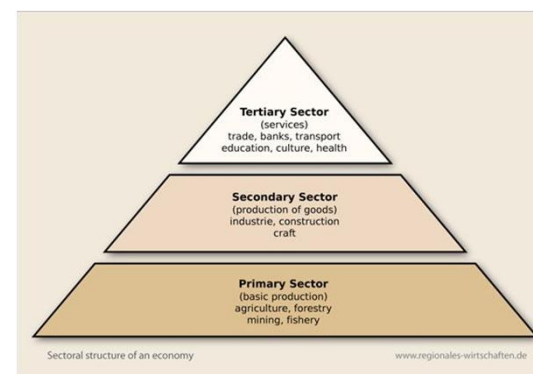**CLASSIFICATION OF WATER RESOURCES AND DETERMINATION OF THE RESOURCE QUALITY OBJECTIVES IN THE LETABA CATCHMENT**

STATUS QUO ASSESSMENT, IUA AND BIOPHYSICAL NODE DELINEATION AND IDENTIFICATION

Economic Regions
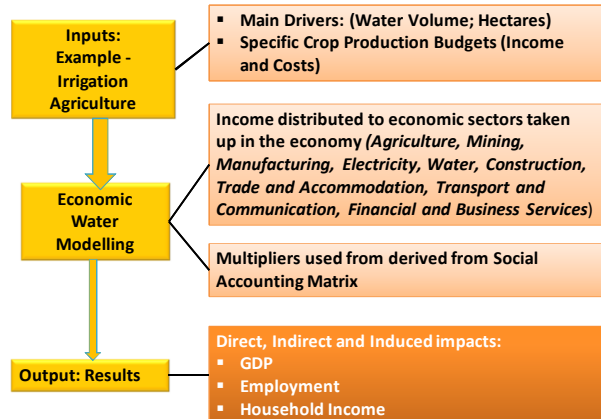

Sectoral structure of the economy

Scope

˝ Eight Economic Regions

˝ Large water volume users

˝ Economic Activities

- Irrigation Agriculture

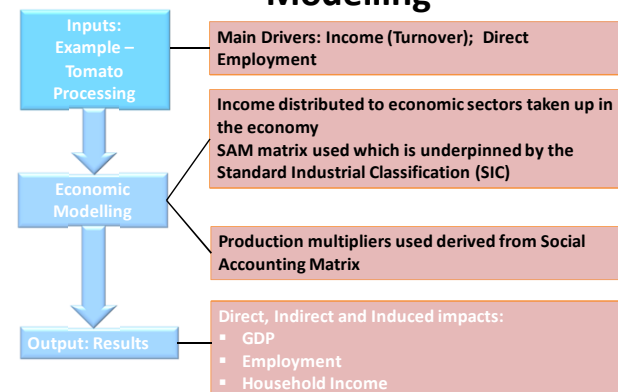- Commercial Forestry

- Industries

- Eco-tourism

APPROACH

˝ Use of the Water Impact Model (WIM) and Production Impact Model (PIM) applied to the Letaba catchment

˝ Components used were:

    - Limpopo Social Accounting Matrix

    - Computer based crop budgets (Combuds)

    - Turnover of industries (ex. Juice, Tomato)

    - Tourism - Number of bed nights sold
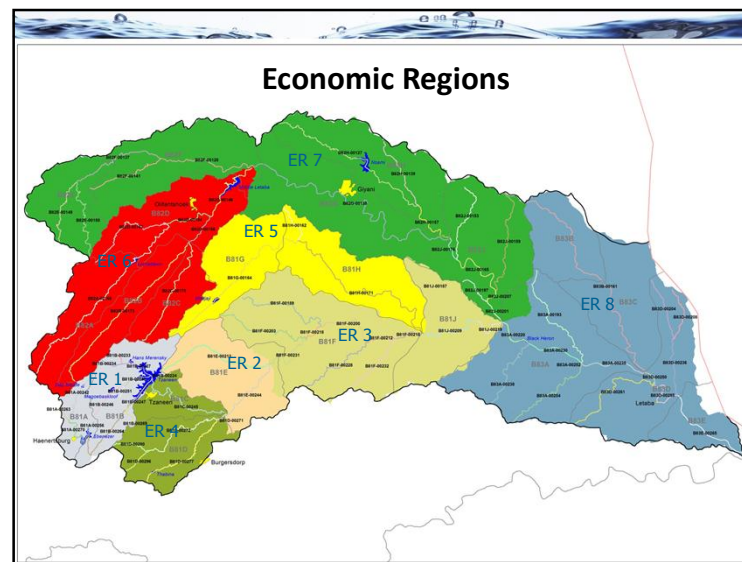
Modeling of Primary Sector in WIM-model

Inputs: Example - Irrigation Agriculture

- **Main Drivers: (Water Volume; Hectares)**
- **Specific Crop Production Budgets (Income and Costs)**

