

## State of Water and Sanitation in South West Bangladesh

### Pitfalls and Prospects



## Background

Absence of clean water and safe sanitation facilities poses a serious threat to Bangladesh's future and to children.

Currently, 36% of children under 5 suffer from chronic malnutrition<sup>1</sup>, which is partially caused by the lack of access to clean water and safe sanitation. Improved sanitation services can reduce stunting by 9%<sup>2</sup>.

Furthermore, it is estimated that more than 70 million people in Bangladesh are affected by climate change, many of whom live in coastal areas. The coastal population face increasing risks from rising sea levels, saline intrusion and arsenic contamination in

ground water, which leads to insecurity of safe and affordable drinking water<sup>3</sup>. Empowerment of women with regard to 'water and sanitation' is the catalyst to serve in these committees as they are directly involved in the transport storage and treatment of water and to take care of health, hygiene and sanitation at household level. Thus, Nobo Jatra program envisions women leadership to improve water and sanitation in the unions of Khulna and Satkhira districts.

### WORLD VISION'S "CITIZEN VOICE AND ACTION" APPROACH

The recommendations here are drawn largely from the opinions and data gathered by communities themselves in Khulna and Satkhira districts. Across Khulna and Satkhira districts, World Vision equips communities to monitor the provision of basic services using its "Citizen Voice and Action" social accountability approach. The data on community-led monitoring of WASH facilities referenced in this brief has been generated by communities in 40 Union Parishads

According to baseline data<sup>4</sup>, 26.7% of people live on less than USD 1.9 per day; only 42.2% households have sanitation facilities and 61% households do not maintain soap and water for hand washing. Prevalence of underweight (30.2%), stunted (26.8%) and wasted (17.4%) children under five years of age is also alarming. Only 35.2% percentage of households are using recommended water treatment technologies. Water options are often hard to access, requiring round trips of over 30 minutes. This exacerbates risk for women and adolescent girls, who are typically tasked with the transport, storage and use of water. Baseline data shows that only 34.5% households can obtain drinking water in less than 30 minutes (round trip).

During the devastating Cyclone Aila in 2009, almost all the freshwater sources in southwest Bangladesh were destroyed, and there has been little progress ever since. In most places, tube-wells cease to function because of salinity in the shallow and deep aquifer levels – coupled with a lack of skills and availability of materials to repair the water option. The embankments are eroded and groundwater sources are flooded; therefore, about 70 percent of people in the region depend on pond water for drinking and domestic uses. Nearly a decade after Aila, the Government of Bangladesh and non-government organizations active are yet to restore freshwater sources in the country's coastal belt. This is primarily because of lack of water flow in rivers (which contributes to the rise of salinity), also salinity due to shrimp cultivation, remoteness and lack of sustainable and joint initiatives. The water plants built by different

<sup>1</sup> See World Bank, Prevalence of stunting, height for age (% of children under 5), available at <https://data.worldbank.org/indicator/SH.STA.STNT.ZS?locations=BD>

<sup>2</sup> Ibid.

<sup>3</sup> K. D. Tusar and C. Moumita (2013) "Climate change influence water use pattern in south-west coastal belt of Bangladesh" J. Environ. Sci. & Natural Resources, 6(2): 217-225

<sup>4</sup> Nobo Jatra Baseline Survey Fact Sheet.

institutions become dysfunctional within a short span of time due to extreme level of salinity and lack of regular maintenance. Awareness of local people is also an issue.<sup>5</sup>

Since 2015, the Nobo Jatra project<sup>6</sup> has sought to improve the food security, nutrition and resilience of vulnerable communities, especially children, in the Khulna and Satkhira districts of south west Bangladesh through a multisectoral set of interventions, including new investments in water and sanitation. Indicators for the region along with experience of communities and staff involved in this project demonstrates that the Government of Bangladesh, INGOs, academia and private sector must take action if it is to achieve its commitment to fulfil Sustainable Development Goal #6, and “ensure the availability and sustainable management of water and sanitation for all”<sup>7</sup>. The time for action is now.

