Rwanda Natural Capital Accounting

Water Accounts: Overview and Key Results

Introduction

- Rwanda started implementing NCA from early 2015.
- **Land, Water and Minerals** as key priorities.
- Focused on 4 key tracks:
  - ✓ *Accounts development;*
  - ✓ *Capacity building;*
  - ✓ *Policy analysis; and*
  - ✓ *Communication.*

- All 4 components implemented in parallel; work is continuous.

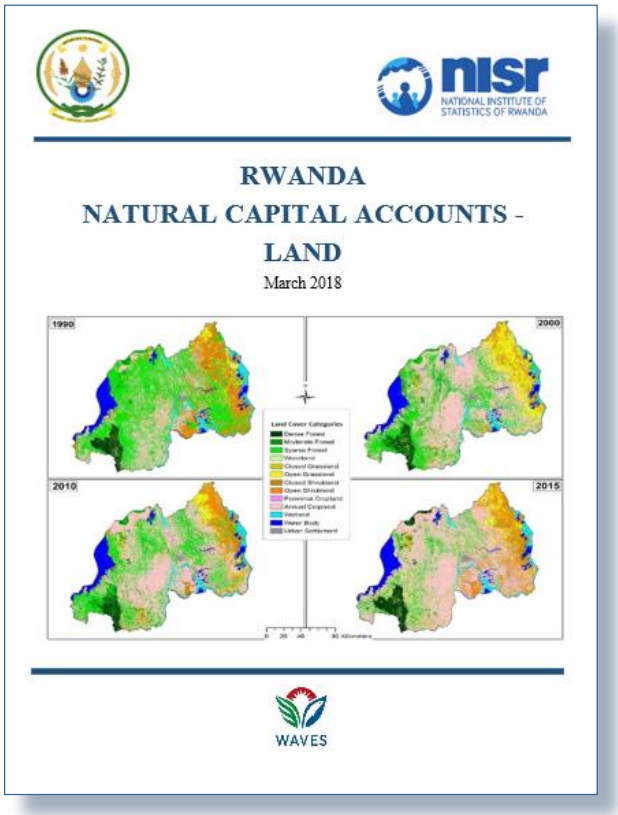
Natural Capital Accounts are linked to the System of National Accounts

- Important contributions of natural capital not fully captured in National Accounts (NA);
- Climate changing, fisheries depleted, soils degraded, water supplies overextended…Wealth depleted
- Yet depletion not reflected in GDP
- Need a measure that goes beyond GDP

- SEEA describes interactions between the economy and environment, and the stocks and changes in stocks of environmental assets;

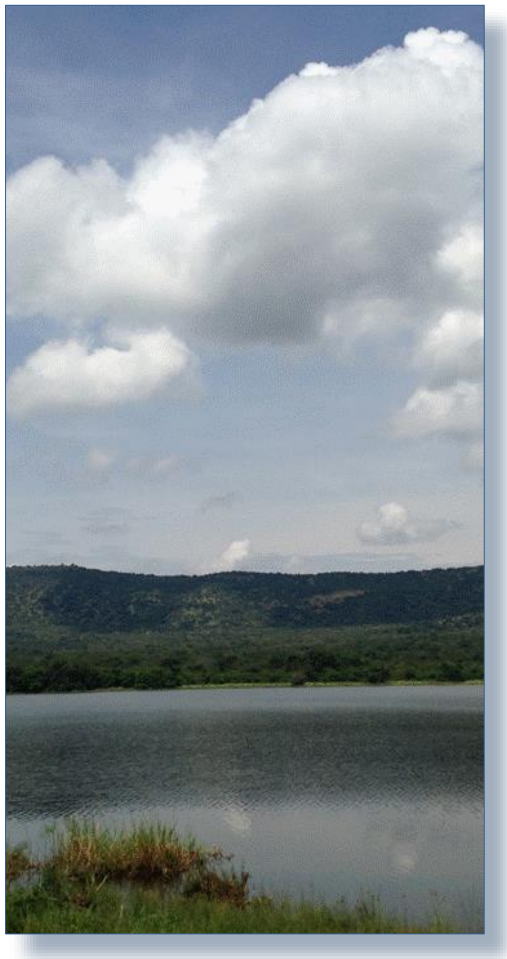
Rwanda Natural Capital Accounting Initiative

