--|------|--|---|--|---|--|--|
| | | | meetings | Bank CPF | | | |
| Intermediate Outcomes Indicators | | | | | | | |
| 2.1 Country has policy notes and analytical work based on NCA. | None | Target: none | Target: 1 st report to update water accounts Achieved: Update of water accts presented to BEAC, 1 st technical report | Target: Technical report, policy note on water accounts; 1 st prelim technical report on mineral accts/macro policy Achieved: New Technical report, policy note and flyer on water accounts; 1 st prelim technical report on mineral accts/macro policy; 1 st tech. report on energy; | Target: 2 nd technical report, 2 policy briefs and 2 flyers on water accounts; 2 nd technical report, policy brief and flyer on macro indicators and sustainability; 1 st technical report and policy note on ecosystem accts | Target: 3rd policy note and brief on sustainability, macro indicators and minerals; 3 rd technical report, policy note and briefs on water accts/mgmt; 2 nd tech report on ecosystem accounting, tourism and land mgmt.; note on scaling up ecosystem accounting to rest of country | Target: technical reports, policy notes on ecosystem accounts for the country |
| 2.2 Country has capacity for using NCA in policy dialogue (evidenced by government staff trained in using NCA) | None | Target: policy-makers workshop for 35+ people Achieved: 2 policy-makers workshops for 35+ people (1 dedicated to NCA, 1 in prep for Rio+20) | Target: Training by technical expert and at least 3 seminars in DWA Achieved: 5 staff attend water acct training workshop; 3 internal training seminars on policy uses of water accts at DWA | Target: 3 training seminars on water accts at DWA; 2 workshops on NCA; briefing to MFDP on mineral/macro accts and sustainability; initial training on ecosystem accts. Achieved: -2 workshops on NCA w for 40+ participants; 3 training seminars on water accts. at DWA; seminar on uses of energy accts; initial seminars held for land-ecosystem-tourism TWG | Target: Water acc'ting seminars in DWA; 2-week training course in water acc'ting as part of Univ course for 15-20; initial training of 20+ staff for ecosystem acc'ting; training of 15 stff in MFDP on minerals/macro; training continues through in-country, regional and other training workshops, and by working with int'l experts on the accts; Staff attend regional | Target: Water acc'ting seminars in DWA; 2-week training course in water acc'ting as part of Univ course for 15-20; training of 20+ staff for ecosystem acc'ting and valuation; training of 15 staff in MFDP on minerals/macro; training continues through in-country, regional and other training workshops, and by working with | Target: Water acc'ting seminars in DWA; 2-week training course in water acc'ting as part of Univ course for 15-20; training of 20+ staff for ecosystem acc'ting and valuation; training of 15 staff in MFDP on |

| | | | | | | | |
|--|--|--|--|--|---|---|--|
| | | | | | training workshop on policy uses of NCA | int'l experts on the accts; Staff attend regional training workshop on policy uses of NCA | minerals/macro ; training continues through in-country, regional and other training workshops, and by working with int'l experts on the accts; Staff attend regional training workshop on policy uses of NCA |
|--|--|--|--|--|---|---|--|



WAVES

www.wavespartnership.org