



NATURAL CAPITAL POLICY FORUM

Natural Capital Accounts for Water- Zambia

November 2018 [Paris, France]



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



OUTLINE OF PRESENTATION

□ INTRODUCTION

□ INITIAL KEY FINDINGS

□ POSSIBLE APPLICATIONS

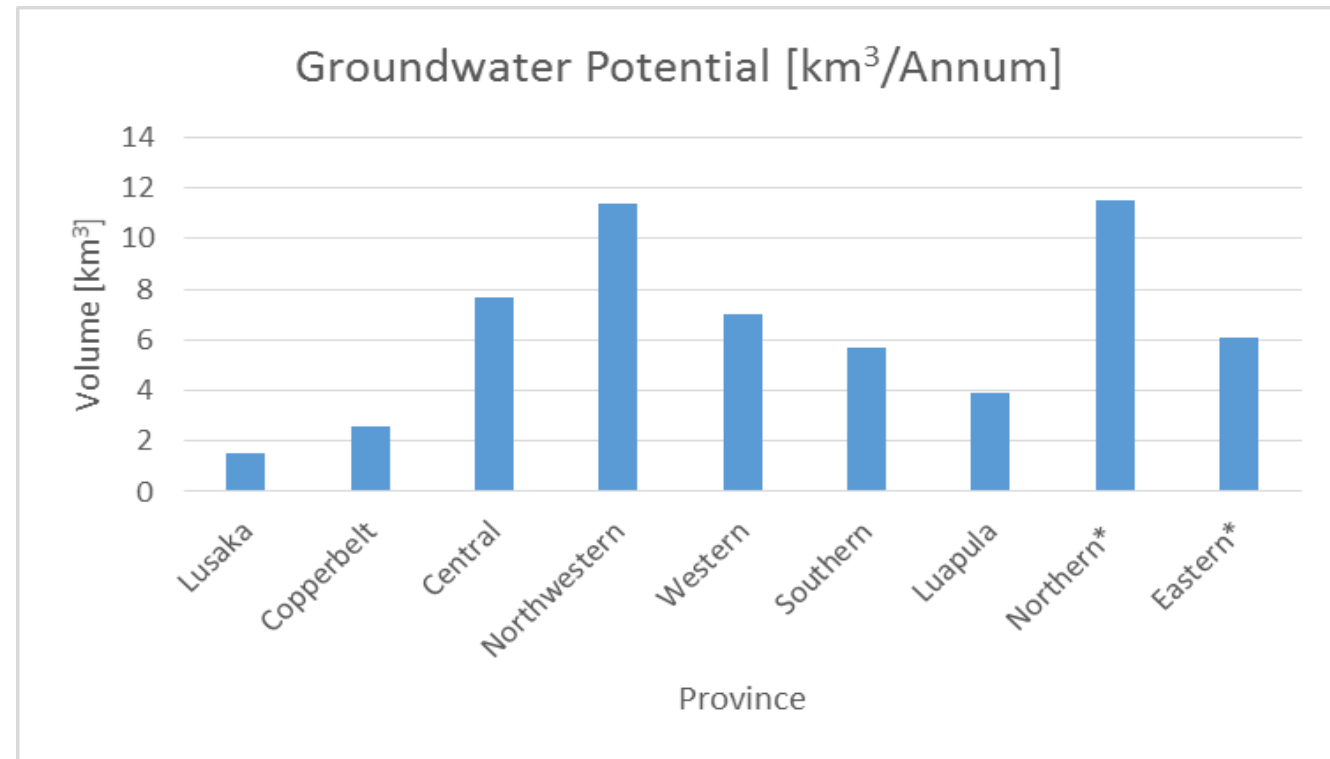
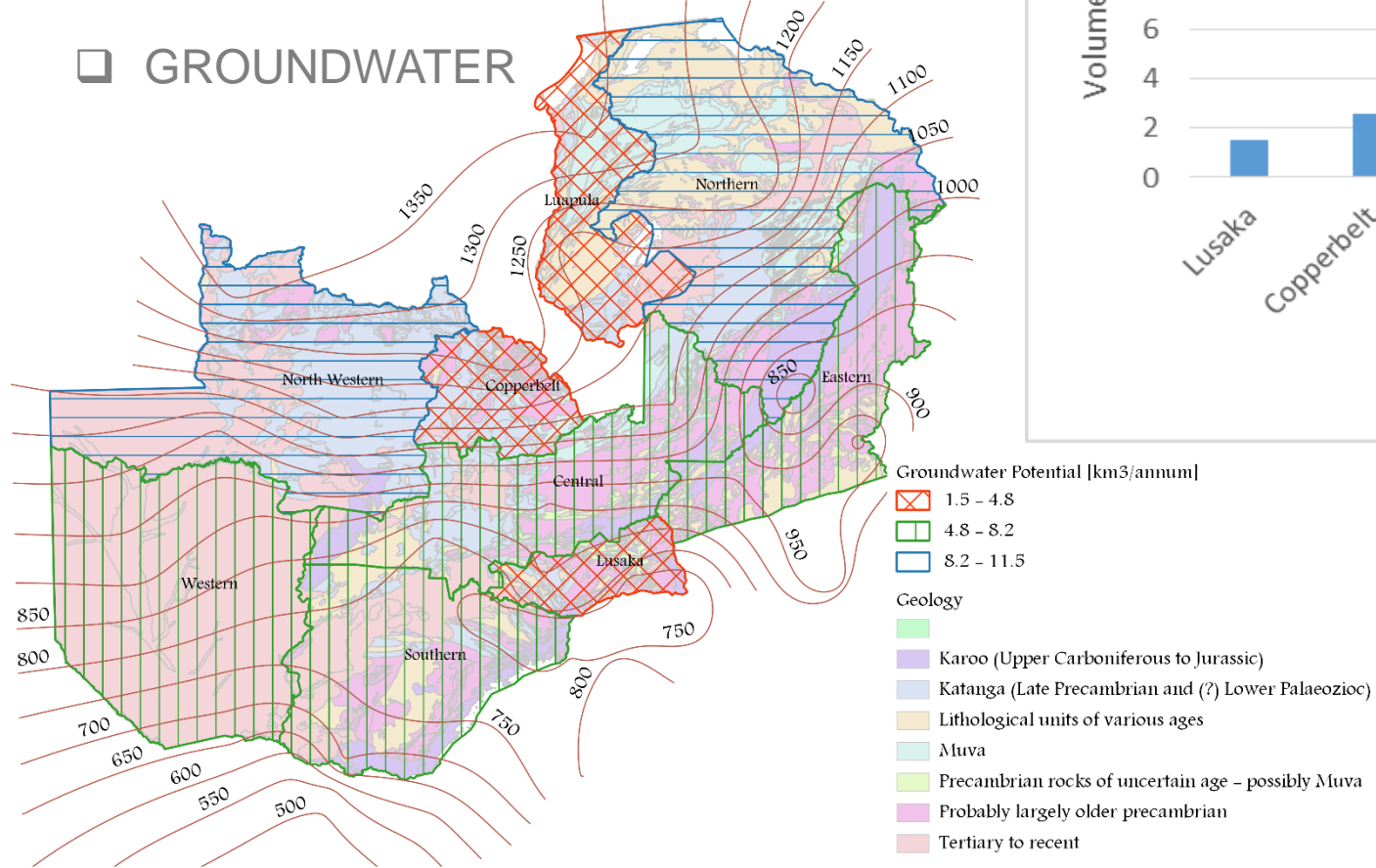
□ WAY FORWARD