- Rwanda Committed to incorporate value of natural capital in public and private sector policies and decision-making;
- NCA provides tools to better measure and analyze natural resource opportunities, constraints, and trade-offs on the path to sustainability;
- Government prioritized NCA work on Land, Water, Minerals and Ecosystems .
- WAVES Global Partnership and World Bank provide support and technical assistance.



Results from newly published Land Account on 6th March 2018

Why Now Water Accounts?



- Inform policy makers as a National Development priority sector;
- Clarify and compare the economic values of water in competing uses;
- Provide more accurate picture of overall water available, water use, potential constraints to growth;
- Relate economic production to water use, water productivity;
- Look after performance water supply sector;
- Monitor and enhance water productivity across sectors in Rwandan economy (use efficiency);
- Identify potential for improving performance in water supplying sector, like water efficiency in supply.

Progress and Way Forward: Water Accounts

October 2018: Version 1 Water Account

- **Draft Water Document** for review – End August 2018
- **3 Draft Policy briefs** submitted by May 2018: 1. Water Use efficiency and Productivity; 2. Water Availability and Water Demand; 3. Water Stress.

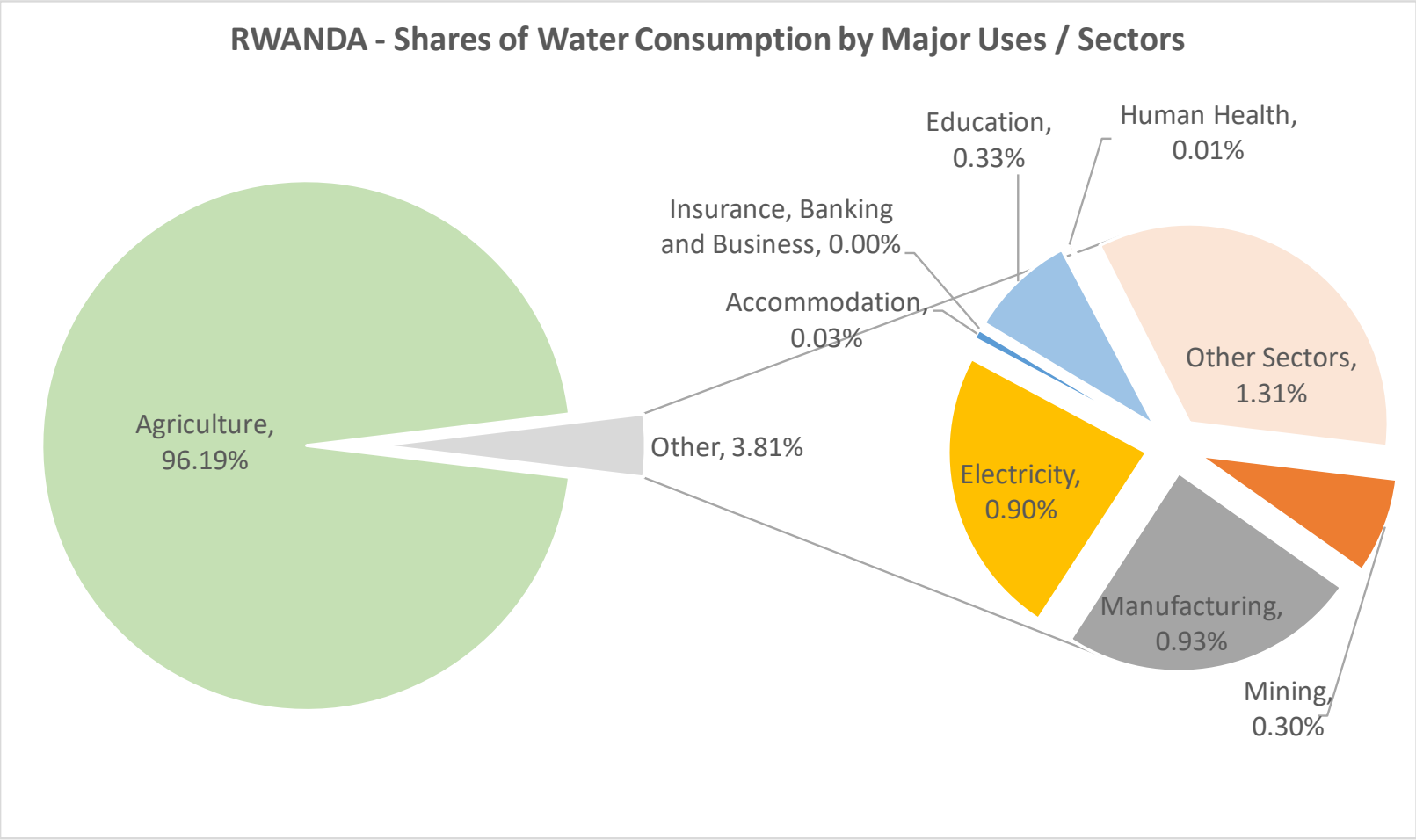
June 2019- Version 2 Water Document

- Additional years **2016 and 2017**;
- Disaggregate information to 9 catchment level;
- Integrated link to the Ecosystem accounts data and modeling;
- WASAC database, NISR IBES data and additional data to complete coverage of sectors/ industries

Water Accounts:
Key Findings and Policy Implications

Water Accounts: Findings

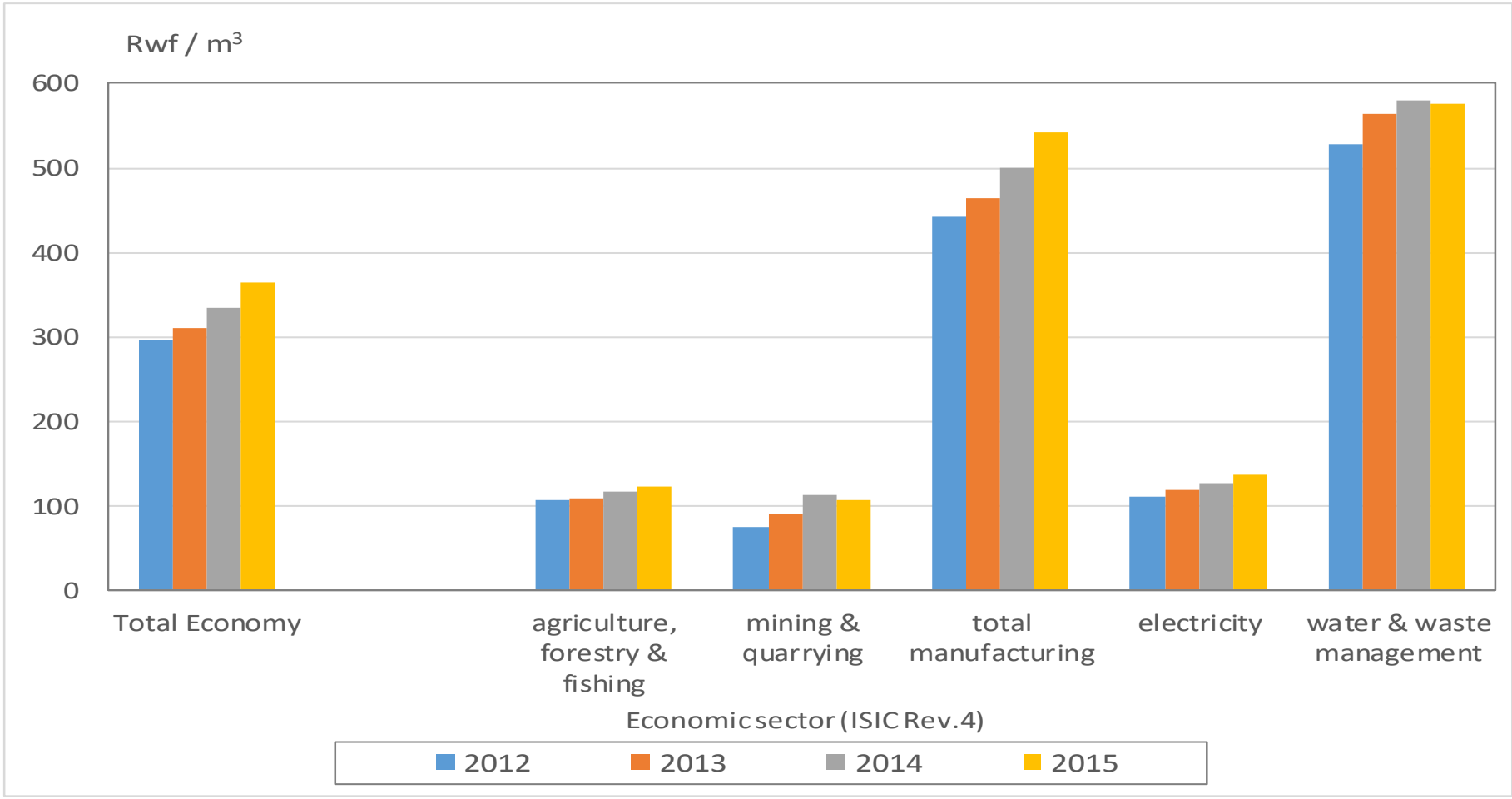
Water Use efficiency and Productivity: SDG 6.4.1



