WAVES Madagascar: Update of progress

Presented by: Haga Rabefitia

Date: 01 June 2015

WAVES

Wealth Accounting and the Valuation of Ecosystem Services
www.wavespartnership.org

WORLD BANK GROUP

Madagascar in context

- **Resource-rich fragile country**
- **Recurrent political crises**
- **As a result, GDP growth lower than population growth, poverty rates increasing**
  - 2014: per capita income fell to 2005 level: USD 275
  - Absolute poverty at 92.8 % (2010)

- **Population and economy highly reliant on natural resources**
- **WAVES program will help government ensure development is sustainable and equitable**
- **Challenges of working during a transition and through political instability**

Accounts being produced

MACRO-ECONOMIC INDICATORS

TIMBER ACCOUNTS

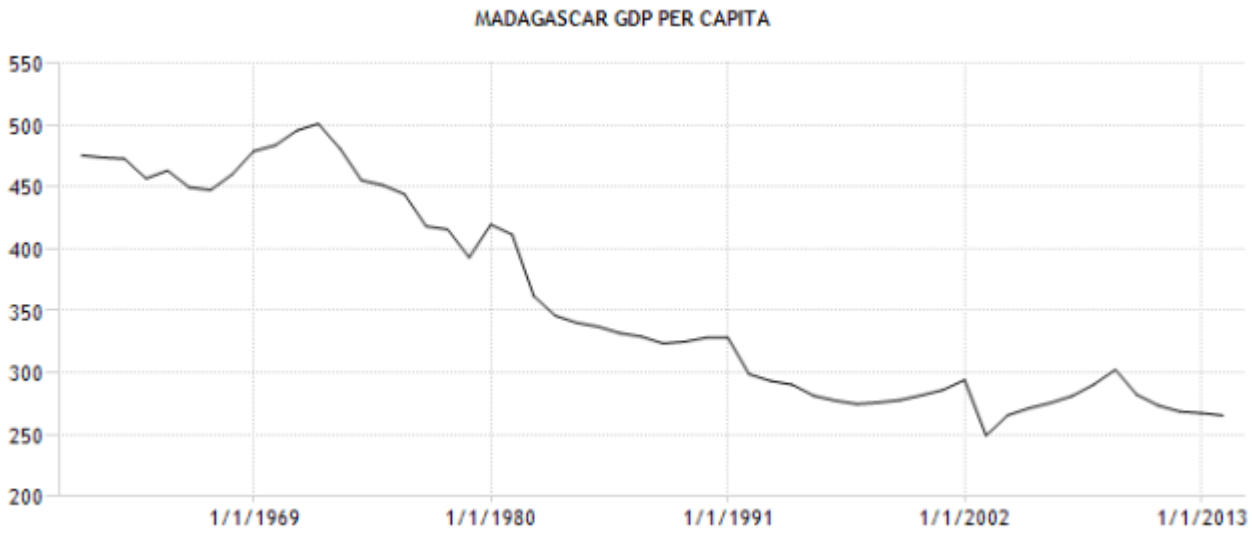
MINERAL ACCOUNTS

WATER RESOURCES ACCOUNTS

Macroeconomic indicators

Context:

- **Half of Madagascar's assets lie in its natural capital**
- **However, weak growth for last 30 years**



- **Majority of population caught in poverty trap**
- **Inclusion of natural capital values in national accounts to :**
  - (i) monitor the sustainability of economic development; and
  - (ii) manage key natural resource based sectors.

Macroeconomic indicators

Current status:

- **Focus on adjusted net savings (ANS) and natural capital wealth**
  - Depletion of natural capital represented 2.7 percent of the country's GDP in 2010
  - Total wealth is declining (GNI growth of -6.5 percent), and ANS has always been negative since the 1980s
- **Macro-economic policy note drafted**
- **Communication and training workshop planned to build capacity**

Timber accounts

Context:

- Population is highly reliant on fuelwood for energy and timber for construction purposes
- Poor law enforcement in timber concessions
- Between 1950 and 2000, Madagascar lost half of its forest cover
- Population is expected to double by 2040

The timber accounts will inform policy on:

