Development of irrigated agriculture in Angola

Effects on the downstream Okavango Delta

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The Okavango Delta

- situated in a desert
- all water evaporates
- a biodiversity hotspot
How much current irrigation?

- classification of satellite images
How big is the potential for irrigated agriculture?

Satellite based radar images used for criteria

Agriculture defined from the parameters:
- Horizontal distance
- Vertical distance
- Slope of landscape
How is the river flow affected if the full potential for agriculture is used?

- The flow decreases with with 35% in the wet season
- The river dries out in the dry season
What is the impacts on the Okavango Delta?

- The depth to groundwater increases
- The delta decrease in size
How big is the impacts on the Okavango Delta nature?

- Increased agriculture decrease the wet ecoregions
- The dry area increase in size
Annual benefits from agriculture = 800 million US$

Value of 1m3 water = 0.15 US$

Tourism benefits > 1 billion US$