



Economic Assessment

- Consists of the Status Quo in the Inkomati Catchment
- Large Water Users include:
 - Irrigation Agriculture
 - Commercial Forestry
 - Saw Mills
 - Mining
 - Paper Mills
 - Sugar Mills
 - Industrial Users
- The Economic Value of Water has to be determined





Economic Baseline

- The economic baseline provides the current impacts of water users in the respective sub-systems
- These impacts are calculated on variables such as:
 - Gross Domestic Product (GDP)/Gross Value Added (GVA)
 - Business Output (Production)
 - Employment
 - Household Income
- These impacts are modelled using a Macro-Economic Impact Model
- The model used for this project is a Social Accounting Matrix (SAM)



Social Accounting Matrix (SAM)

- A Social Accounting Matrix (SAM) represents flows of all economic transactions that take place within an economy (regional or national)
- SAMs refer to a single year providing a static picture of the economy
- The Water Impact Model includes a number of primary elements, these include: **Social Accounting Matrix (SAM)**
 - Economic Data
 - Water usage information
 - Production
 - Economic Multipliers



Types of Impacts

- **Direct impact:** refers to effects occurring directly in the sector.
- **Indirect impact:** refer to those effects occurring in the different economic sectors that link backward to the sector in question due to the supply of intermediate inputs
- **Induced impact:** refers to the chain reaction triggered by the salaries and profits that are ploughed back into the economy in the form of private consumption expenditure
- **Water Quality:** Acid mine drainage will impose a future cost on the catchment and must be taken into consideration.





