



SafePani
সেফপানি

SafePani – Public finance to support safe drinking water in Bangladesh



Story of change: Key findings & emerging impacts

Summary

- The SafePani model guarantees reliable drinking water services, free from faecal contamination, to rural schools (primary and secondary) and community clinics in rural Bangladesh.
- In 2024, the Planning Commission in collaboration with the Local Government Division of the Government of Bangladesh confirmed national budget commitments from 2024 to 2030 to co-fund a results-based contract for safe drinking water services for public schools and community clinics in Khulna District in the coastal zone.
- At a cost of less than USD 1 per person per year, this will benefit around 230,000 pupils and 2,400 daily outpatients in Khulna District (excluding Khulna City Corporation).
- There are opportunities to progressively scale up SafePani nationally to achieve SDG 6.1, achieving significant education, health, development, and economic benefits for tens of millions of children and vulnerable people.

Photo by Lutfor Rahman

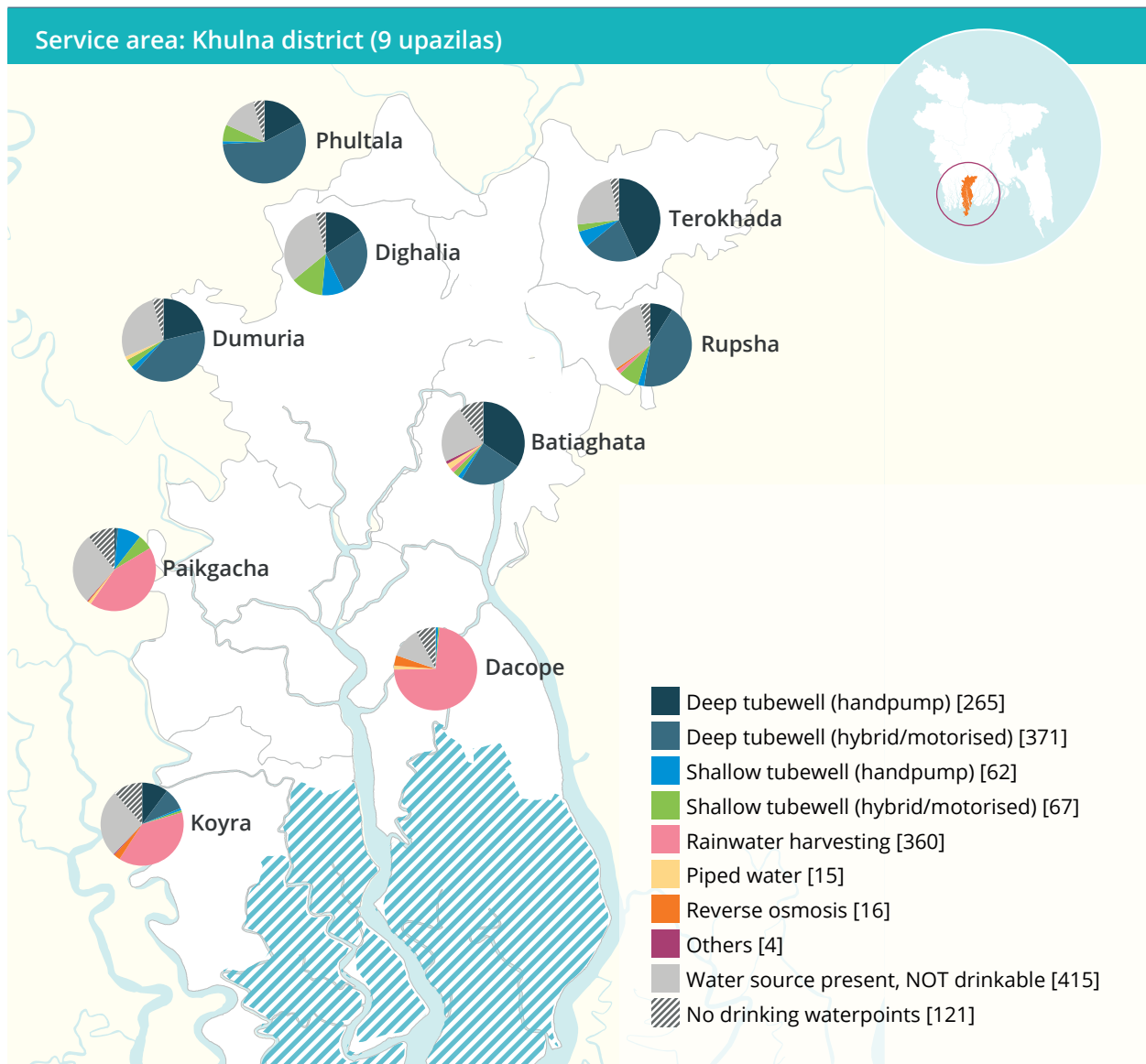


Introduction

SafePani represents a change in public policy and national planning in Bangladesh. For the first time, safe drinking water services will be guaranteed in public schools and community clinics with a sustainable funding model to ensure accountable service delivery to 2030.