INTRODUCTION

The water resources of Zambia

GROUNDWATER

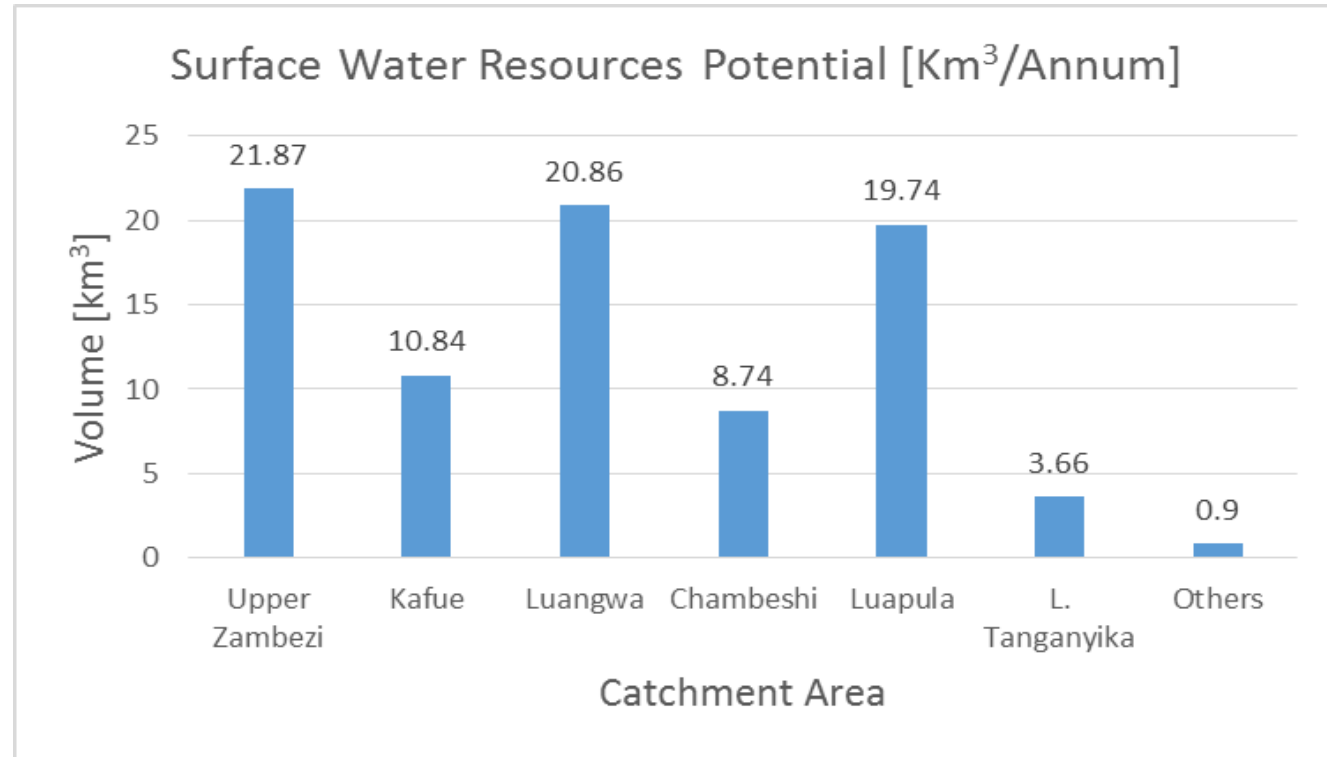
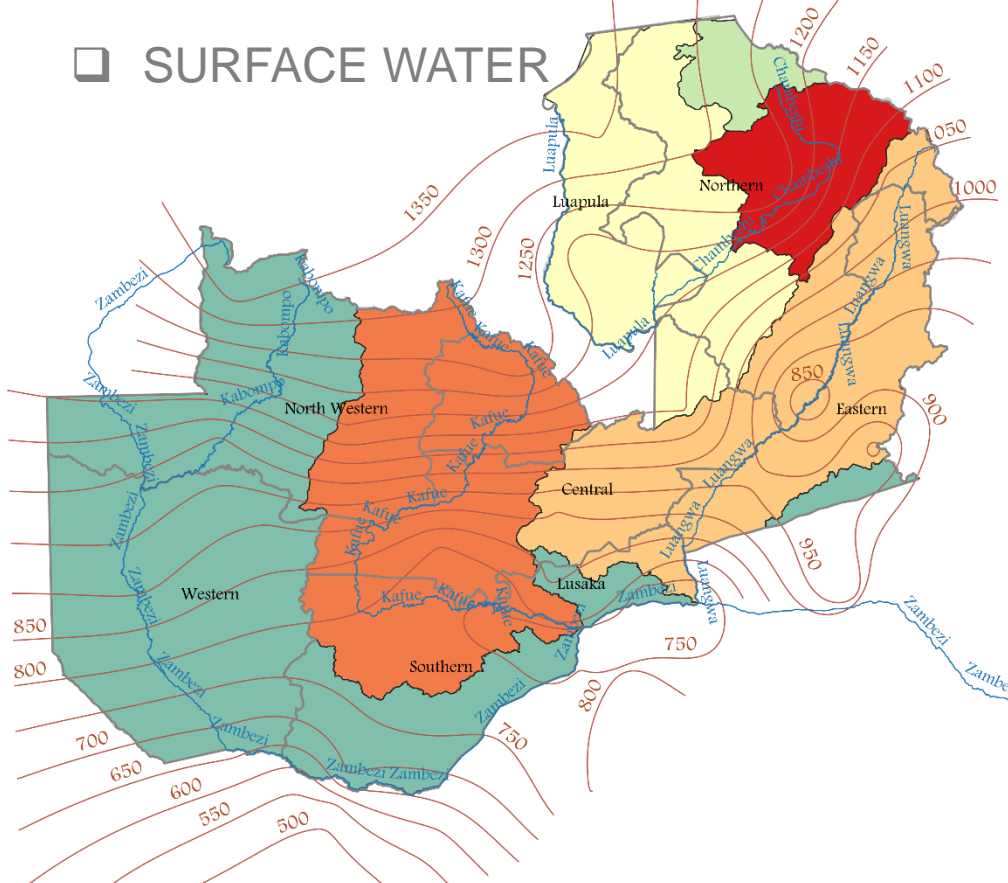


Country estimate 57.4 km³
JICA (1995)