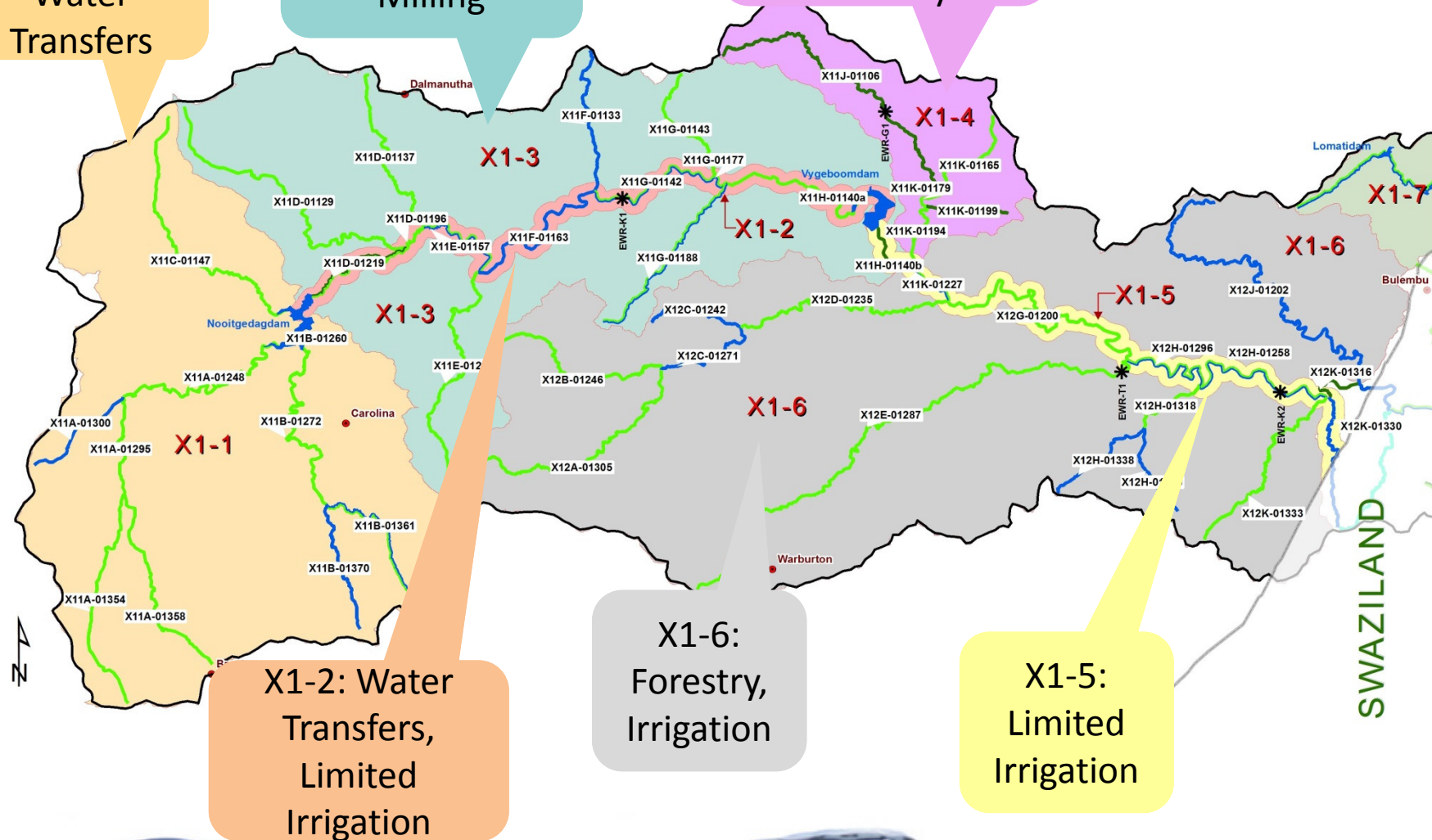
Main Economic Activities

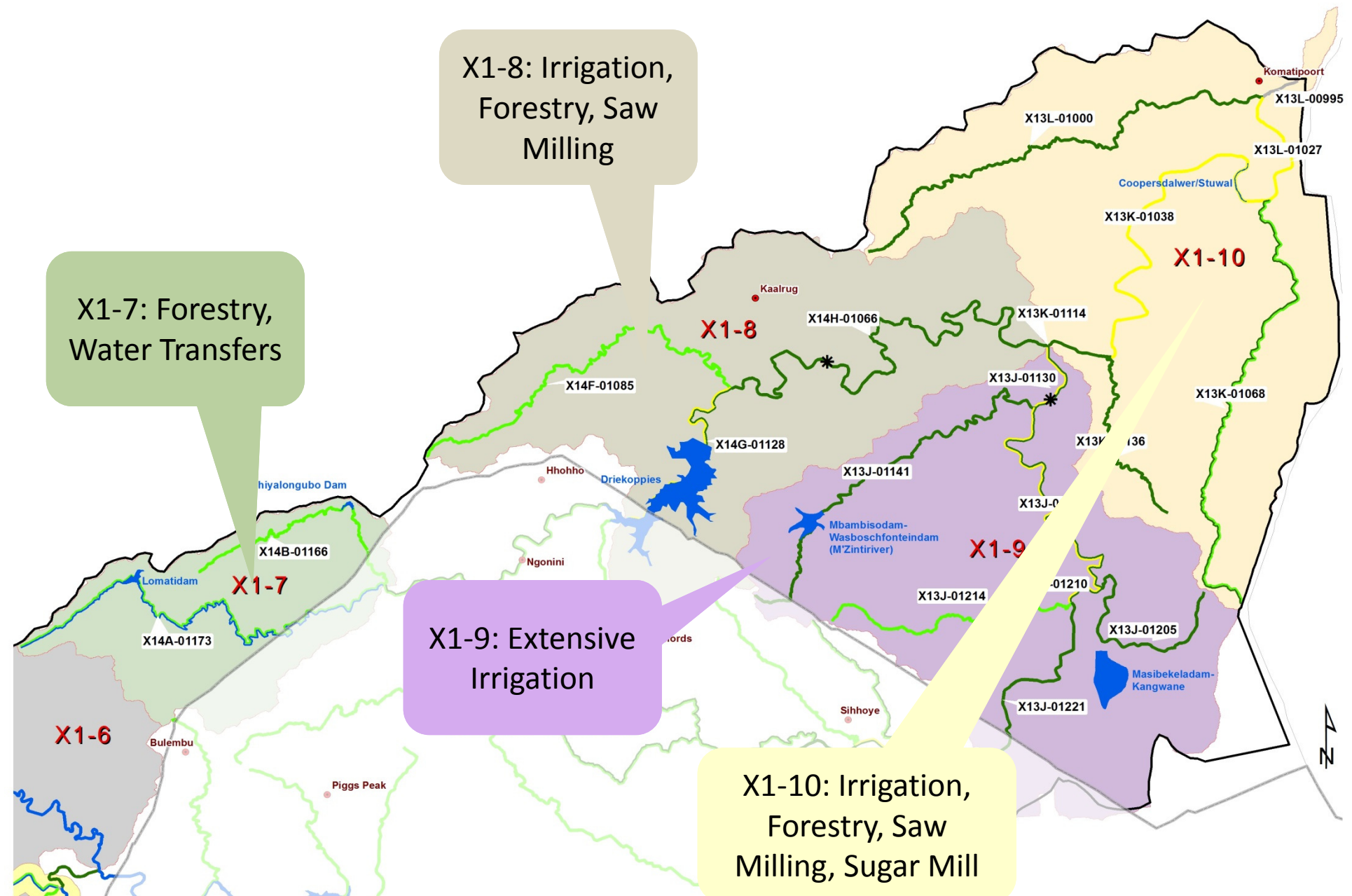
Komati	Crocodile	Sabie
Irrigation Crops	Irrigation Crops	Irrigation Crops
Commercial Forestry	Commercial Forestry	Commercial Forestry
Coal Mining	Tourism	Saw Milling
Nickel Mine	Gold Mining	Tourism
Saw Milling	Manganese Mining	
Sugar Mill	Saw Milling	
Tourism	Paper Milling	
	Sugar Mill	
	Industrial	
	Tourism	

