

Blue Gold Program
Pre-Emptive Actions to Avoid Embankment Breaches

1. Within the Blue Gold Program, there is active threat to polder embankments in 29 reaches affecting 13 polders – out of the total number of 22 polders under the program.
2. BWDB is responsible for 139 polders in the coastal region, so the scale of the threat to the integrity of the polders will be proportionately larger.
3. One of BWDB's primary responsibilities in the coastal region is to ensure the integrity of the polder embankment and to thus protect the vulnerable communities who live and work in the polders.
4. Pre-emptive action to strengthen vulnerable embankments before they fail is – in our view justified - because:
 - a. Costs of repair of threatened infrastructure (embankments, sluices etc) are much reduced if work is done before embankment failure; and
 - b. Costs in terms of human lives, and damage to crops, livestock, businesses and households can be prevented.
5. There are a number of measures which might be considered:
 - a. Providing the field XEN with technical assistance from an experienced design team – supported by IWM - who are responsible for preparing recommended engineering interventions and presenting them and obtaining local community acceptance, assisted by representatives from WMG, WMA, UP, UZP and any local MP.
 - b. Providing flexible funding arrangements by pre-allocating budgets under the Annual Development Plan (ADP) so that pre-emptive actions can be included in the Revised Annual Development Plan (RADP) in February/March, thus leaving a four-month window for tendering and construction from March to June (when the onset of the monsoon prevents work from continuing).
 - c. Providing a 5-year on-call framework contract for pre-emptive emergency repair including stock-piling geotextile bags in godowns of BWDB Divisions. Incentivising contractors through appropriate contractual arrangements to complete pre-emptive works on time and to a good quality, and to be accountable for successful implementation and the integrity of the embankment, perhaps for the duration of the framework contract.
 - d. Emergency maintenance is a major role of BWDB in the O&M Agreement between BWDB and polder-level WMA, and should be extended to include investments for pre-emptive works – with BWDB and WMA together agreeing a prioritized list of actions.