A lack of functionality due to inadequate budgeting, and poor management with regard to water and sanitation leading to disrupted service delivery are the impediments to strong and efficient local structures. Nobo Jatra project combines several elements of social accountability<sup>8</sup> such as civic education, a community monitoring score card of local services, a social audit, monitoring of government standards and interface meetings which brings together all stakeholders, and finally, community-driven evidence based advocacy. World Vision’s program emphasized well-being of children and families through sustainable, equitable access to clean water, dignified sanitation and appropriate hygiene behaviors. WASH program of WV in different countries accentuate through supporting the formation of Citizen Voice and Action (CVA) groups, communities advocate to county governments for improved service delivery at all levels.<sup>9</sup>

### **Method and participants of monitoring standard session**

As part of the social accountability process, four formal meetings were arranged in four sub districts. Number of informal meetings to sensitize and orientate different stakeholders took place before the formal meetings. 40 monitoring standard sessions took place in 40 unions since December 2017 to April 2018. Members of Union WatSan Committees (including chairmen and members of UP) were the participants of these session. Participation of representatives of UPs is important because as local leaders they can help mobilizing funds both from GoB through UP budget and from local donations besides ensuring communities’ engagement. 478 participants attended monitoring standard sessions.

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<sup>5</sup> Mohammed Norul Alam Raju, Potable water crisis in Southwest Bangladesh, The Daily Star, December 31, 2017. Available at [thedailystar.net](http://thedailystar.net)

<sup>6</sup> Nobo Jatra is a consortium led by World Vision that also includes Winrock International, and The World Food Programme. For detail see, <https://www.wvb-nobojatra.org/2017/01/24/program-overview/>

<sup>7</sup> See <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

<sup>8</sup> Growing evidence and institutionalisation trend for social accountability, for detail see, <https://www.wvi.org/socialaccountability>

<sup>9</sup> For detail see, <https://www.wvi.org/kenya/water-sanitation-and-hygiene-wash>

Monitoring Standard for Union WatSan Committee considered the following major services as noted in the table.

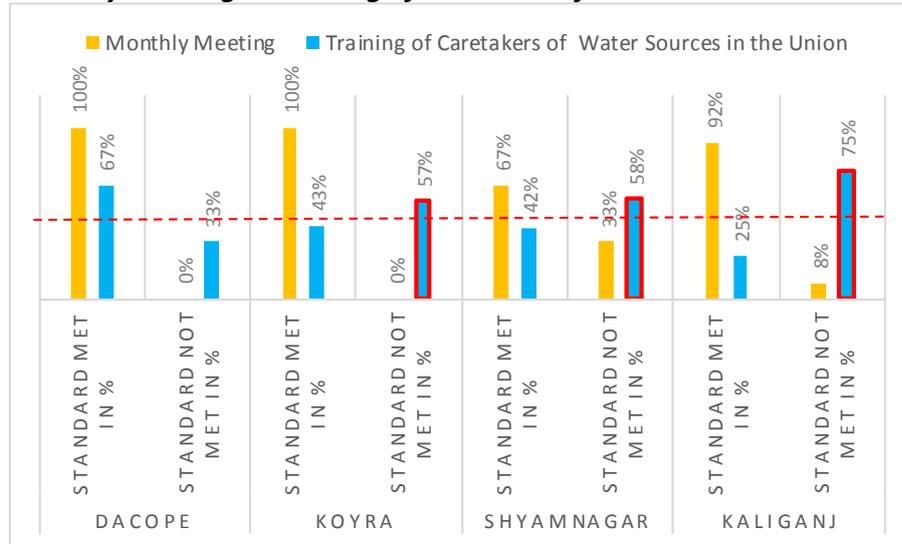
<i>Name of Services</i>	<i>Description</i>
Monthly Meeting	Once a month and keeping the meeting minutes
Training of caretaker of water sources in each Union	A list of caretakers of water sources and assist Upazila Department of Public Health & Engineering to organize the training
Ensure the coordination among the Government and Non-Government Organizations to improve water and sanitation condition in the Union	- A list of Government and Non-Government organizations and projects on water and sanitation in the union. - Conduct regular coordination meeting with the Government and non-government organizations working on water and sanitation.
Take necessary initiative to reach the target beneficiaries	- Prepared beneficiary list who needs support. - Preserved list of beneficiaries who have received support from Government and non-government organizations
Improvement of Union Water and Sanitation Condition	a) Annual plan for improving Water and Sanitation condition b) Develop and implement different project as per plan c) 01 sanitary latrine in each household d) Pure drinking water source for each persons (01 Shallow tube-well for each 50 person; 01 deep tube-well for each 80-100 persons) e) One pond for drinking water purpose in each village

For each Union WatSan committee, nine score card sessions were conducted per union (total 9\*40 Unions) with the following community groups. Score card sessions took place from February to May 2018. 4004 participants attended scorecard sessions.

