



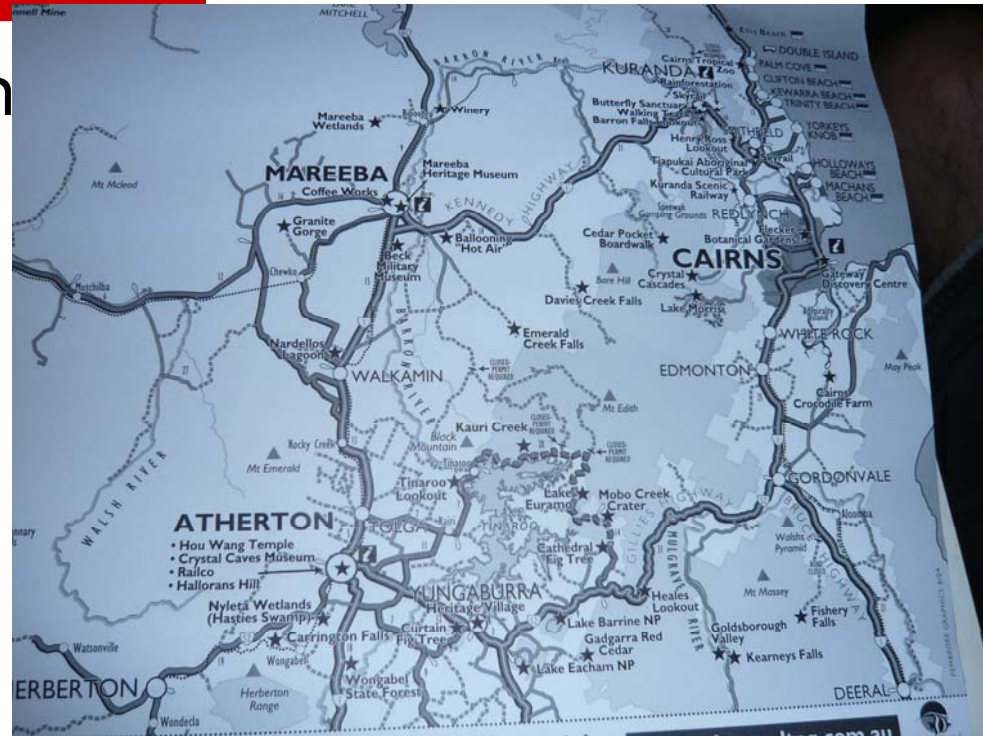
Agriculture in Atherton Tableland

Outline

- Agricultural potential and constraints
 - Technology
 - The environmental impact from agricultural activities
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Potential

- ❑ West of Cairns with tropical climate
- ❑ High accessibility (Close to town centre)
- ❑ Flat and gentle relief
- ❑ Large area of land



Potential

- ❑ Natural resources for plant growth
- ❑ Demand for high quality agricultural products
- ❑ Need for generation of local electricity and fuels



Constraints

- Limited rainfall
 - Existence of TRF
 - Regional competition
 - May be subject to habitual changes
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Climatic Condition in Mareeba

- ❑ Temperature
 - ❑ January:
 - ❑ Average maximum: 34°C
 - ❑ Average minimum: 20°C
 - ❑ July:
 - ❑ Average maximum: 25°C
 - ❑ Average minimum: 10°C
 - ❑ → suitable for agricultural activities
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Climatic Condition in Mareeba

- Rainfall
 - Varies across areas
 - Near the coastal: 1300mm
 - The west: 660mm
 - → Main constraint
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Technology

- Irrigation
 - Mechanization
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Irrigation

- ❑ Tinaroo Falls Dam was built in the Barron River
 - ❑ Water is stored in late summer
 - ❑ Available in dry months
 - ❑ Water is released along Mareeba-Dimbulah Irrigation Channel
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Irrigation



Irrigation

- ❑ Irrigation outlets (to distribution channel):
2x1500mm radial gates
 - ❑ Irrigation area: 1,175 km sq.
 - ❑ Irrigated farmland area: 415 km sq.
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Mechanization



Impacts on the environment

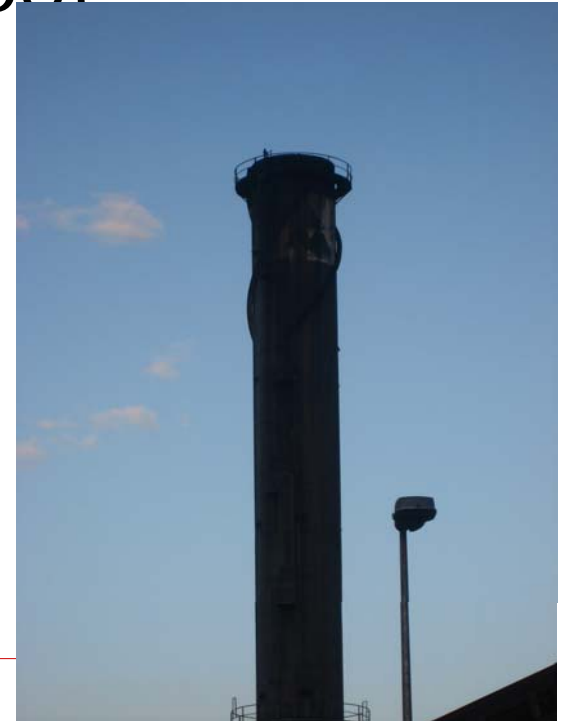
Direct :

Water pollution

- > monoculture (e.g. sugarcane, corns)
 - water washes the agro-chemicals
 - eutrophication + bleaching of coral reef
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Impacts on the environment

- Air pollution
 - burning of sugarcane fiber
 - release of smoke and soot



Impacts on the environment

Indirect:

- Energy generation by fiber
 - use less coal
 - Modification of natural landscape
 - e.g. dam construction, railway
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Impacts on crops

- Use of bio-fuels
 - affects the world food supply and prices
- Monoculture
 - over-use of pesticides and herbicides
 - adaption of chemicals by pests
 - pests become more resistant
 - intensifies the insect problem