INTRODUCTION

The water resources of Zambia

☐ SURFACE WATER

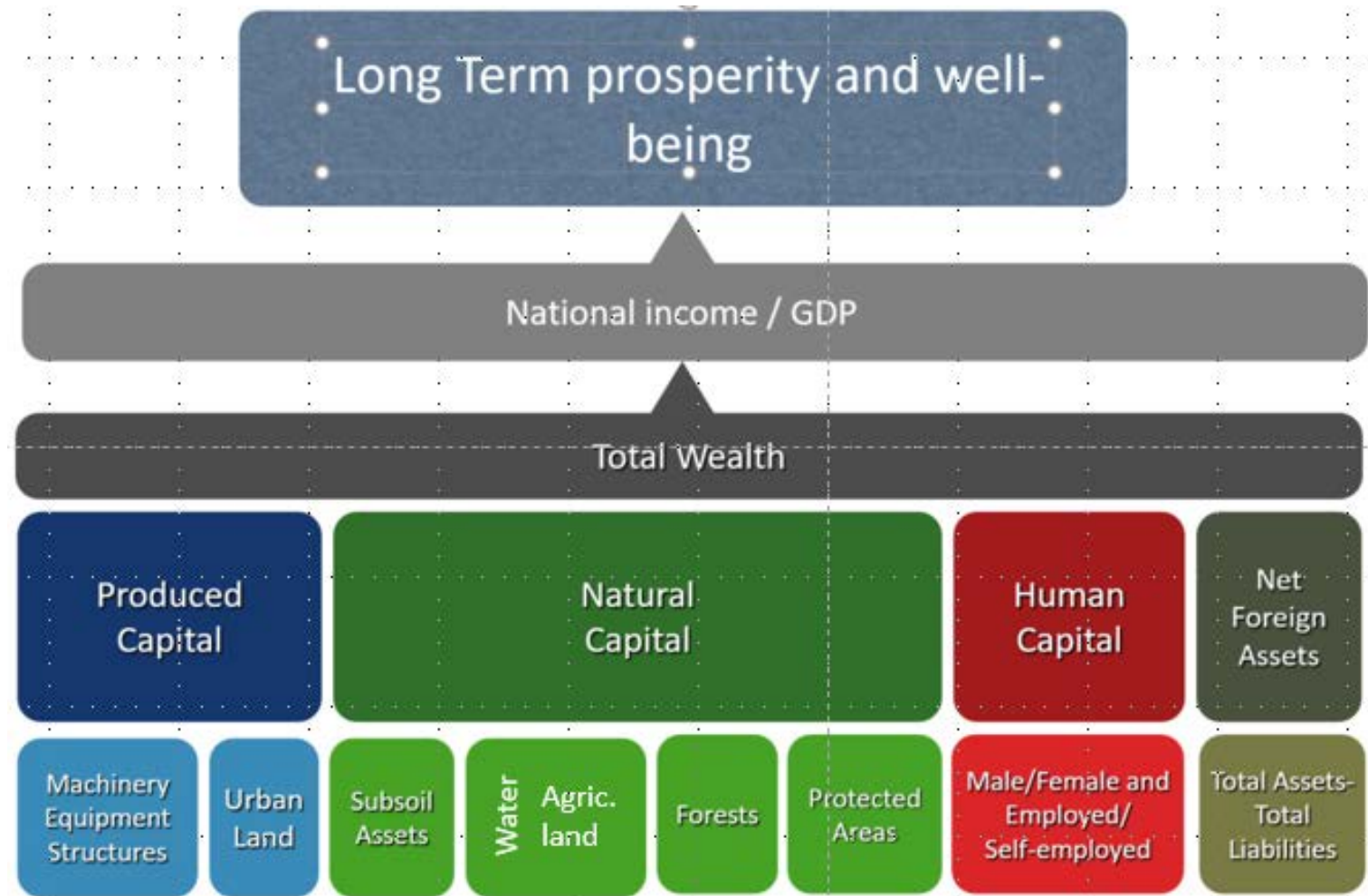


- ☐ 30 year average
- ☐ Country estimate 86.6 km³
- ☐ JICA (1995)