X1-1: Coal
Mining,
Water
Transfers

X1-3: Forestry,
Irrigation, Saw
Milling

X1-4: Nickel
Mining, Forestry,
Irrigation,
Forestry



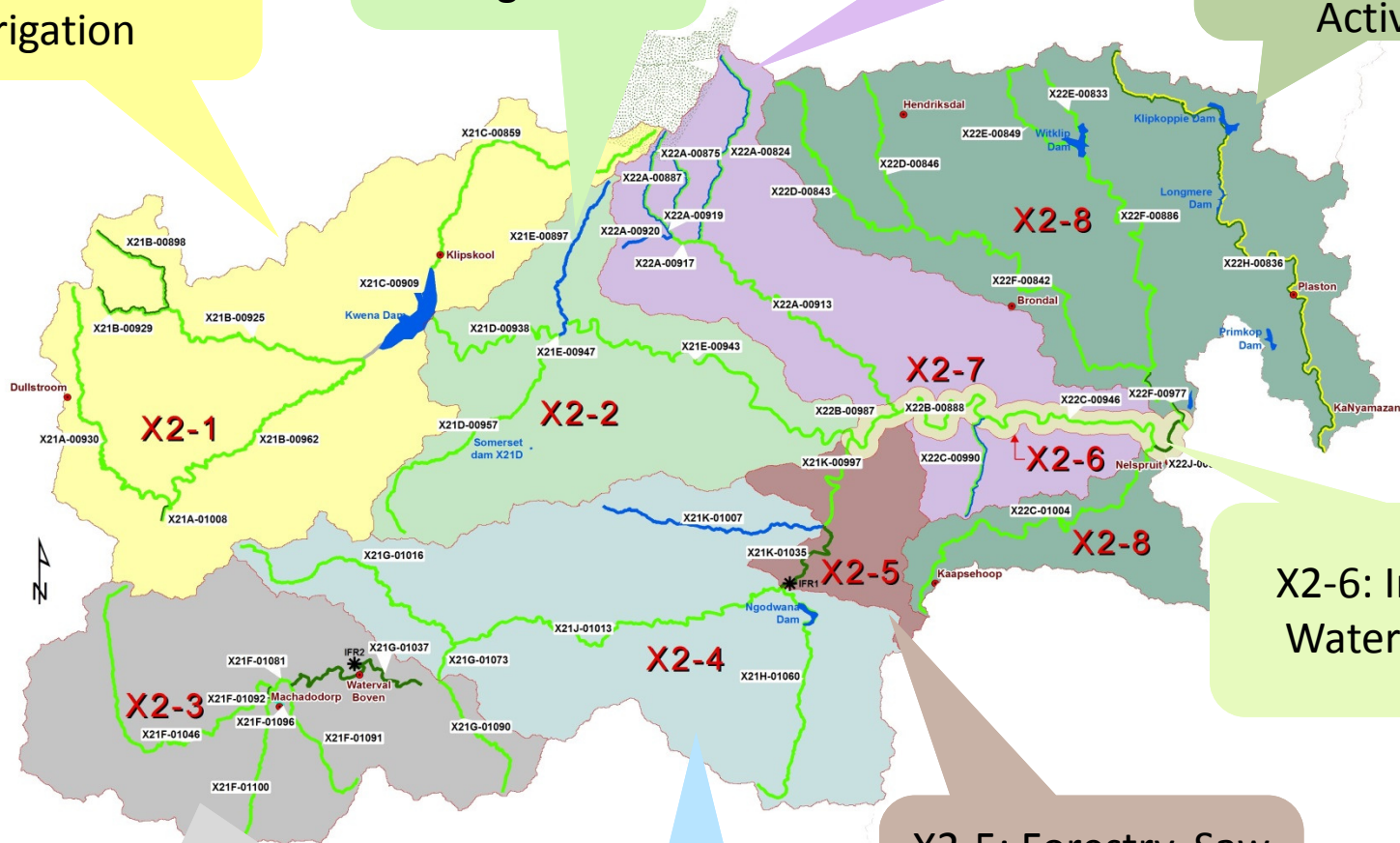


X2-1: Forestry,
Trout Fishing,
Irrigation

X2-2: Forestry,
Saw Milling,
Irrigation

X2-7: Forestry,