- Sustainable exploitation of timber resources
- Household energy

Timber accounts: current status

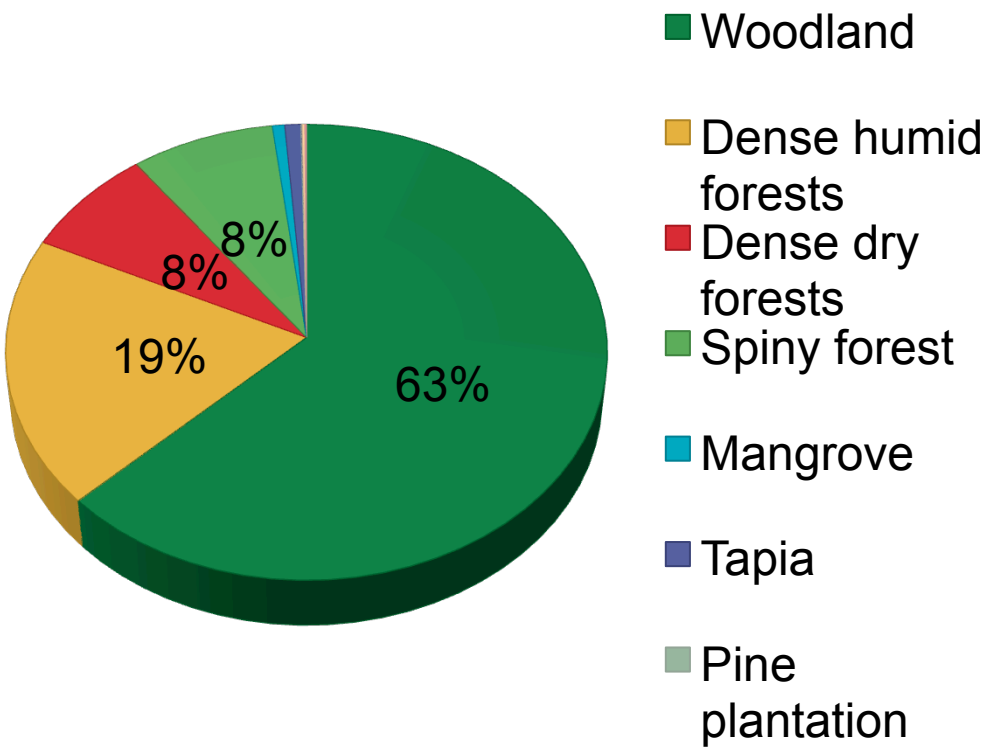
Data collected on :

- Timber stocks (surface area and volume), for different forest type, in/ out of PAs
- Exploitation permits granted

Ongoing works:

- Monetary value of different forest types
- yearly formal and informal timber consumption;

Proportion of forest cover per forest type (2013)



Timber accounts: some data

Forest cover and volume (2013):

- **Total forest cover: 25m ha, of which 18m are within non PAs.**
- **Plantations amount to only 80.000 ha: 0.31% of forest cover**

Surface loss (2005-2013):

- **1.6m ha (24%) of dense humid forests**
- **1.4m ha (42%) of dense dry forests**
- **Plantation surface area stagnating**

Volume loss (2005-2013):

- **26% of dense dry forests**
- **54% of dense humid forests**

Mineral accounts: context & policy issues

Context:

- **Geologically rich country (ilmenite, cobalt, nickel, iron ore, coal, bauxite..)**
- **Potential to underpin country's economic takeoff (sector contribution to GDP could grow from <1% to 14% by 2025)**
- **Royalties captured are low compared to other countries (1-2%)**

Identified policy entry points :

- **Maximize resource rent**
- **Investment of resource rents in productive assets**
- **Manage land use conflicts and control other adverse effects**

Mineral physical stock accounts

	Ilmenite	Nickel	Cobalt	Chrome
Closing stocks (2012)	7 million tons (Commercially viable) 39 million tons (Potentially viable resources)	1.6 million tons	132.000 tons	1.4 million tons
Extraction	1.6 million tons between 2008-2012	16,150 tons between 2010-2012	1,385 tons between 2010-2012	833,000 tons between 2008-2010
Observations	Given current use, the life time of the three fields (Toliary Sands, QMM and Mainland) would be over 64 years.	Real extraction is low compared with capacity, could be due to price fluctuation	Extraction has grown rapidly but remains far from the full capacity of 5,600 tons per year	The life time of reported reserves is 7 years Reserves could be under-estimated.