INTRODUCTION

□ Towards better measures of wealth

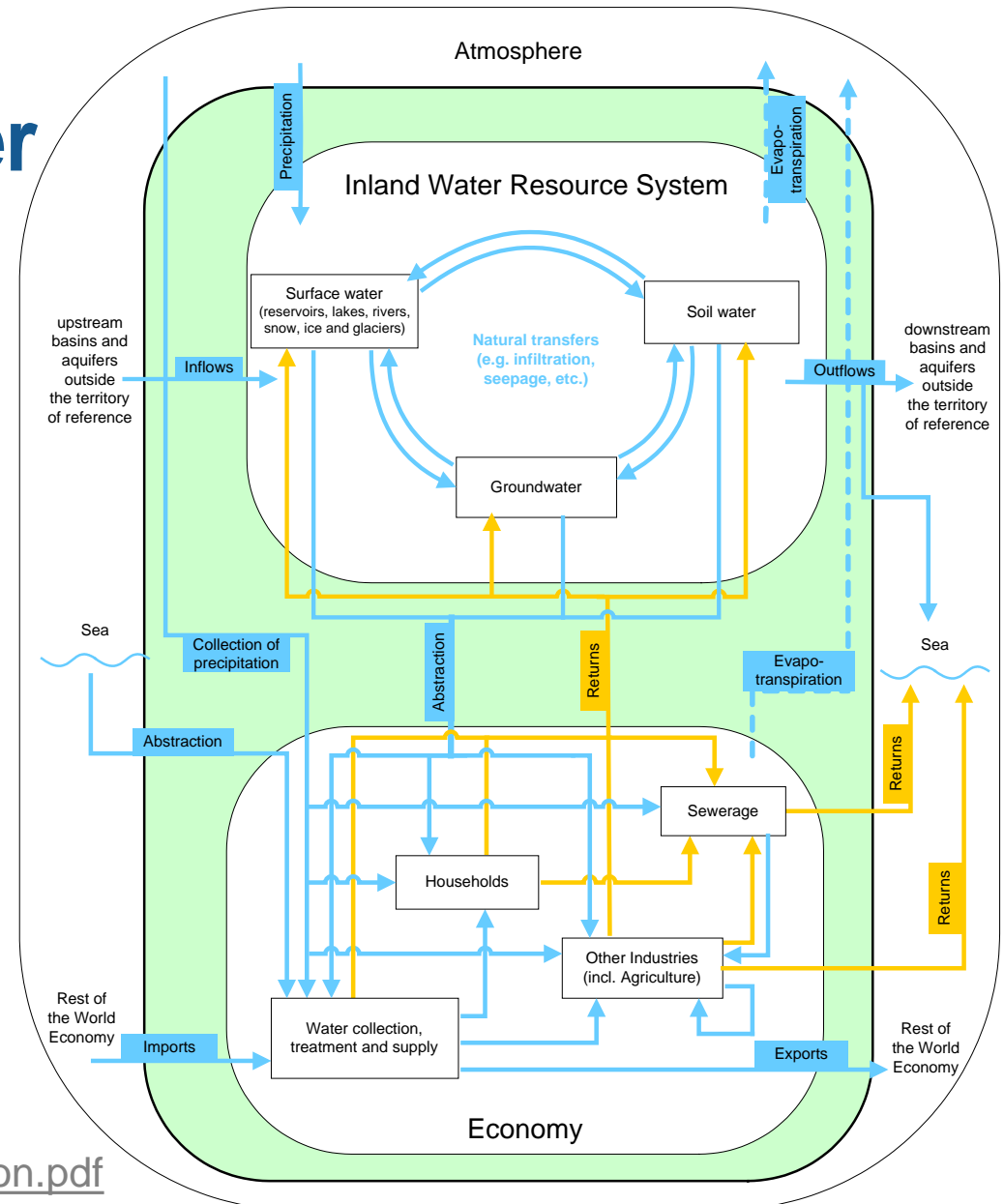
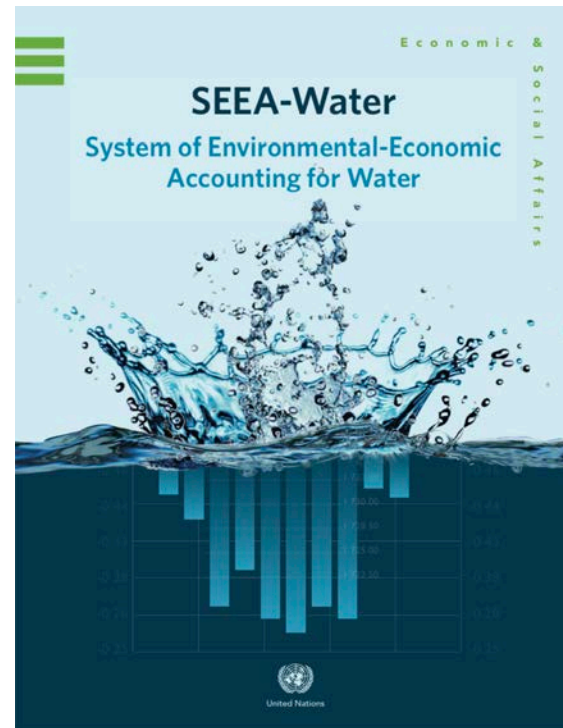
- Economic development is a process of building wealth and managing a portfolio of assets



Natural Capital Accounting is focused on the part of total wealth that comes from land, water, mineral, energy, soil, forests and timber, and ecosystem assets

