

هيئة البيئة
ENVIRONMENT AUTHORITY

Mangrove Project in Oman

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Ramsar Sites:

- Qurm Nature Reserve – (Muscat) registered.
- Al Ansab Wetland – (Muscat) registered.
- Wetlands Reserve – under process to register as Ramsar site.



Classification of wetlands in Oman

- Coastal Wetlands: Operated By Environment Authority.
- Internal Wetlands: Operated By Ministry of Agriculture, Fisheries Wealth & Water Resources.
- Human Made Wetlands: Companies.



What is Mangrove

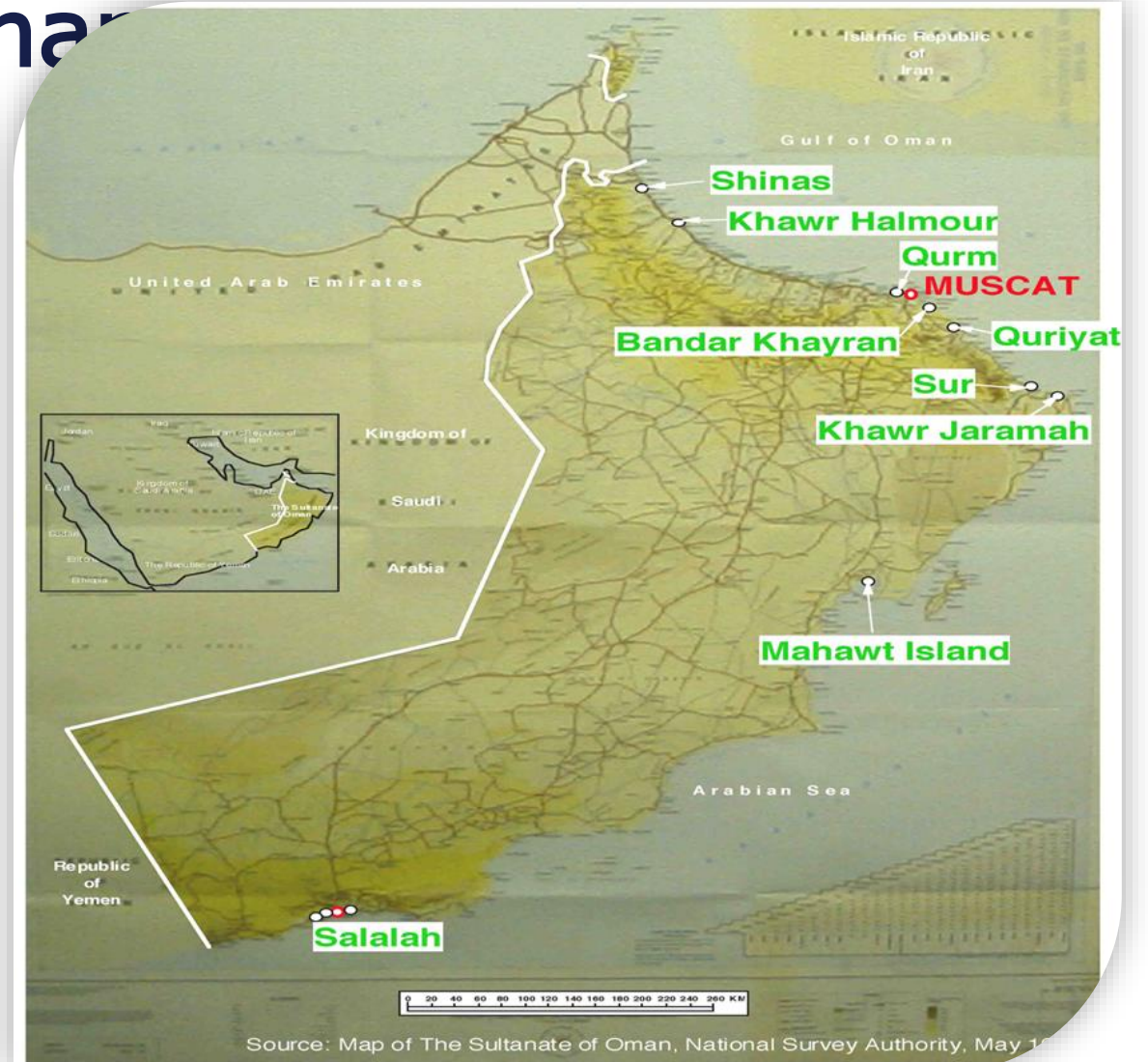
Mangrove forests are a unique ecosystem generally found along sheltered coasts where they grow abundantly in saline soil and brackish water.



