

THE ADB CIRCULAR ECONOMY WORKING GROUP WEBINAR SERIES 2022

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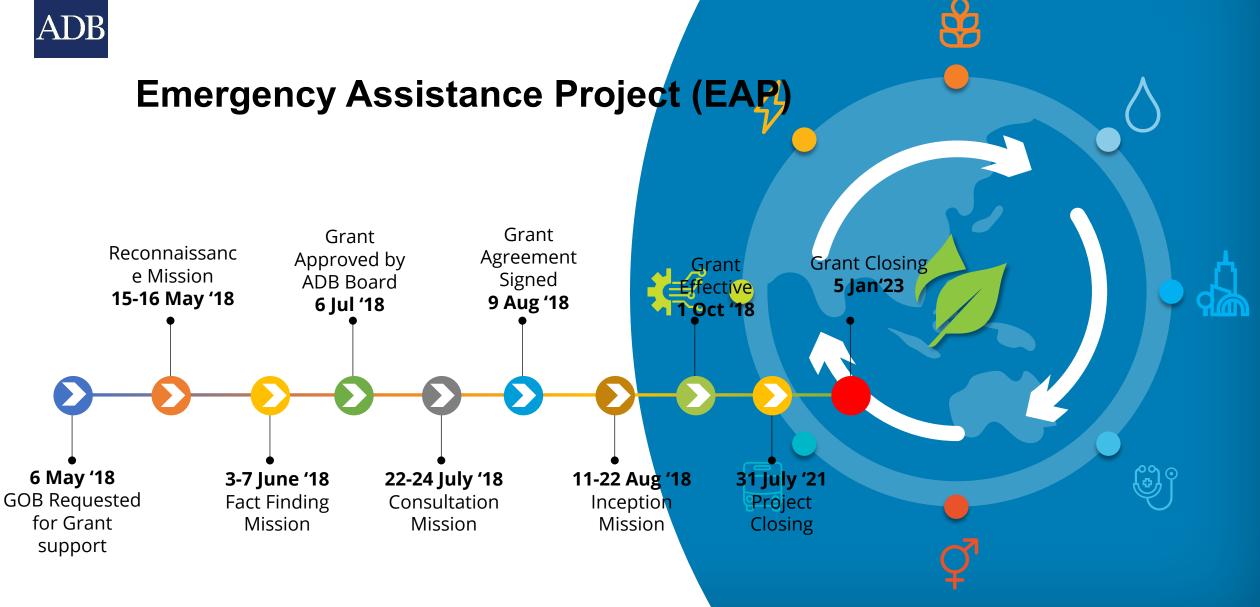
ADB CEWG Webinar Session 8

Omni Processor Emergency Assistance Project

17 November 2022

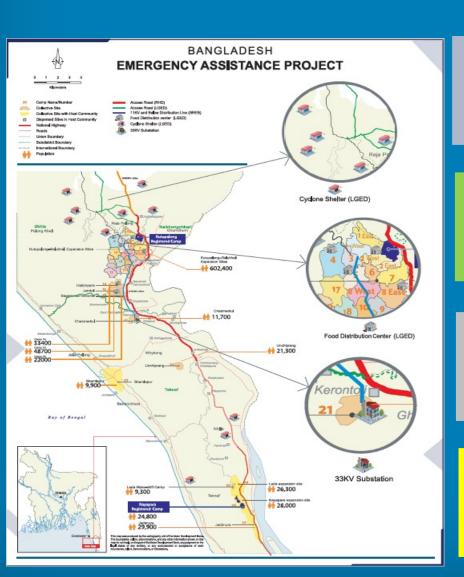






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Project Components



Water supply and sanitation

Department of Public Health Engineering (DPHE)

Disaster risk Management strengthened Local Government
Engineering Department
(LGED)



Access roads improved

Roads and Highways Department (RHD)



Energy sources provided

Bangladesh Rural Electrification Board (BREB)



Key Issues of Waste Treatment Facilities

Existing Technologies	Omni Processor (OP) Technology
Land footprint is high and existing technologies can serve only faecal sludge	To fully treat faecal sludge, organic solid waste and single use plastic for 100,000 population only 1000 sq.m of land is required
To serve 100,000 population 25 treatment units are required	One unit of Omni Processor can treat faecal sludge and solid waste for population between 100,000 to 300,000 population
Further treatment of sludge and wastewater from the treatment units are required	OP is a community-scale faecal sludge and solid waste processing unit that generates clean water, electricity, heat, and biochar/ash from waste.
Current treatment units are based on the end of the pipe solution	Promotes circular approach of faecal sludge and solid waste management
Laboratory analysis of wastewater from existing plants shows it is not meeting DOE parameters	OP can generate electricity, distilled water and biochar/ash.
Technology is not able to treat municipal organic solid waste and SUP.	
Additional land is required for treatment of solid waste	

Intervention in Camp 4 Ext. (IWTF)

- Total land area is 1000 sq.m for Omni Processor.
- The facility will serve 100,000 population within Camp 4, Camp 4 extension and adjoining 3 camps.
- Both solid waste and faecal sludge will be treated within the same facility as well as recyclables.
- Total 11 tons of solid waste will treat per day along with 30 cubic meter of faecal sludge per day.











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Thank you!