Saw Milling,
Irrigation

X2-8: Forestry,
Irrigation, Saw
Milling, Industrial
Activities



X2-3: Mining,
Forestry, Tourism,
Ferrochrome
Smelter

X2-4: Forestry,
Paper Mill,
Irrigation

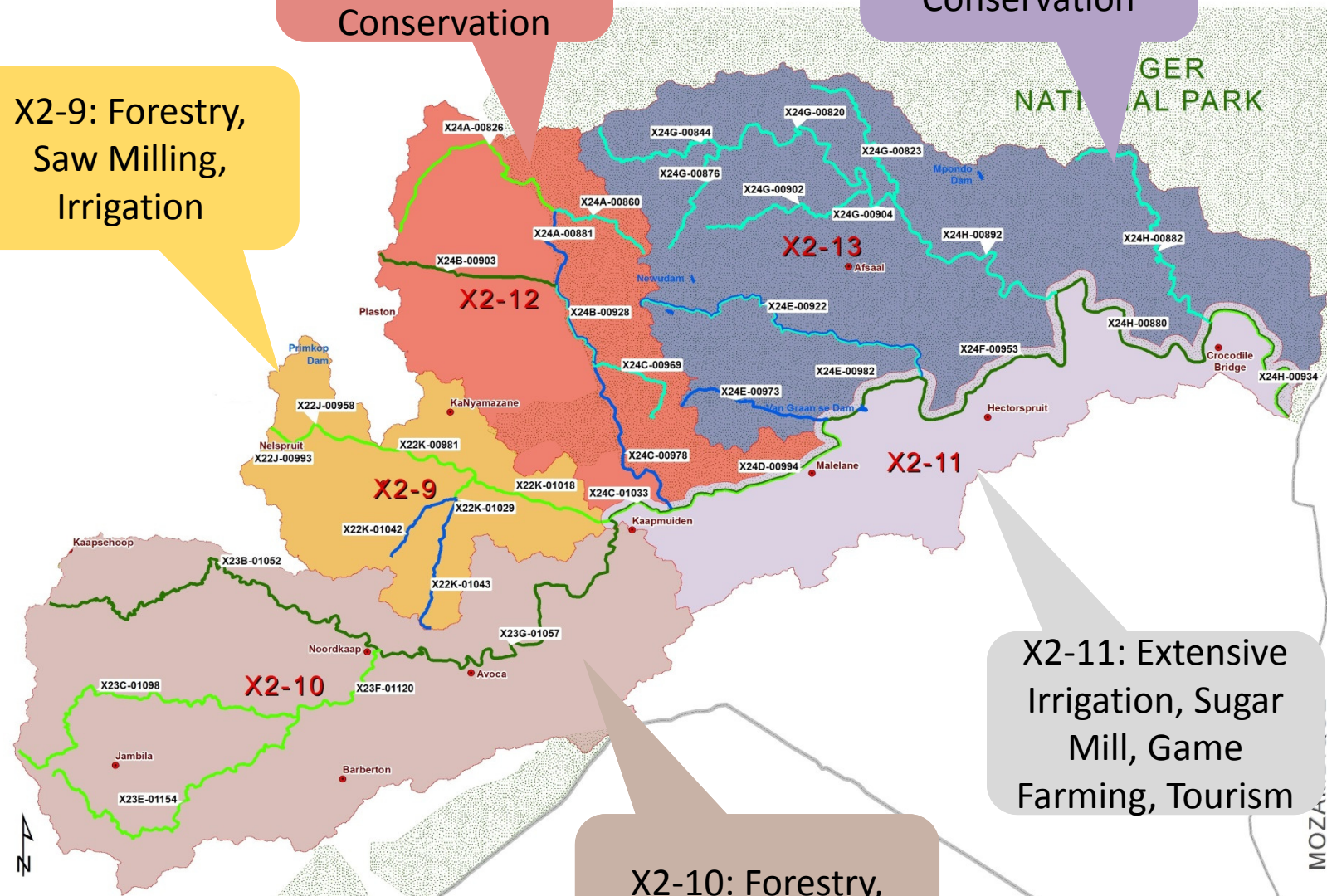
X2-5: Forestry, Saw
Milling, Limited
Irrigation