Nature Mangrove Forests in Oman

1. Shinas.
2. Khawr Halmour.
3. Qurm.
4. Bandar Khayran.
5. Quriyet.
6. Sur.
7. Khawr Jaramah.
8. Mahawt Island.
9. Salalah.

All mangrove forest in Oman is composed of *Avicennia marina*



Benefits of mangrove

- Mangrove forests one of the biggest environment system to absorb and storage carbon.
- Protect the khawr from flooding and erosion .
- Using their Timber for building house, boats, fencing, paper.



- It is major spawning nursery and breeding habitat for commercial fishery species and prawns.
- Important site for habitat birds.



Dam





Women and children working in mangrove forest (fishing), Mahawt Island



Muhot Island



We have four mangrove nursery in Oman



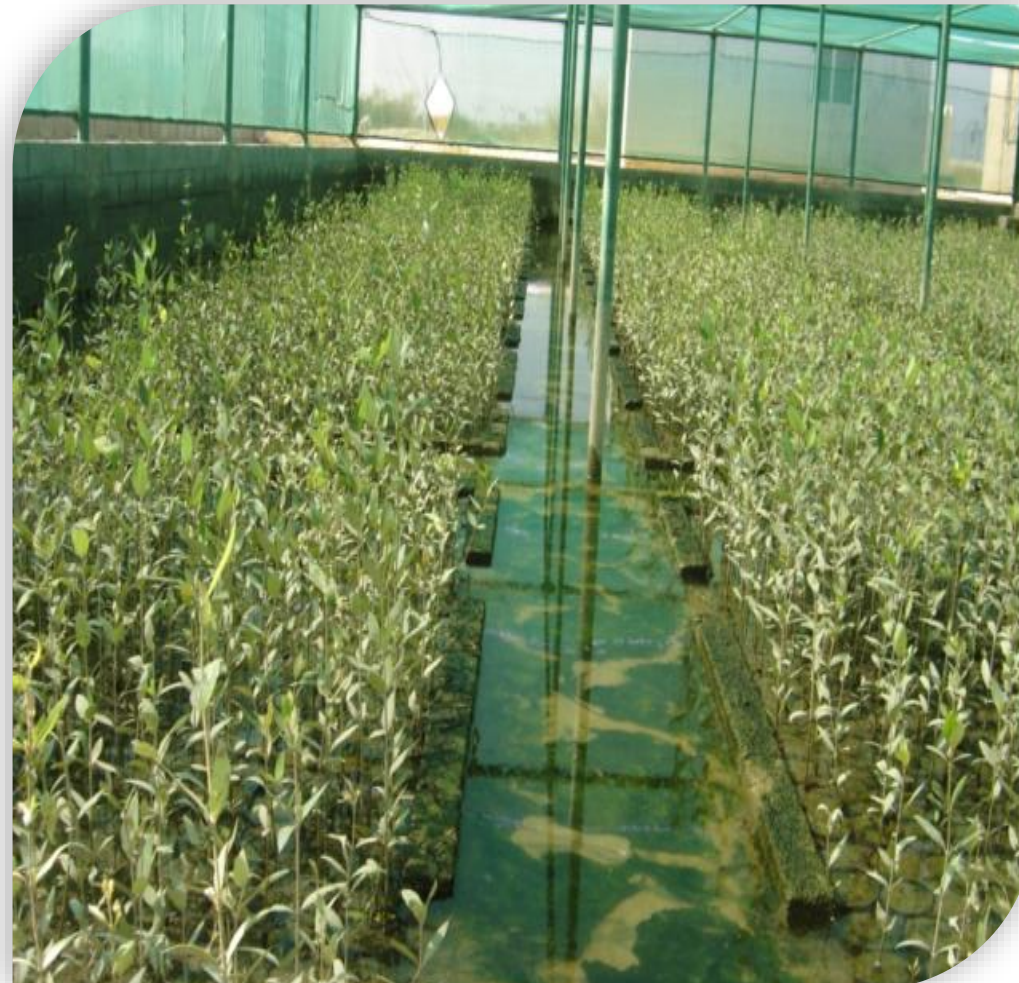




