

Developing low-cost irrigation facilities applicable to sub-Saharan Africa

Developing low-cost irrigation facilities is a key factor for rice cultivation in Ghana!

Current situation

- Strong rainfall intensity
- Strong solar radiation
- Inundation during the rainy season
- > Collapse of unlined channels
- > Collapse and leakage of levee
- > Collapse of passages of nearby channel^{*1}
- > Sedimentation at the channel and reservoir
- > Collapse of embankment

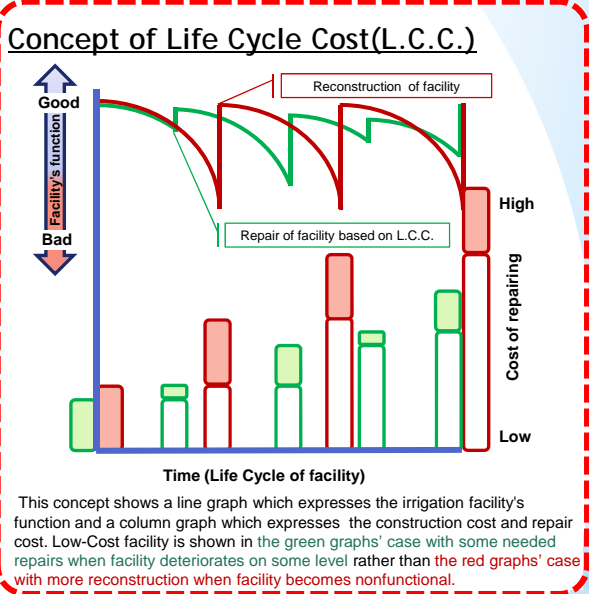
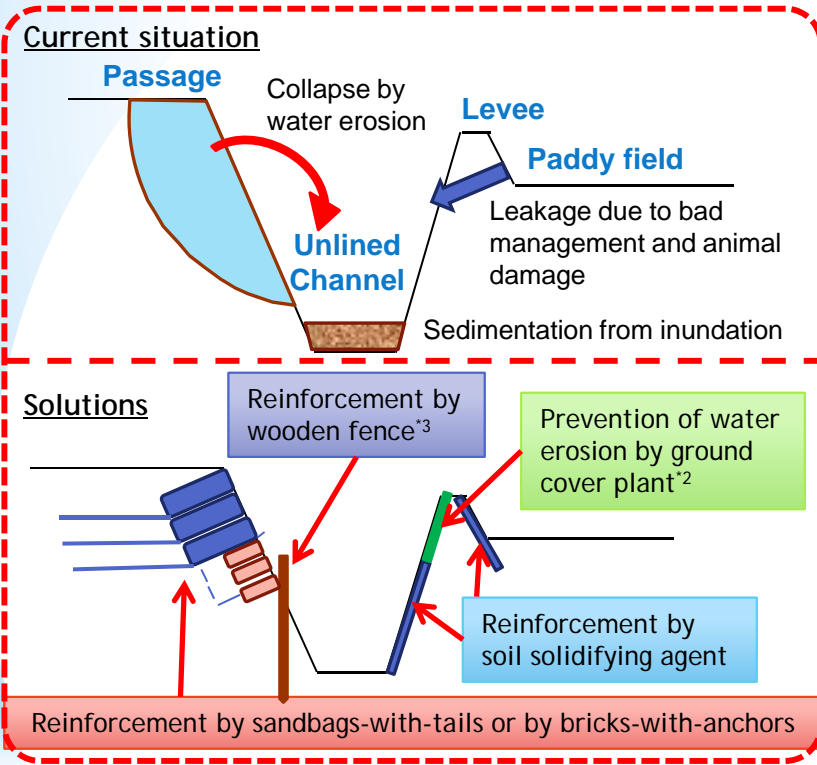
Points to be considered during application

- Difficulty in procurement of materials
- Lack of construction machinery
- Short history of modern rice production

Thus,

Low-cost irrigation facilities, constructed and maintained by farmers, should be developed based on the ideal viewpoint of Life Cycle Cost.

- Apply Japanese low-cost technologies



*1 Levee collapsed due to water erosion



*2 Ground cover plant (image)



*3 Wooden fence (image)



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