The government has agreed long-term action with public funding to recognise gaps in current policy delivery. There are opportunities to progressively scale up SafePani nationally to achieve SDG 6.1, achieving significant education, health, development, and economic benefits for tens of millions of children and vulnerable people in rural areas.

Figure 1: Map of Khulna district showing the state of drinking water infrastructure across 1433 primary and secondary schools and 263 healthcare facilities (Total 1696) as of February 2024. Through a results-based contract (2024 – 2030), SafePani will provide professional drinking water services in 1160 of these institutions (excluding 536 institutions without water supply infrastructure) benefitting 230,000 students in 1084 schools and an average of 2400 monthly outpatients in 76 healthcare facilities.



In 2024, the Planning Commission in collaboration with the Local Government Division of the Government of Bangladesh confirmed national budget commitments from 2024 to 2030 to co-fund a results-based contract for safe drinking water services for public schools and community clinics in Khulna District in the coastal zone.

At a cost of less than USD 1 per person per year, this will benefit around 230,000 pupils and 2,400 daily outpatients in Khulna District (excluding Khulna City Corporation).

The [SafePani model](#) is based on a professional service delivery model guaranteeing water safety actions and reliability metrics, which may be of value for other governments and development agencies attempting to both fund and verify delivery of safer drinking water services to rural facilities (Hope et al., 2021).

SafePani introduces a professional service delivery provider, which is paid after verified results of a) monitoring, reporting, and managing water safety, and b) repairing faults in waterpoints within 48 hours. It allows school and clinic leaders to focus on providing high quality education and health services, and not managing waterpoints.

Led by the Local Government Division and supported by the Directorate of Primary Education, Department of Secondary and Higher Education, Department of Public Health Engineering, Directorate General of Health Services, Department of Disaster Management and the Deputy Commissioner (Khulna District), a national steering committee has monitored the performance of the SafePani pilot project over a three year period as part of the FCDO REACH programme led by the University of Oxford with UNICEF (Bangladesh) and the Bangladesh University of Engineering and Technology (BUET).

What is SafePani?

The SafePani model guarantees reliable drinking water services, free from faecal contamination, to rural schools (primary and secondary) and community clinics in rural Bangladesh. The model responds to national policy guidelines and a high-level political commitment to SDG6.1.

Photo by Lutfor Rahman



Why was SafePani needed?

Drinking water quality is a key challenge in Bangladesh due to known issues of arsenic, manganese, salinity (particularly the coastal belt), and other chemicals. While 99% of national households have access to a waterpoint, 40% have bacteriological contamination (*E.coli*) (BBS/UNICEF, 2021). In contrast, data for schools and community clinics are not accurately known nationally.

REACH's research in 150 schools in Chandpur District from 2017-19 indicated that the majority of waterpoints exceeded arsenic and chloride detection limits, with issues of turbidity and manganese. In addition, repair times for minor repairs (buckets, washers) had a median range of 4 to 5 days (average: > 24 days) with major repairs (handle, pipe, rod) having a median range of 10 to 60 days (average: 10 to 83 days). In summary, most schools had contaminated supplies which took weeks or months to repair when broken (Fischer et al., 2021).

In response to the challenges, the government agreed to pilot a professional service delivery in Khulna District in the coastal belt from 2021. Baseline data indicated similar service delivery challenges to Chandpur District with 40% of schools with *E.coli* and 30% having a medium or high risk based on sanitary inspections.

How does it work?

There are institutional, operational, and financial dimensions to the SafePani model, including: a) national steering committee, b) professional service delivery model, and c) government co-funding.

National Steering Committee

Chaired by the Additional Secretary (LGD, Water Supply Wing) and supported by the Joint Secretary (LGD, Policy Support Branch), relevant national government departments from education, health, disaster management and local government (Deputy Commissioner) convened a National Steering Committee.

Technical updates and reporting are provided by the University of Oxford, BUET and HYSAWA (service provider) at each meeting.

In November 2021, the committee met for the first time for a three-day inception workshop to agree roles, responsibilities and outcomes of the SafePani pilot. After that, two in-person meetings were held each year either in Dhaka or Khulna.

Based on positive progress of improved service outcomes, additional funding from REACH increased the initial work in 97 schools and community clinics in four unions to 204 institutions in eight unions since July 2022.

The National Steering Committee is supported by a District Working Group with members from the same government departments chaired by the Deputy Commissioner of Khulna District with technical support from HYSAWA. The group meets 2-3 times per year and ensures local concerns from civil society are tabled and addressed. Various public events have increased awareness of the work supported by HYSAWA's Community Liaison Officers to provide regular engagement at the local level.