Economic Water Modelling

Income distributed to economic sectors taken up in the economy *(Agriculture, Mining, Manufacturing, Electricity, Water, Construction, Trade and Accommodation, Transport and Communication, Financial and Business Services*)

Multipliers used from derived from Social Accounting Matrix

Output: Results

Direct, Indirect and Induced impacts:
- **GDP**
- **Employment**
- **Household Income**

Secondary and Tertiary sector Modelling

Inputs: Example – Tomato Processing

Main Drivers: Income (Turnover); Direct Employment

Income distributed to economic sectors taken up in the economy
SAM matrix used which is underpinned by the Standard Industrial Classification (SIC)

Economic Modelling

Production multipliers used derived from Social Accounting Matrix

Output: Results

Direct, Indirect and Induced impacts:
- **GDP**
- **Employment**
- **Household Income**

Reasons for identification of Economic Regions (ERs)

˝ Topographic differences
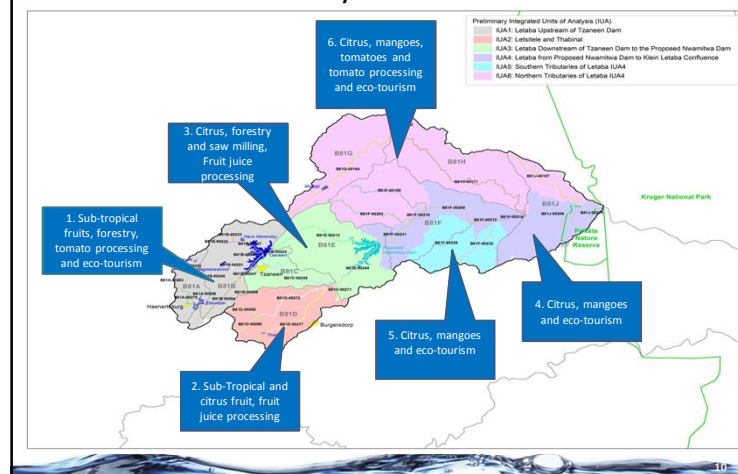˝ Climatic differences
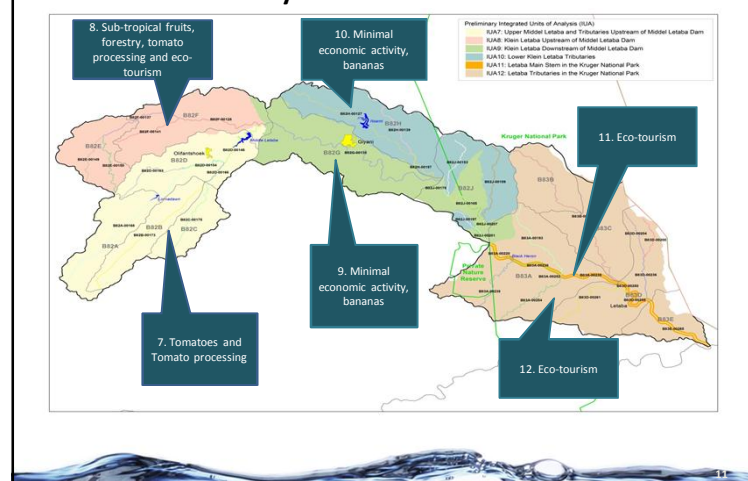˝ Economic activity differences

Economic Regions

MACRO-ECONOMIC PARAMETERS

˝ GDP (direct, indirect and induced)

˝ Number of labour opportunities (direct, indirect and induced)

˝ Distribution of income to households (High and medium, and low)

˝ Note: *Direct labour and payments to low-income households an indication of impact on the alleviation of poverty in the region*.

Economic activity in IUAs: Groot Letaba

Economic activity in IUAs: Middel and Klein Letaba

ECONOMIC REGIONS RESULTs

˝ ER1 - Irrigation agriculture, commercial forestry, sawmills and eco-tourism

˝ ER 2 - ER 7: Dominant sector - Irrigation Agriculture

˝ ER 8 - Eco-tourism

˝ Criteria for selection: Labour opportunities and Income distribution to low income households

STATUS QUO ECONOMIC RATING

The ranking was expressed in the following order: 0 – no importance, 1 – Very low, 2 – Low,
3 – Moderate, 4 – High and 5 – Very high.

Sector	ER1	ER2	ER3	ER4	ER5	ER6	ER7	ER8	Average
Irrigation agriculture	4	4	5	5	5	5	5	0	4.71
Commercial forestry	3	4	0	3	3	3	3	0	2.71
Industry	3	5	0	4	4	4	4	0	3.43
Eco-tourism	2	2	4	2	0	2	2	5	2.71
Average	3.00	3.75	4.50	3.50	4.00	3.50	3.50	5.00	