- Male (two Groups from two wards; members of a male group were youth)
- Female (two Groups from two wards; members of a female group were youth)
- Boys (two Groups from two wards)
- Girls (two Groups from two wards)
- Ward WatSan Committee (one Group from a ward)

## Findings from the monitoring standard data

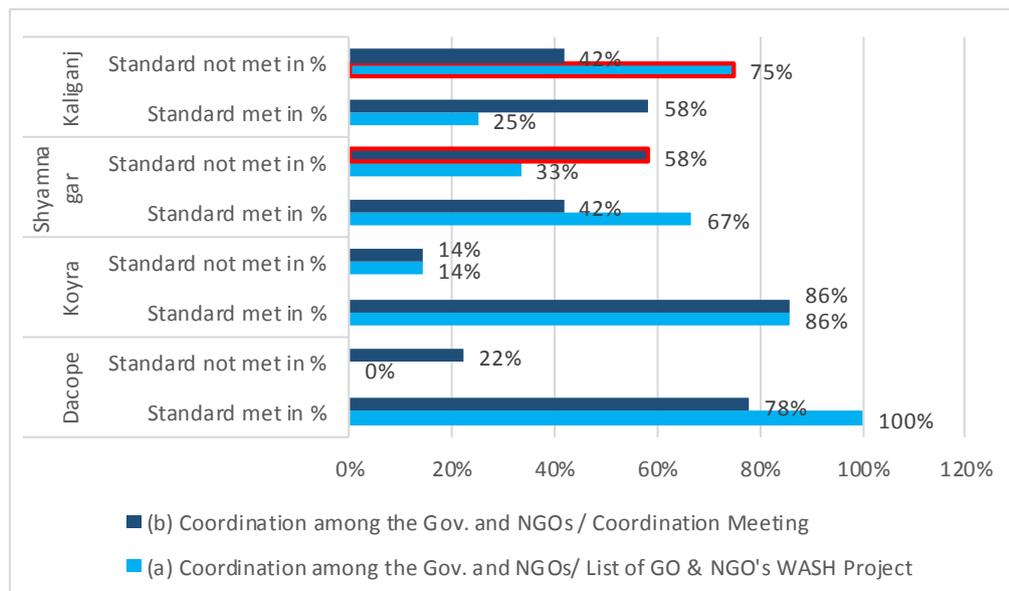
### Monthly meeting & training of caretaker of water sources in each Union



It is positive trend that monthly meetings happened in all unions of Dacope and Koyra; monthly meetings took place in 92% unions of Kaliganj whereas only 67% unions in Shyamnagar could meet this standard. 67% unions in Dacope a list of caretakers of water sources was developed

and Upazila Department of Public Health and Engineering did provide training. There is significant lack with regard to achieving this monitoring standard because 75% unions in Kaliganj, 58% in Shyamnagar, and 57% unions in Koyra could not meet the standard.

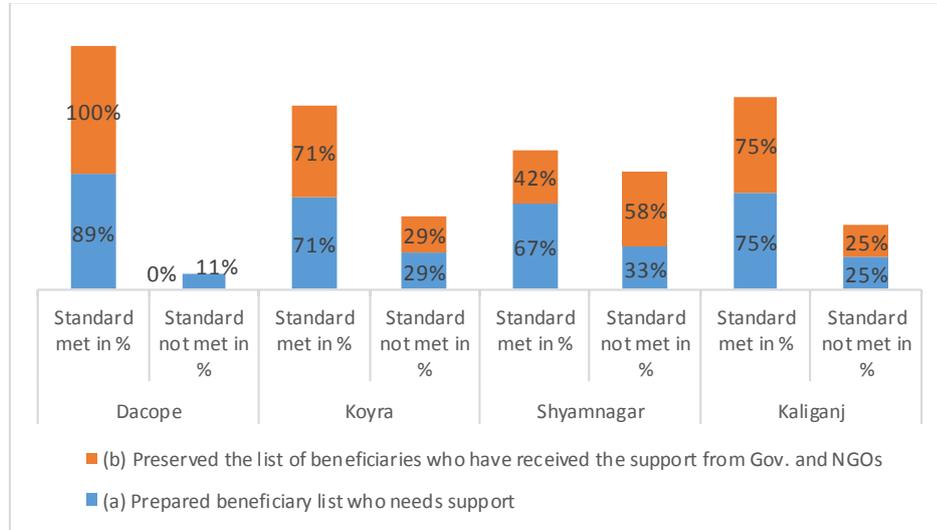
### Coordination among the Government and Non-Government Organizations to improve water and sanitation condition in the Union



