NATURAL CAPITAL ACCOUNTING AND SDGs INTERRELATIONSHIP

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OVERVIEW OF NATURAL CAPITAL ACCOUNTING

- Natural Capital Accounts (NCA) - are a series of interconnected accounts that provide a structured (integrated) set of information relating to the stocks of natural resources and flows of services supplied by them.
- Botswana embraced NCA following the outcome of the Gaborone Declaration for Sustainability in Africa (GDSA) in 2012.
- NCA prioritized for: water, minerals and energy resources, including compilation of macroeconomic indicators of sustainable development.
- Capacity building and a process to institutionalize the accounts was led by Government, with support from the World Bank, through the WAVES Global Partnership programme.
- NCA is all about generating environmental-economic information

Why do we need environmental-economic information?

- The quality of the environment impact human welfare – an important policy issue
- Concern about impact of economic activity on the environment (economy uses natural inputs from environment to produce goods & services and releases residuals back to the environment, like air emissions and return flows of water)
- Continuing economic growth and human welfare depend on the environment
- Are environmental endowments being used responsibly and **sustainably?**

SEEA and SNA – measuring environment & economy interaction

- NCA adopts UN System of Environmental Economic Accounting (SEEA) to produce environmental and economic information in one system using common classifications, concepts and definitions
- SEEA is a satellite (sub) system of the System of National Accounts (SNA)
  - SNA - used to measure economic activity, economic wealth & general structure of economy. **Use of GDP**
  - SEEA – on other hand, allows for integration of environmental information with economic information. An extension of SNA
  - SEEA is used for valuing environmental assets – by showing how much is value added, depleted or degraded overtime. **Goes beyond GDP by using** **other macro indicators**
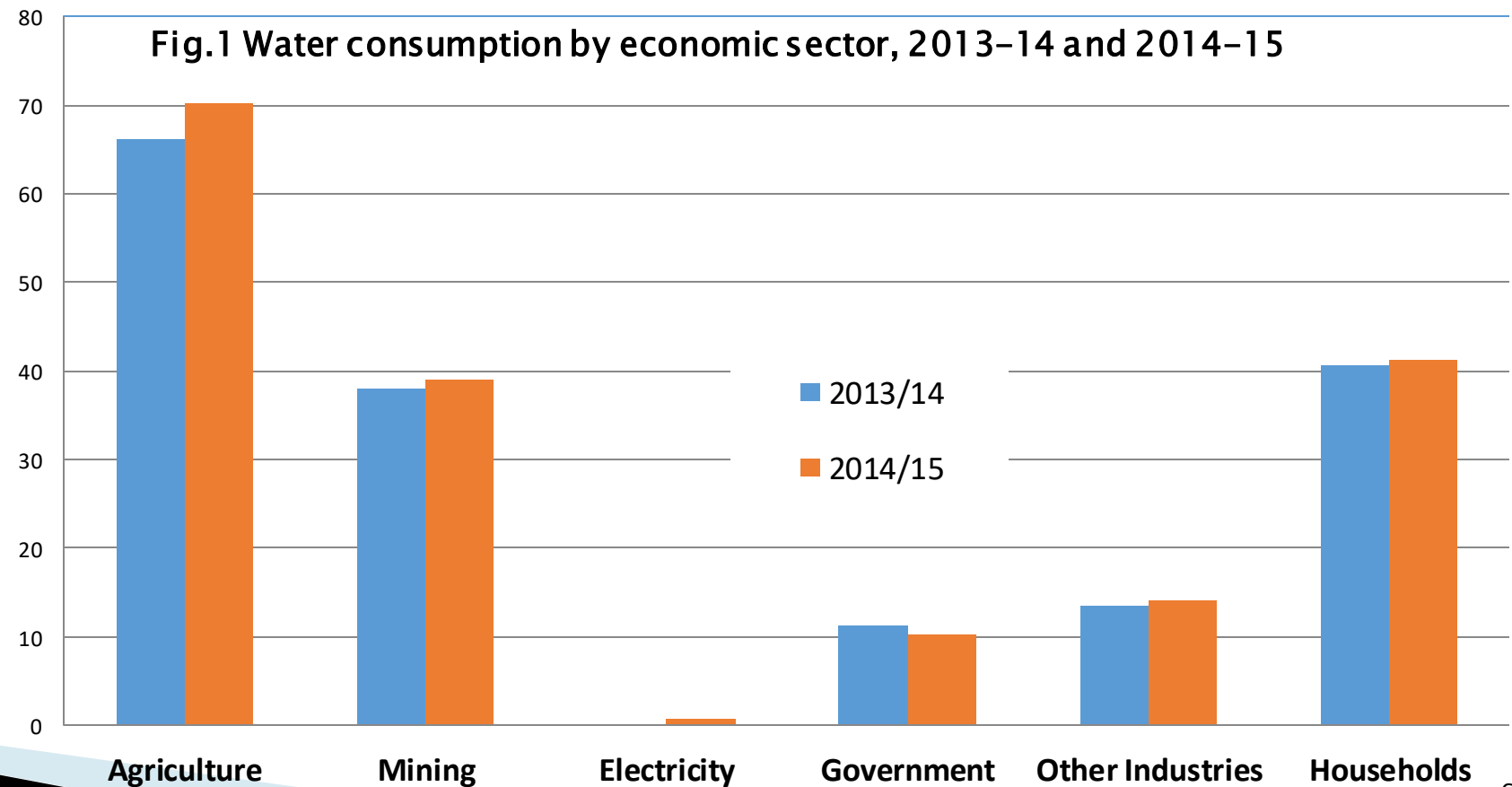
NCA ACHIVEMENTS IN BOTSWANA