INTRODUCTION: SEEA Water

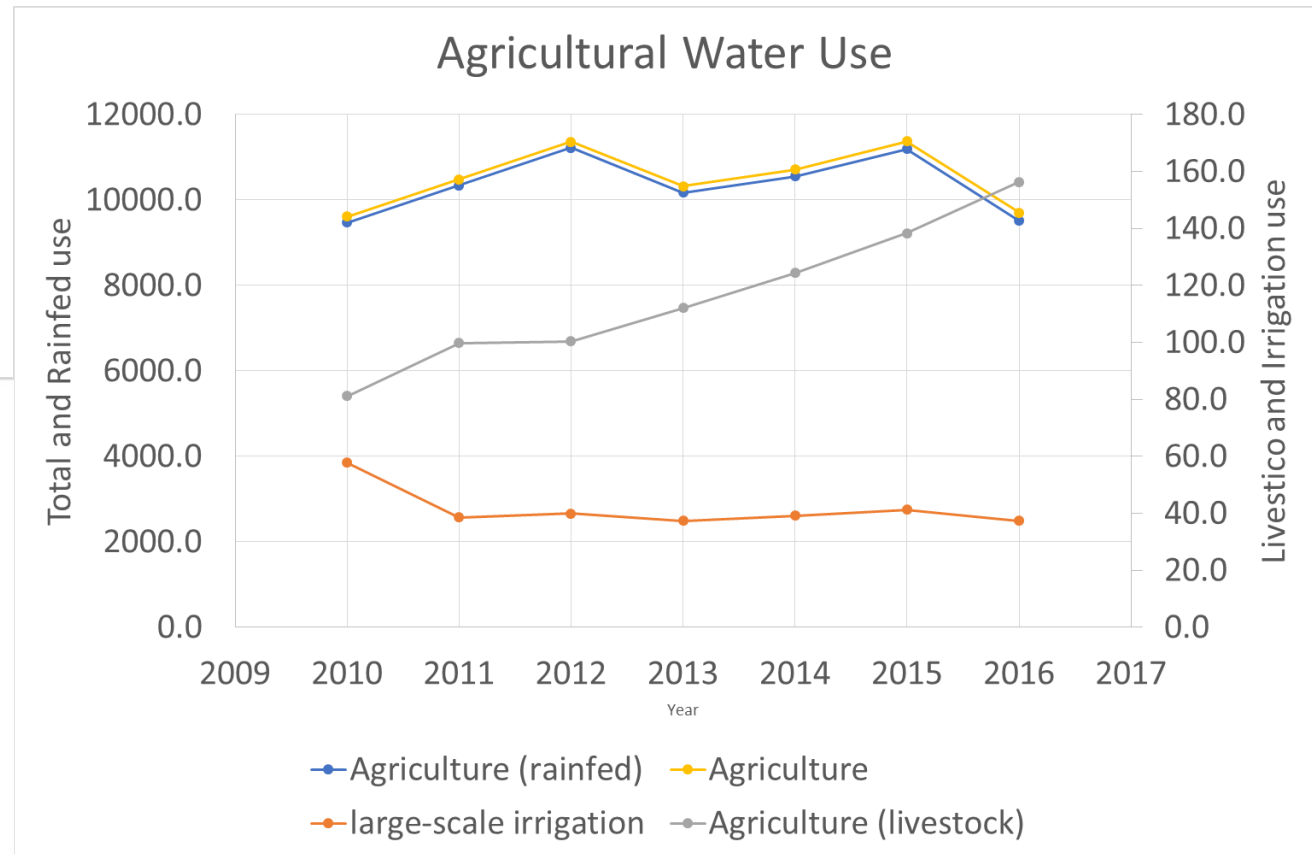
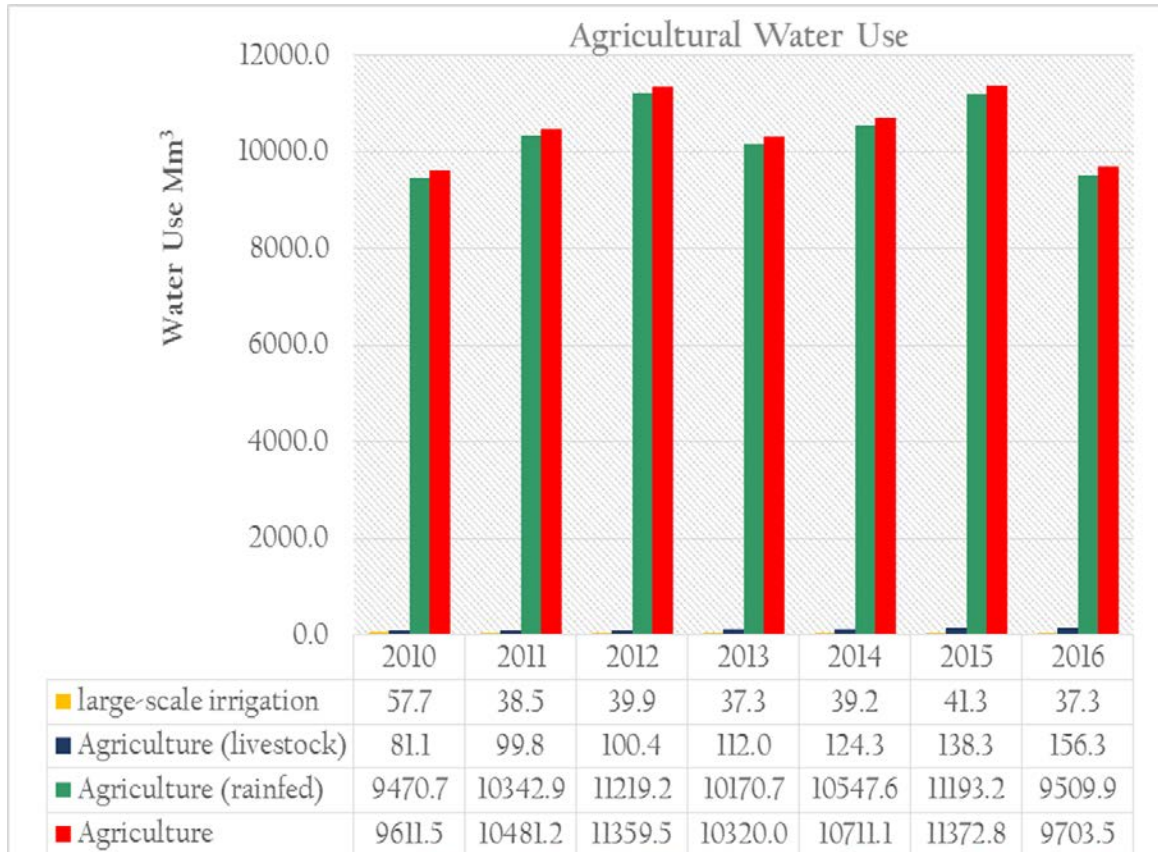
- ❑ Stocks and flows
- ❑ Economy and environment
- ❑ Volume and values
- ❑ Water quality