Tidal Irrigation



An intake channel









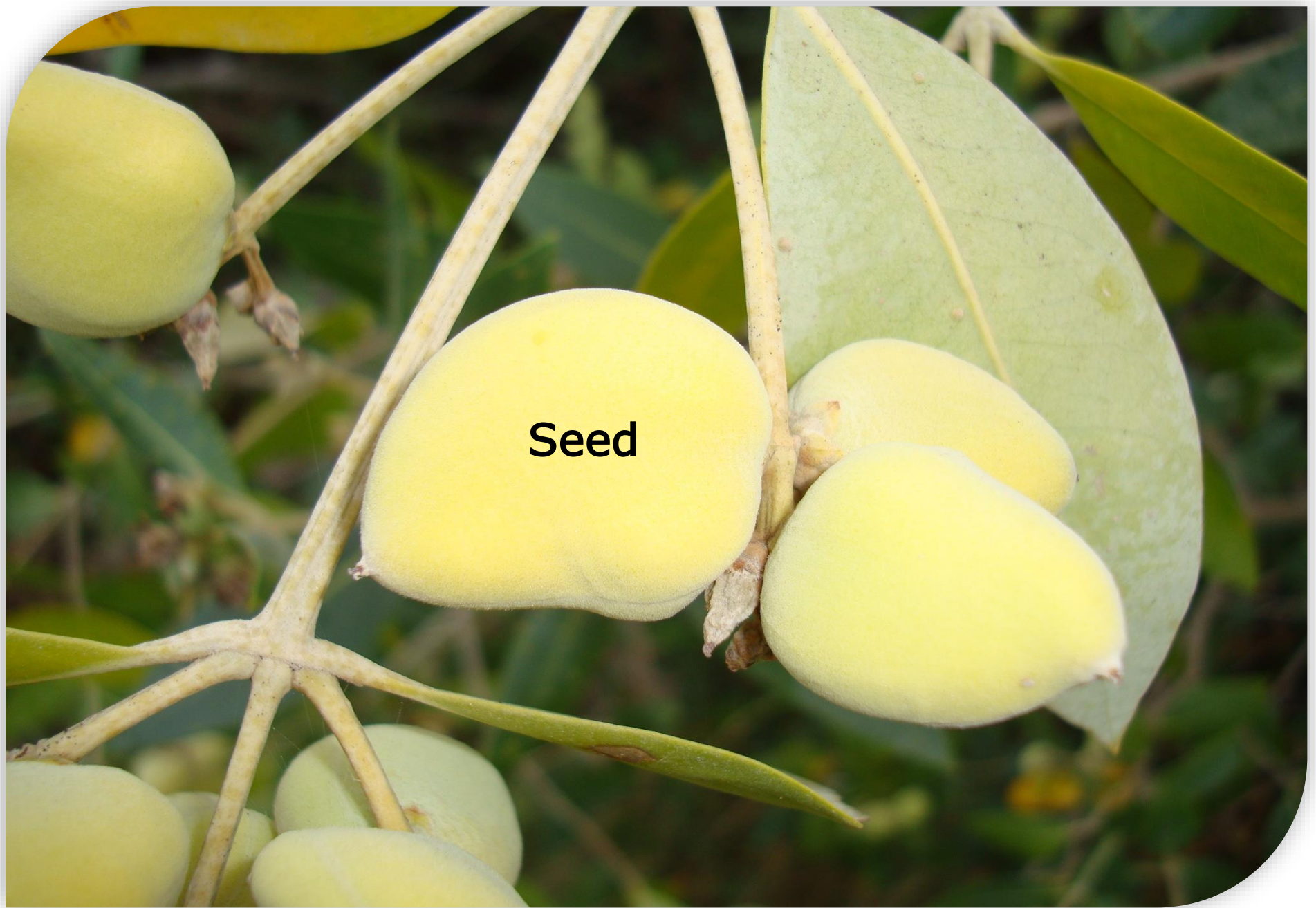
Pump

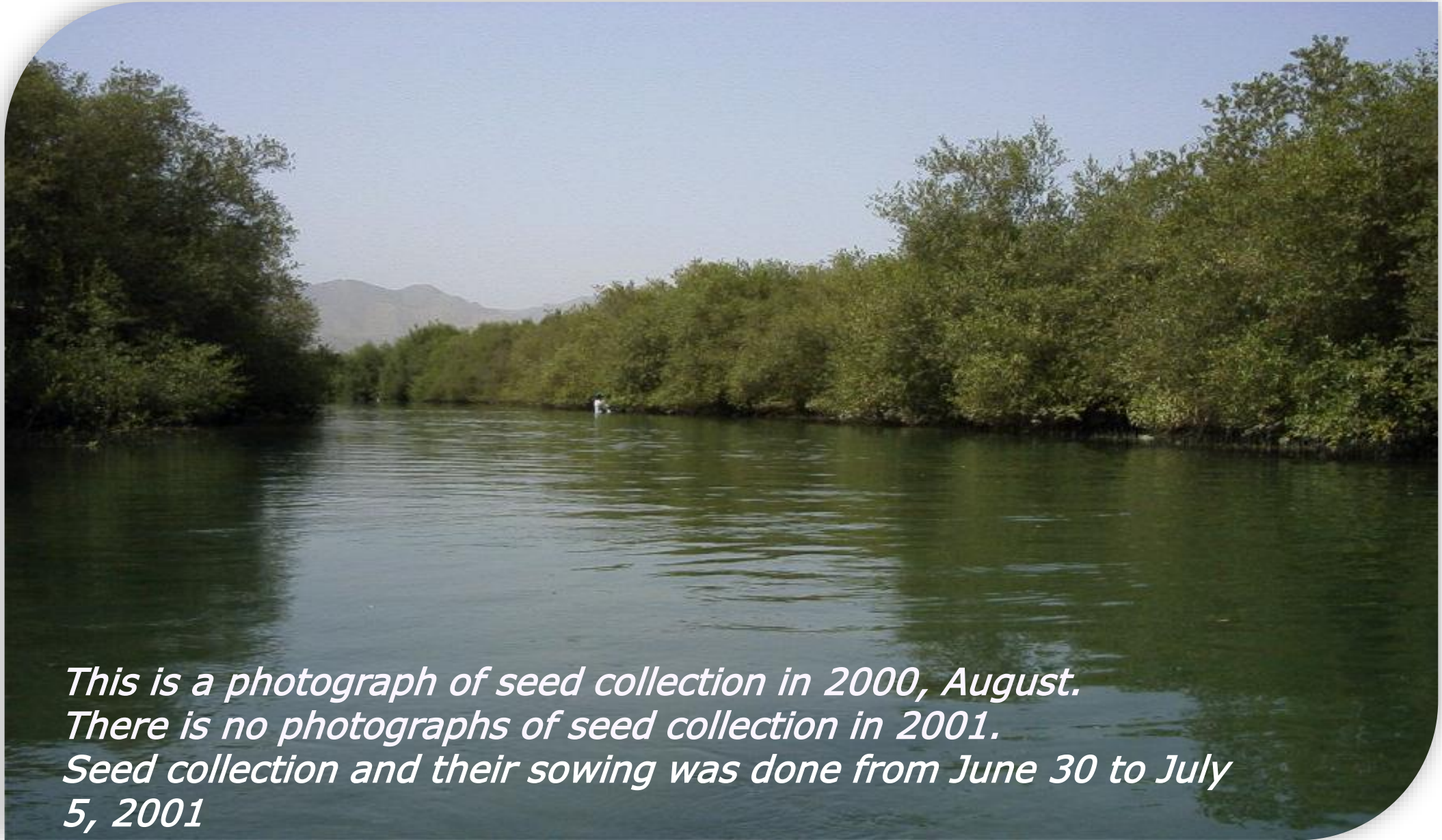
Nursery
Salalah



Flowering







*This is a photograph of seed collection in 2000, August.
There is no photographs of seed collection in 2001.
Seed collection and their sowing was done from June 30 to July
5, 2001*