NCA is implemented at sectoral level and coordinated at MFED. Each accounting component has made substantial progress so far:

- **Water Accounts (DWA)** – 4 (annual) technical reports produced, covering 2011/12 – 2015/16 – showing pop. access to clean water, water use by sectors, trend analysis; other indicators
- **Mineral Accounts (BGI)** – 2 reports, 2016 – economic rent for diamonds, copper/nickel, coal, gold & soda ash; prospects to account for industrial minerals in future
- **Energy Accounts (DOE)** – 1 report, 2015 – accounts for electricity & coal; prospects for liquid fuels like petrol, diesel, etc. in future
- **Macroeconomic Indicators of Sustainable Development (MPS, MFED)** : 3 reports, 2016 – wealth accounts analysis, computation & analysis of ANNI and ANS. Wealth accounts indicate diversity of national assets and composition of wealth – monitor prospects for long term sustainable economic development

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NCA AND SDGs LINKAGES: PRACTICAL EXAMPLES FROM NCA IN BOTSWANA

Water Accounts: **SDG 6: Target 6.4:** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of fresh water to address water scarcity and substantially reduce the number of people suffering from water scarcity
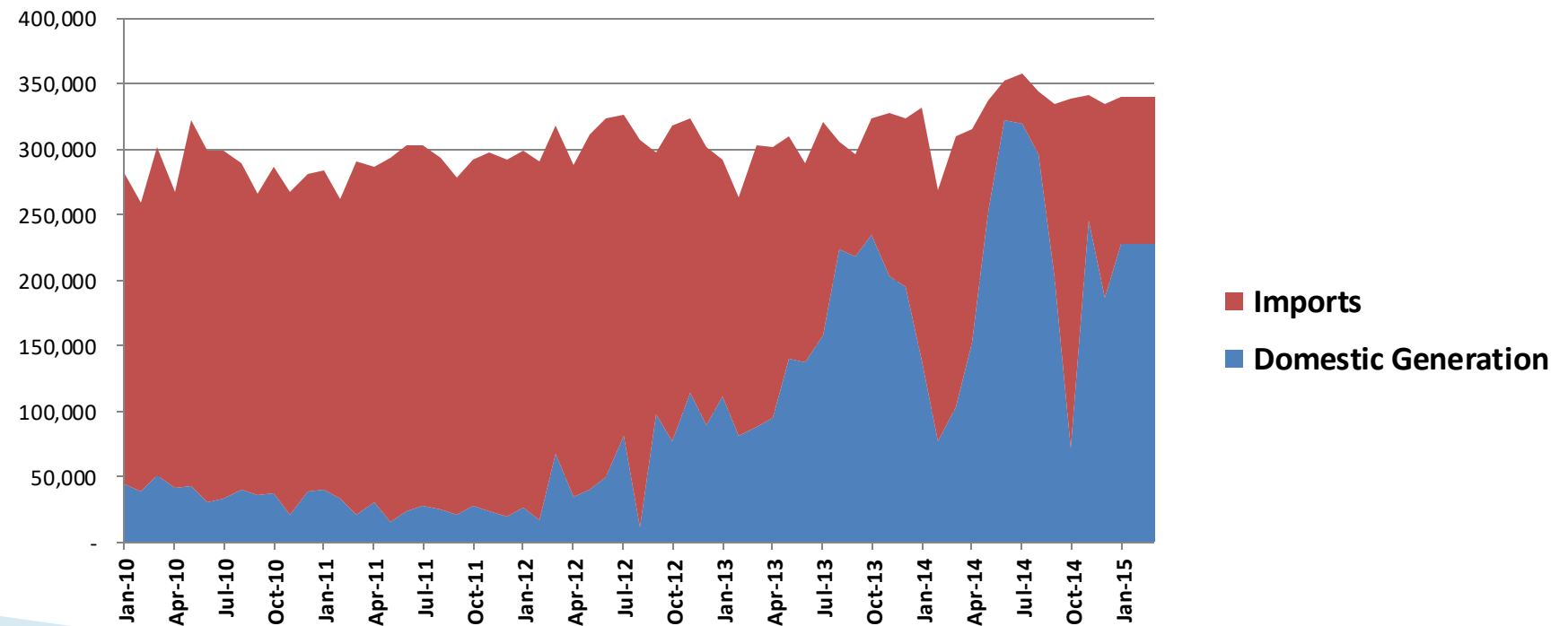