Photo by Lutfor Rahman

Professional Service Delivery Model

The University of Oxford has conducted research in the design and delivery of results-based funding for drinking water services for a decade. This includes a long-term collaboration in Kenya incubating FundiFix as a local professional service provider. Wider collaboration includes a partnership with Uptime which has results-based contracts in 16 countries guaranteeing reliable drinking water for 5 million people in 2024. A gap in Uptime's work has been inclusion of water quality. SafePani has provided an opportunity to design and test water safety and water quality monitoring, reporting and management (Charles et al., 2023). Critical to this work has been institutional accountability to take prompt action where reported challenges need to be resolved. This closes the gap in standard monitoring or testing water quality without any action being taken by an accountable agency.

In 2021, HYSAWA won a competitive REACH call to be contracted for the pilot phase of SafePani. HYSAWA has an established record of constructing high quality drinking waterpoints nationally. SafePani provided an opportunity for HYSAWA to take on the additional responsibility for maintenance and monitoring services against agreed performance metrics. In addition, data management systems on operational and financial performance need to be designed to monitor and evaluate results.

In March 2024, at the end of the pilot phase, HYSAWA's contract with REACH concluded as the results-based contract commenced.

Government co-funding

The financial architecture of SafePani is based on results-based contracts. The logic is that public investments require ongoing performance metrics of water quality and reliability, not the only construction of a tap or a tubewell. The results-based contract specifies quarterly reporting on agreed and verifiable metrics that then releases a quarterly payment to the professional service provider.

The pilot phase demonstrated that results could be dramatically improved at a reasonable cost (figure 1). A detailed costed model based on observed data from the operations included a) capital expenditure, b) operational expenditure, and c) data management costs (REACH, 2023). Overall, the district level costed model estimated a cost of less than USD 1 per person per year to include all public schools and community clinics. This was considered affordable and good value for money by the National Steering Committee.

Based on agreement by the National Steering Committee, the Policy Support Branch developed a Technical Assistance Project Proposal (TAPP) to co-fund all public schools and community clinics in Khulna District from 2024 to 2030. The TAPP was submitted by the Local Government Division to the Planning Commission for consideration in the national budget. The Uptime Catalyst Facility (UCF, UK registered charity) agreed to co-fund 50% of the contract with the Government of Bangladesh. The UCF has issued results-based contracts for rural drinking water services in 16 countries since 2020 disbursing pooled funds granted from a portfolio of global foundations.

The UCF partners with Uptime Global which is a social enterprise, which designs results-based contracts, verifies results, and provides advisory services. Uptime Global will provide independent verification of SafePani performance metrics based on an established protocol of a) data validation, b) data audit, and c) site visits (Armstrong et al., 2024). Verification results will provide the basis for quarterly payments to be authorised by the Government of Bangladesh (PSB) and the UCF. It will offer a standardised and scalable model that could be applied to all public primary and secondary schools, and community clinics in Bangladesh.

What next?

The Directorate of Primary Education has an established five-year funding model under the Primary Education Development Programme (PEDP) with multi-donor support. The fifth cycle of the programme (PEDP5) will commence in 2025. The SafePani model will be considered in the design of this programme to potentially serve all public primary schools in the country.

Secondary education is more decentralised with a mixture of public and private schools. Conversations with DSHE will explore what opportunities may exist to scale up the model.

Health services are governed by multiple agencies. DGHS and LGD are two lead agencies which can determine which pathways may be most appropriate to provide effective coverage of all health facilities, including hospitals. A recent initiative supported by DGHS and UNICEF with the University of Oxford has identified how results-based contracts may be one response to improve drinking water, sanitation and hygiene services in district hospitals.



Collaborators in SafePani

Government of Bangladesh:

- Mr Md. Abdul Mannan – Minister, Planning Commission (2019–2024)
- Mr Muhammad Ibrahim – Secretary, Local Government Division
- Mr Emdadul Hoq, Additional Secretary, Local Government Division
- Mr Md. Shamim Alam, Joint Secretary, Policy Support Branch, Local Government Division
- Mr Tushar Shadu Khan, Chief Engineer, DPHE
- Mr Khandaker Yaser Arefin, District Commissioner, Khulna
- **University of Oxford** | Professor Rob Hope, Professor Katrina Charles, Dr Sonia Hoque
- **HYSAWA** | Nurul Osman and Md. Refatul Islam
- **UNICEF** | Md. Monirul Alam
- **BUET** | Professor Mashfiquis Salehin

- **Uptime Global** | Dr Andrew Armstrong
- **Uptime Catalyst Facility** | Dr Alex Money

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Outputs

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Story of change themes



Groundwater



Land



Coasts



Gender



Schools



Services



Health



Climate



Cities



Basins

REACH is a global research programme to improve water security for the poor by delivering world-class science that transforms policy and practice. The REACH programme runs from 2015–2024 and is led by Oxford University with international consortium of partners and funded with UK Aid from the UK Government's Foreign, Commonwealth & Development Office. Project code 201880.