Shares of water consumption by major uses / sectors

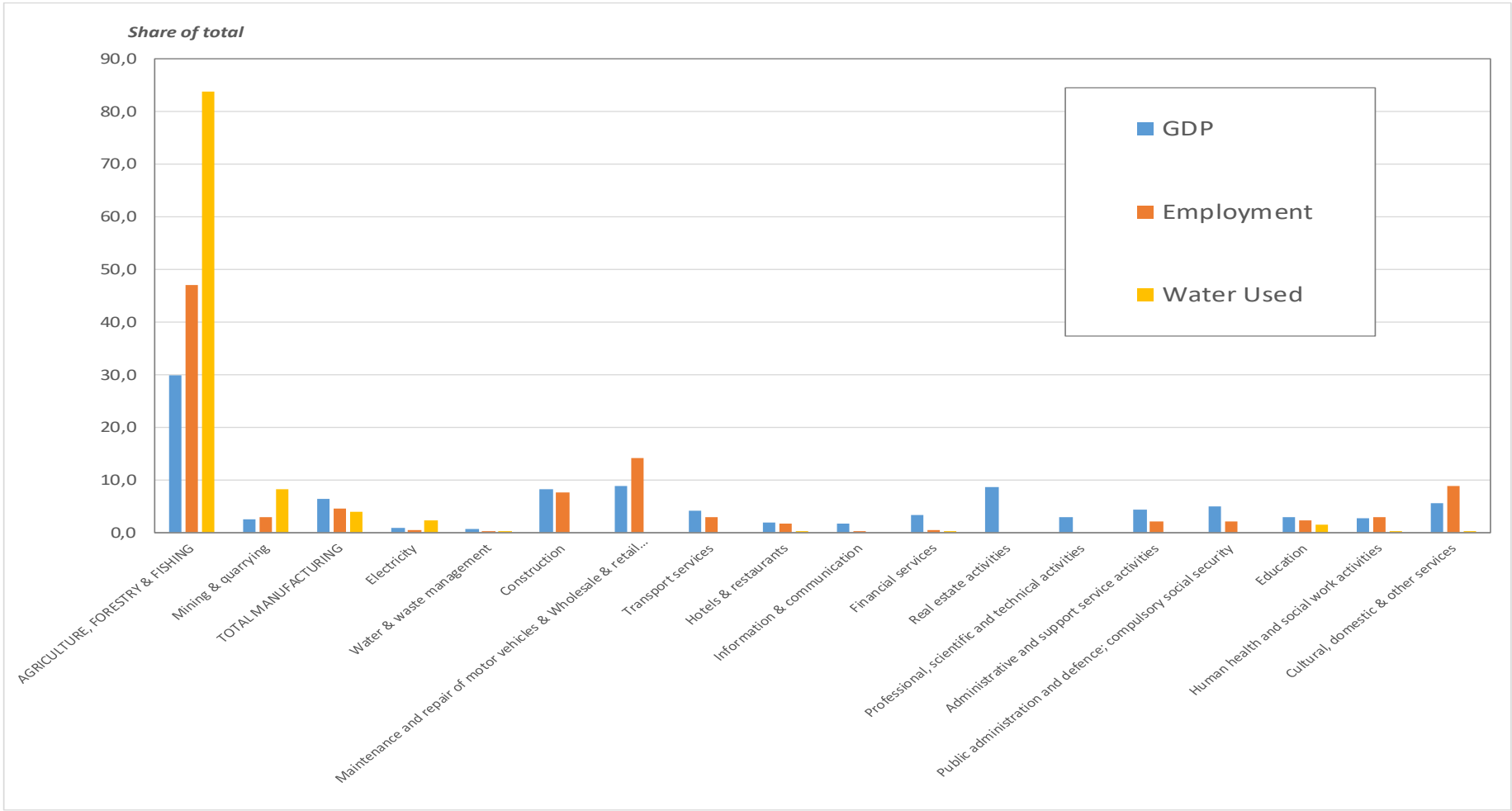
Water Accounts Findings

Water Productivity by sector on water Use, SEEA Water Accounts Rwanda time series



Water Accounts Findings

Shares of GDP and employment (2016), and water used (2015)



Agriculture created about 6% of formal jobs, but many more are informal

Source Data: Labour force statistical table

Water Accounts: Findings

Water accounts results on water stress at country level

SDG 6.4.2

Year	TRWR	Population by NISR	Water Availability: TRWR / capita	TWW as per NWRMP and Water Use study	Water Stress %*
	(Million m^3)	*As per JJJ*	*(m^3/capita)*	*(Million m^3)*	*With env. water flows consideration of 21%*
2012	11,659.3	10,482,641.0	1,112.0	704.9	6.0%
2013	**10,329.2**	10,978,053.0	**941.0**	712.1	**6.9%**
2014	11,925.3	11,002,628.0	1,084.0	721.0	6.0%
2015	11,256.3	11,262,564.0	**999.0**	729.3	**6.5%**

Water accounts results on water stress in Rwanda at country level

The severity of water stress (WS) is classified by:

(WS < 10%) **no water stress,**
(10% < WS < 20%) low water stress,
(20% < WS < 40%) moderate water stress,
(40% < WS) high water stress

Water Accounts: Policy Implications

- Improve cost recovery, so that users getting high returns on water use also pay for the provision of that water;
- Develop water allocations rules that help to preserve permanent green countryside for recreation and tourism;
- Consider improved water and agricultural management practices and technologies (groundwater recharge, reduce water losses, enhance efficiency) to improve wise use and storage of water resources;
- Note that improved technologies will help to improve food security relative to traditional rain fed agriculture;
- Develop coherent information and policy framework to address growth in water demand and inform water allocation trade-off decisions.

Rwanda Natural Capital Accounting

Thank you!

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WAVES