Fig.1 Water consumption by economic sector, 2013–14 and 2014–15

NCA AND SDGs LINKAGES: PRACTICAL EXAMPLES FROM NCA IN BOTSWANA

Energy Accounts

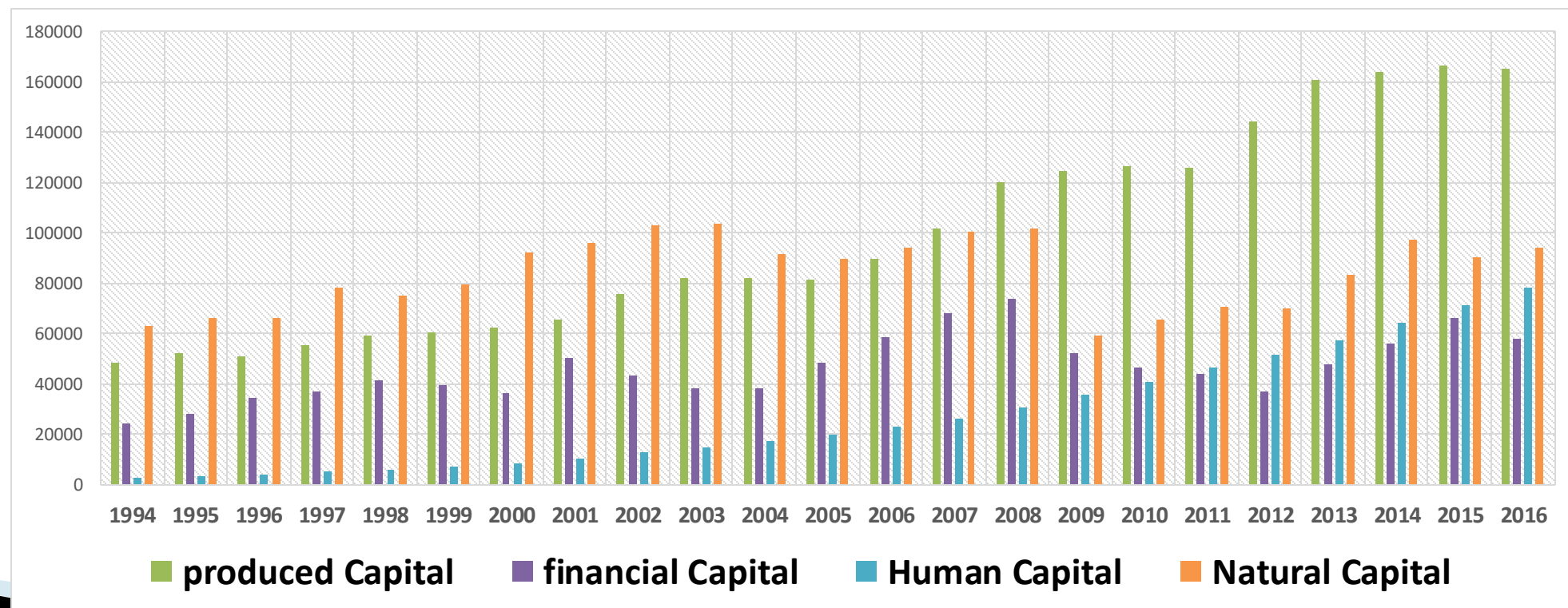**SDG 7:** Ensure access to affordable, reliable, sustainable and modern energy for all

Fig.2 Imports and local production of electricity_2010 –2015

Source: Energy Accounts Technical Report –2016

Mineral Accounts and macroeconomic indicators of sustainable development SDG 12: Ensure Sustainable consumption and production patterns

Fig.3 Changing wealth composition_1994–2016

Source: Macro Indicators Technical Report_2016

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NATURAL CAPITAL ACCOUNTS AND SDG INDICATORS

At national level, NCA indicators are mainly used for monitoring, serving as barometers to gauge national progress towards achieving specific SDGs

- NCAs deliver a broad range of SDG indicators, including those that go beyond the natural resource base (SDGs 13 and 15).
- There is potential for expansion of NCA into other areas: tourism, land, wildlife and other ecosystems
- Due to the fact that NCAs produce consistent and internationally comparable statistics, they are useful to guide the development and estimation of specific SDG indicators – not only those related to the management of natural resources, but also those connected to other SDG clusters

CONCLUSION

- NCA and SDG processes can benefit from one another – NCA generates necessary evidence-based data for monitoring specific & interrelated SDG indicators & targets.

- Need for SDGs and NCA development processes to feed into the SDGs Indicator Framework (at StatsBots) for monitoring purposes.

- Use the existing NCA data to review evidence-based SDG policies, trend analysis, forecasting, integrated data quality assessments, modelling - such as, in using computable general equilibrium (CGE) analysis.

  - For instance - Costa Rica, Guatemala, Colombia and Rwanda are currently experimenting with an integrated CGE model to evaluate the effect of environmental policy measures in their economies.

Thank you for your Attention!