Seed need washed for 6 hours





Germination After 14 day



Plantation ways

1. From Nursery



2. Seedling



3. By Drone



Khwar Al Sawadi -2000



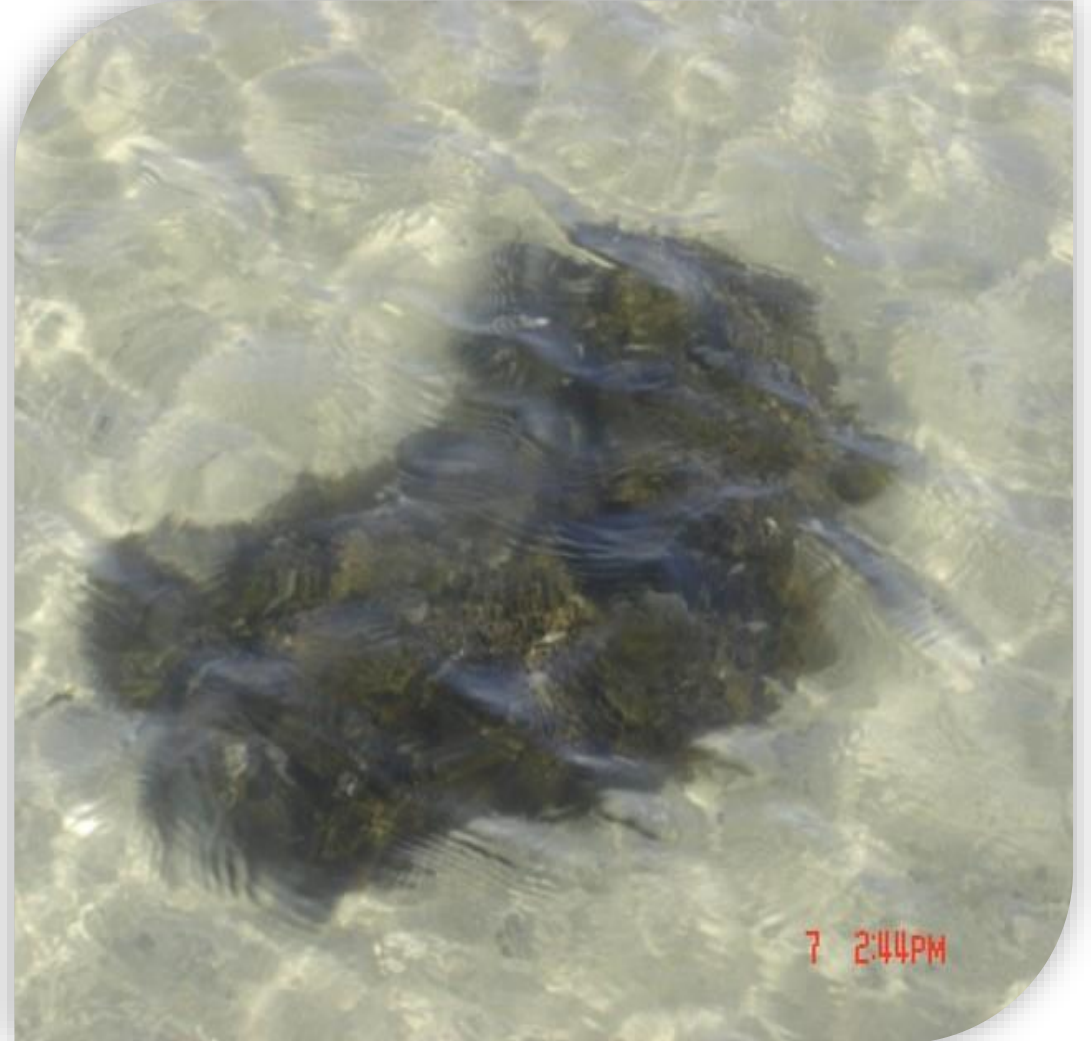
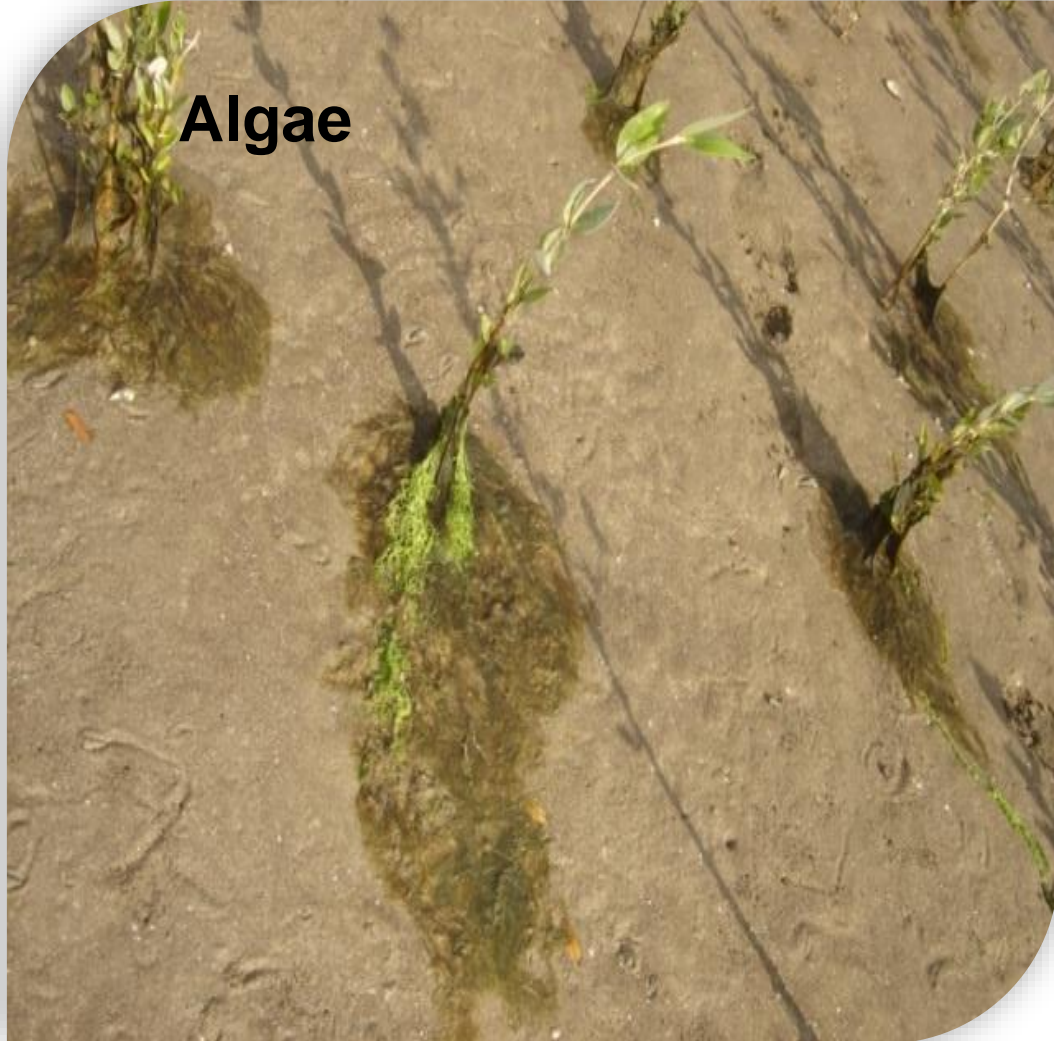
2002



2001
Sawadi
2019



Challenges







Bug Insect



Spraying infected trees with sea water



Overgrazing





Up to Sep - 2022

- 32 sites plantation.
- 766,000 Trees.
- More than 800 Ha.



Environmental Education Program in Mangrove forest















Survey





2021 – 9 meter









Thank You