<https://unstats.un.org/unsd/envaccounting/seeaw/seeawaterwebversion.pdf>

MAIN FINDINGS

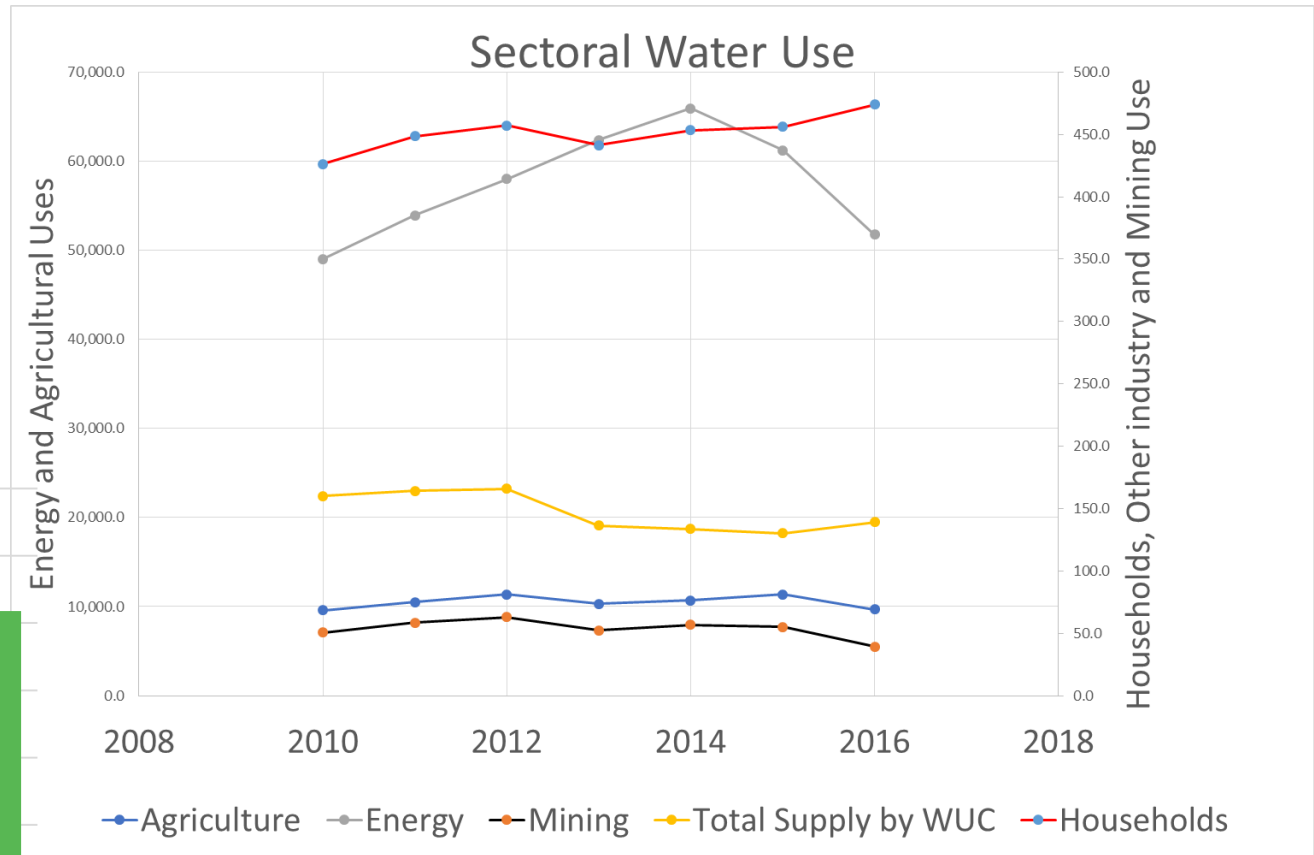
□ Agricultural Water Use



MAIN FINDINGS

▣ Sectoral Water Use

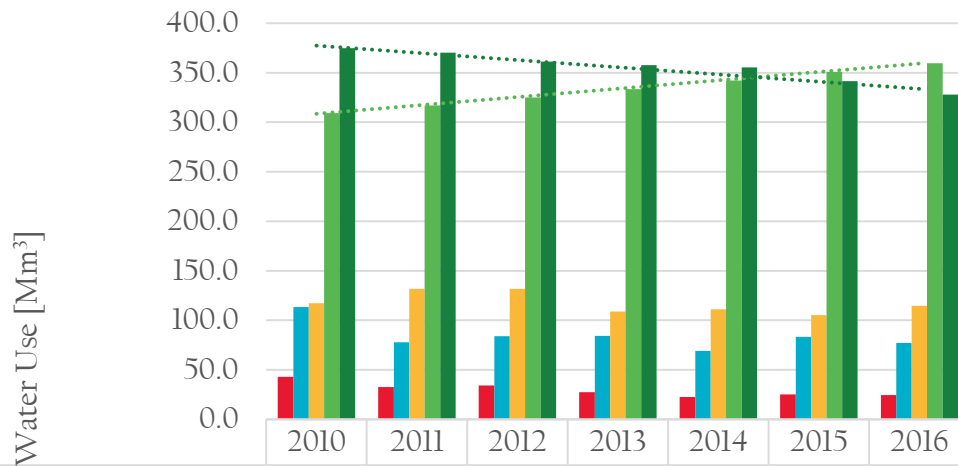
Sectoral Water Use



MAIN FINDINGS

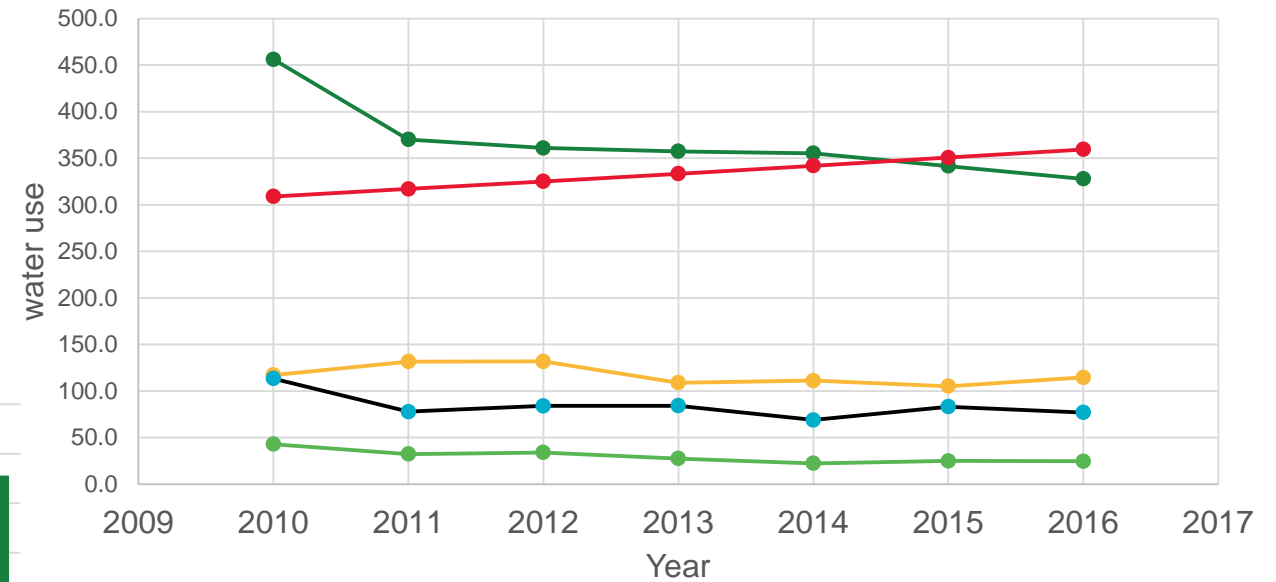
Household & Other Industry Use

Household & Industry Water Use



■ Supply to industry by WUC	43.0	32.4	34.1	27.5	22.4	25.0	24.6
■ Env. Abst. by Ind.	113.4	77.9	84.1	84.2	69.0	83.3	77.1
■ Supply to H.holds by WUC	117.2	131.7	131.9	109.0	111.2	105.3	114.6
■ Env. Abst. by Households	309.1	317.0	325.1	333.4	342.0	350.8	359.5
■ Abstractions by WUC	374.7	370.1	361.1	357.5	355.3	341.5	327.8

Household & Industry Water Use



- Abstractions by WUC
- Env. Abst. by Households
- Environmental Abstractions by Industry
- Supply to H.holds by WUC
- Supply to Industry by WUC

POSSIBLE APPLICATIONS

- ❑ Determining the impacts on water resources as a result of economic growth, the patterns of domestic consumption, and international trade
- ❑ Determining the specific contributions of economic activities to the various pressures on water resources, such as pollution and over abstraction, as well as the opportunities for reducing these pressures
- ❑ Evaluating the possible future water demands under alternative economic development scenarios and determining their sustainability
- ❑ Understanding how changes in sector policies such as agricultural, energy, forestry, land, etc. can affect water resource utilization
- ❑ Linking and enhancing with already existing initiatives such as the Integrated Water Resource Management Information System (IWRMIS) under the Water Resources Management Agency (WARMA) required for capturing and storage of integrated information on environment, water and economic sectors. The database for this would need to be configured along the lines of the International Recommendations for Water Statistics (IRWS) (UN, 2012a)



WAYFORWARD

- ❑ Develop a water statistics database for Zambia following the International Recommendations for Water Statistics (IRWS) and link this with the Smart Zambia framework; including legal and institutional arrangements to operationalize this
- ❑ Mainstream water statistics and natural capital accounting (NCA) for water (NCA) into the operations for the Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) and the Central Statistical Office. A key outcome of this would be the production of annual water statistics and water accounting tables;
- ❑ Build human and institutional capacity for water accounting under MWDSEP, CSO & MNDP; and
- ❑ Ensure that policy actions are informed by the water accounts and statistics.





THANKYOU!!!



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