

1. Overall information of the project

Project title	Irrigation Management Improvement Project
Localization	Bangladesh
Date of operation	Planned 2019/ 20 for full 17,000 ha (2016 for first 2,000 ha)
Public partner	Bangladesh Water Development Board
Private partner	Irrigation Management Operator
Project size	17,000 ha net buried pipe irrigation.
Cost of the project	US\$ 40 million
Number of Farmers	Average land holding is about 0.33 ha, and about 52,000 households (320,000 persons) will benefit.
Short description of production system	Farm sizes are skewed with over 50% of farmers owning < 0.2 ha. Rice is the main crop, though vegetables, spices and pulses are also cropped in the dry season.
Infrastructure / irrigation type	Buried uPVC pipe systems with smart “pre-paid” meters and efficient electric pumping of water from canals. Typical area of each buried pipe scheme 10-35 ha. In total 740 schemes.

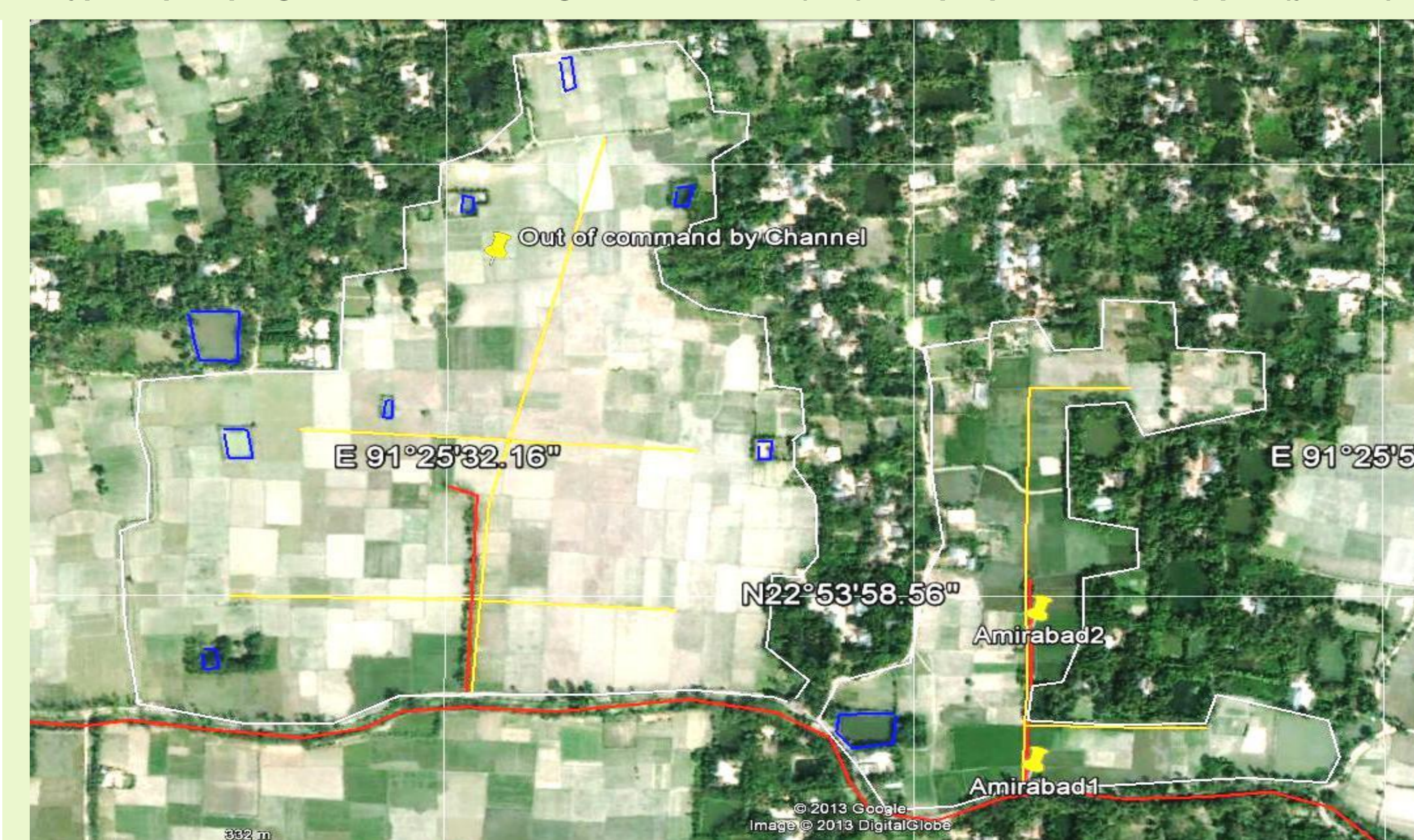
2. Type of contract and term

- Stage 1: Management Contract with a private company undertaking design, construction and MOM for 5 years.
- Stage 2: Lease Contract for 15 years MOM. Procurement will probably specify the irrigation service charge amount(s) with competitive financial offers sought for the Lease.

3. Investment funding source and sharing of the cost

- For Development: Asian Development Bank (80%), GoB (13%), Farmers (7%)
- For MOM: Farmers with GoB subsidy yet to be determined

Typical pumping schemes: Existing field channels (red) and proposed buried pipes (yellow)



Pre-paid meter / buried pipe water distribution systems



Pre-paid meter for electric pump



Recharging a farmer's smart card for pre-paid meter



Outlet from buried pipe system and air-vent standpipe



Excavation of trench for buried pipeline



uPVC Buried pipe



Hose field irrigation – used in conjunction with buried pipe system

4. Payment of the fees

Each farmer will be given a user-card which enables water to be pumped when inserted into the smart meter to activate the pump. The user card may be topped up by payment to the private operator's bank account.

5. Risk management

This is the first large scheme in Bangladesh with Private Sector Participation and risks include: (i) performance of the private sector company for construction supervision and MOM of the scheme; (ii) willingness of the Government/ BWDB to work with the private company; and (iii) willingness and ability of farmers to pay for water pumped.

These risks are/ will be mitigated by: (i) extensive stakeholders' training and engagement; (ii) adoption of pre-paid meters so that each farmer pays for the volume he/ she uses; and (iii) high energy and water use efficiencies achieved by electric pumping of water and buried pipe water distribution replacing diesel pumping to unlined field channels.

6. Performance evaluation

Indicators of performance will be monitored by the BWDB/ IMIP including pumping volumes, charges and costs.

Key lessons learnt - Too early to say