Water resources accounts

Context:

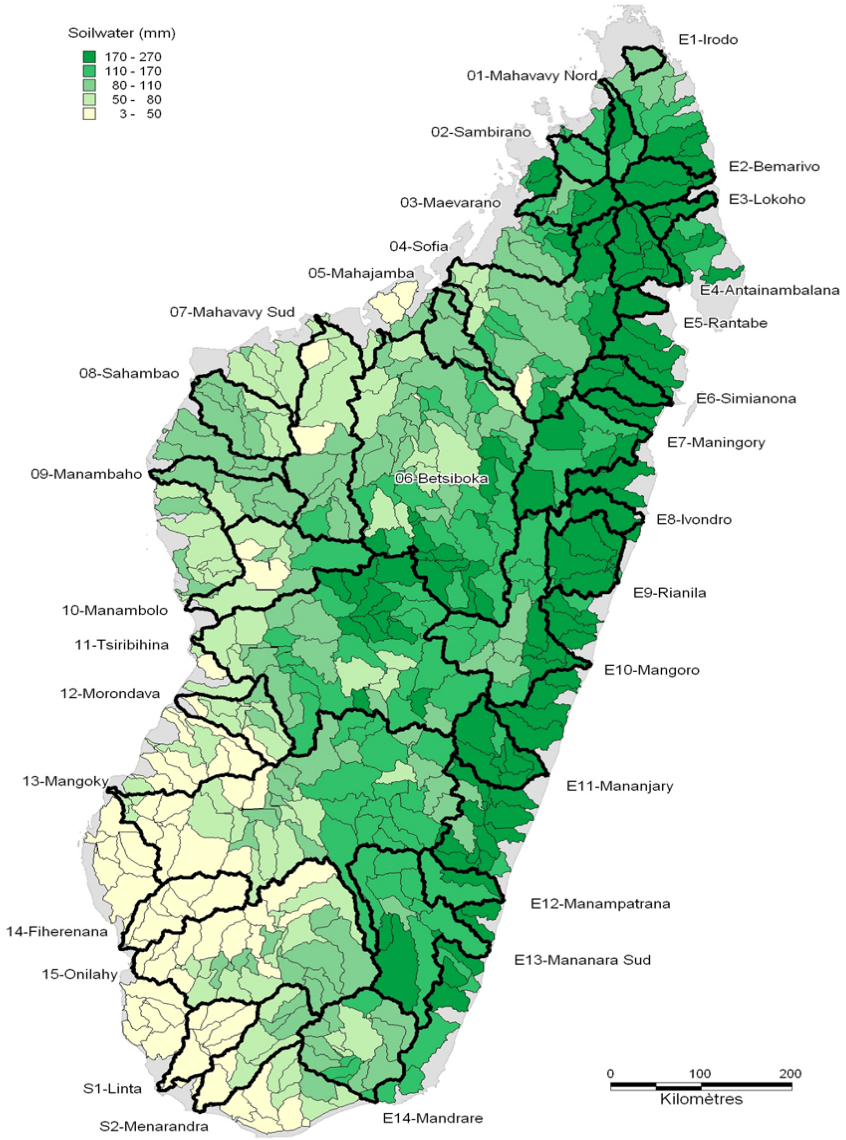
- Abundant water resources (>1,500mm/yr)
- Major seasonal and subnational differences
- Water exploitation low (<5%)
- Demographic growth and rapidly increasing demand agricultural production

Some observations:

- 58% of food production from irrigated systems (remaining from rain-fed agriculture)
- Agriculture use 97% of water resources, but contributes to 27% of GDP

Water resources accounts: current status

- Data on physical stocks collected for 2001-2013
- First attempt at compiling values for national water assets and flows
- Data collection on flow account ongoing



Next steps

MACRO-ECONOMIC INDICATORS

- Update indicators
- Update policy note

TIMBER ACCOUNTS

- Compile the monetary account for legal and illegal harvest
- Publish a policy brief on timber physical and monetary accounts

MINERAL

- Refine physical stock account
- Calculate rent
- Policy analysis related to mineral rent recovery, distribution & investment

WATER

- Refine priority policy question
- Select pilot basin for flow accounts
- Compile the water accounts
- Publish a policy brief on stock and flow accounts

Enhancing Sustainability of Outcomes

- Build capacity within Ministries, including the NCA unit and champions
- Launch a major communication campaign based on Program outputs and briefs

Government support

- **Despite challenges, government has supported the Partnership :**
  - Establishment of the Steering Committee
  - Technical working groups, headed by a champion in each Ministry
  - USD 500,000 of co-financing
- **Political context: elections in 2013, new government in 2015, continued support:**
  - Creation in 2014 of a NCA unit in the Ministry of Economy
  - Recognition of the importance of NCA in the National Development Plan
- **Next year of WAVES will be used to communicate results and further institutionalize NCA in Madagascar**