X2-6: Irrigation,
Water transfer

X2-9: Forestry,
Saw Milling,
Irrigation

X2-12:
Subsistence
Farming, Nature
Conservation

X2-13: Tourism,
Nature
Conservation

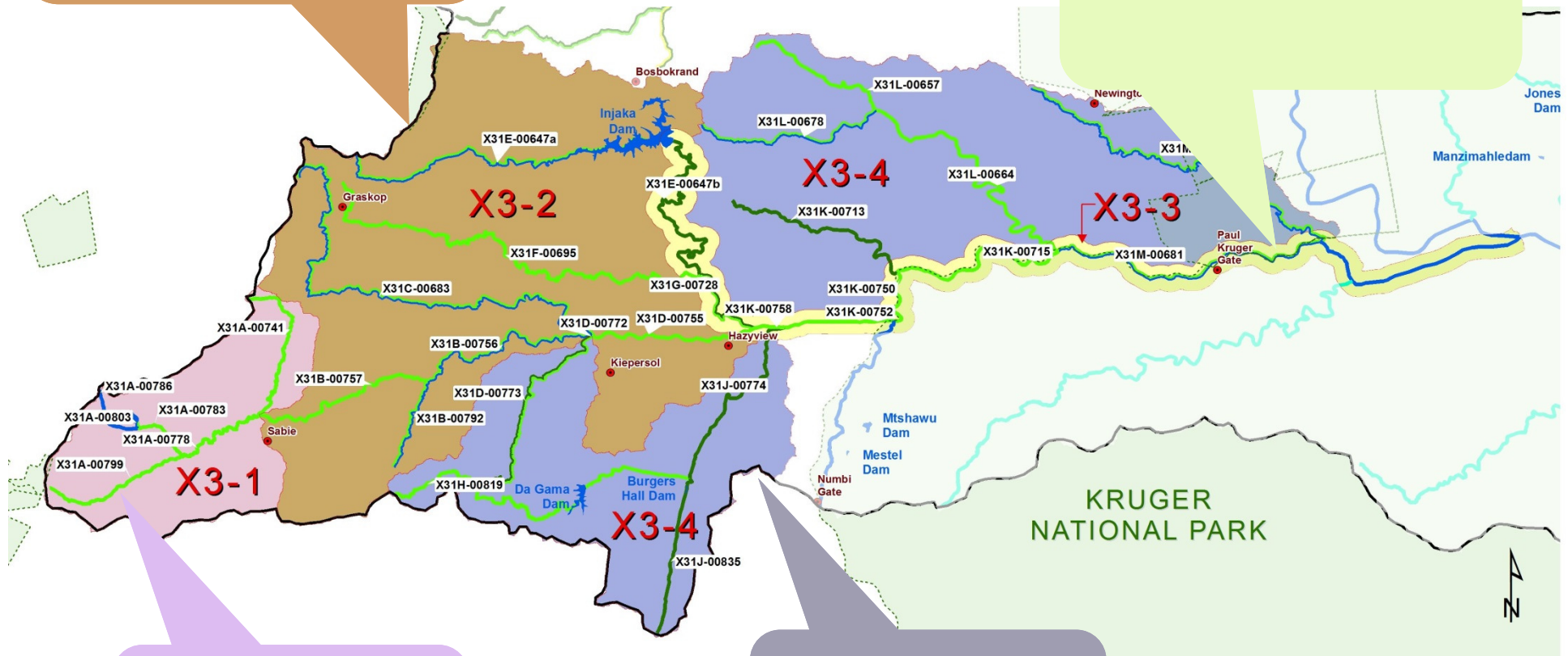


X2-11: Extensive
Irrigation, Sugar
Mill, Game
Farming, Tourism

X2-10: Forestry,
Mining, Irrigation

X3-2: Forestry, irrigation,
Tourism, Saw milling

X3-3: Irrigation

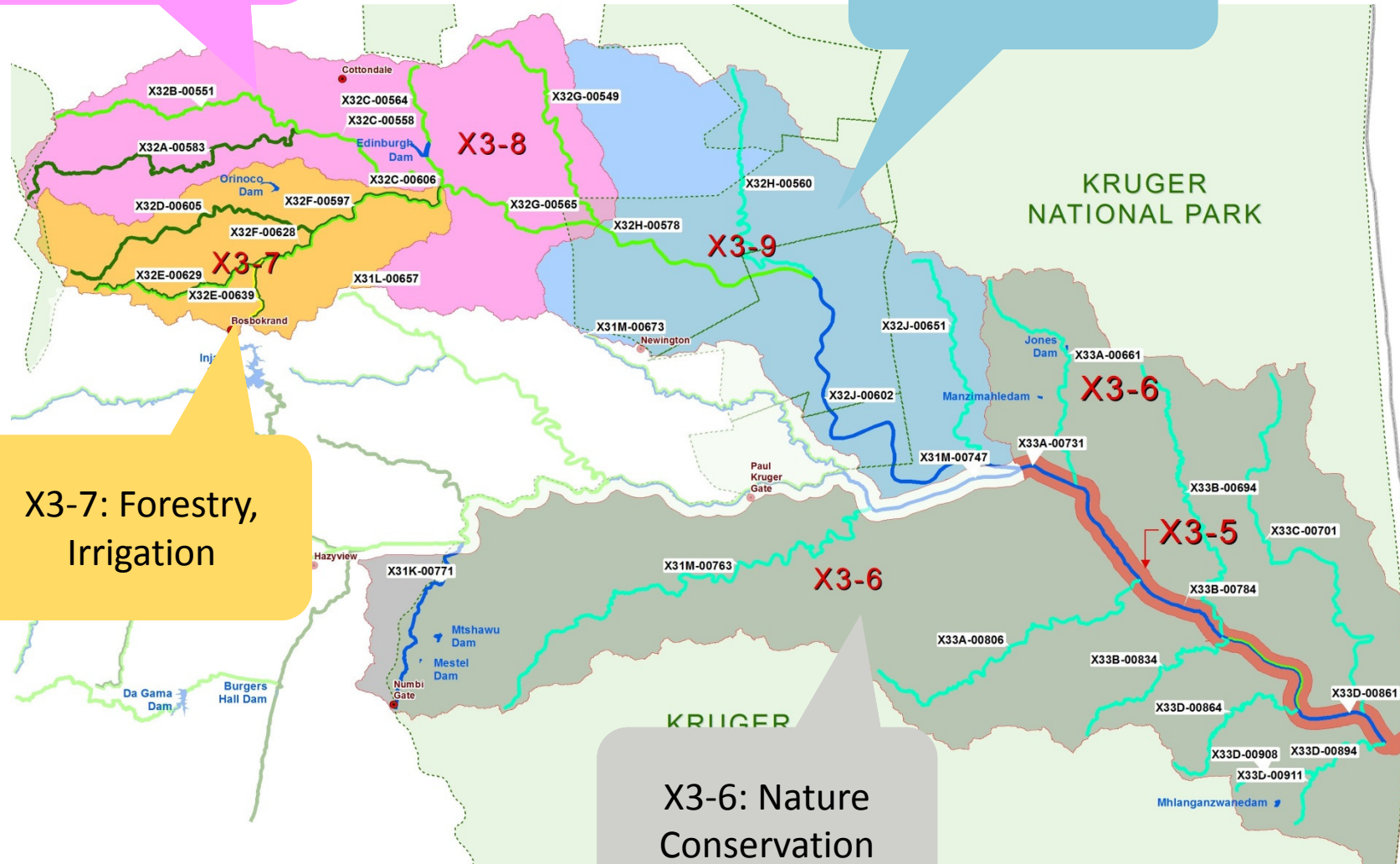


X3-1: Forestry, Saw
Milling, Tourism

X3-4: Forestry, Saw
Milling, Extensive
Irrigation

X3-8: Forestry,
Irrigation

X3-9: Nature
Conservation



X3-7: Forestry,
Irrigation

X3-6: Nature
Conservation



Summary and Conclusions

- The economy of the Inkomati is dominated by Irrigation and Forestry which provide both income and substantial employment opportunities.
- Other important sectors are tourism and mining.