It has been observed from monitoring data that coordination among government and non-government organizations with regard to water and sanitation related projects is strong in Dacope (100%) and in Koyra (86%) sub districts. Data shows that 78% unions in Dacope and 86% unions in Koyra had conducted coordination meetings among respective government institutions and NGOs. Only 67% unions in Shyamnagar sub district could coordinate well among government and non-government institutions with regard to water and sanitation

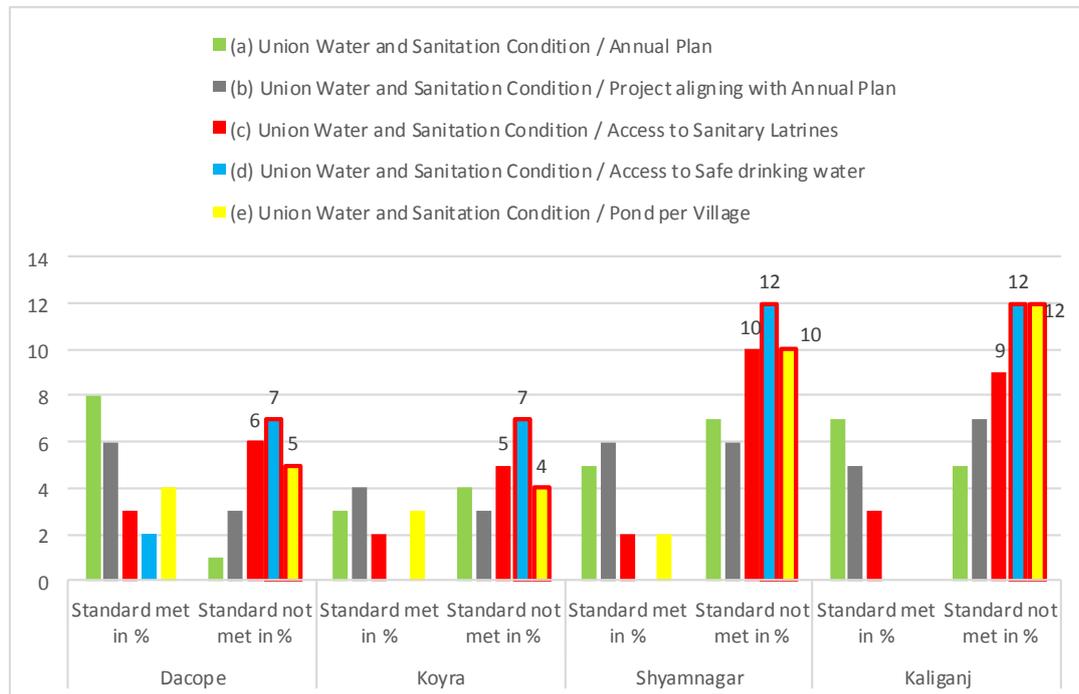
related projects whereas 75% unions in Kaliganj could not meet this monitoring standard. It is alarming that 58% unions in Shyamnagar could not arrange coordination meetings whereas only 58% unions in Kaliganj could meet this monitoring standard.

**Take necessary initiative to reach the target beneficiaries**



89% unions in Dacope, 71% unions in Koyra, 67% unions in Shyamnagar, and 75% unions in Kaliganj prepared list of beneficiaries who need support. Similarly, 100% unions in Dacope, 71% unions in Koyra, and 75% unions in Kaliganj have preserved list of beneficiaries who have received support from government and NGOs. There is a progressive trend in the unions with regard to documentation except Shyamnagar where 58% unions could not meet this monitoring standard.

**Improvement of Union Water and Sanitation Condition**



Eight unions out of nine in Dacope sub district have annual plan for improving water and sanitation conditions; in six unions water and

sanitation related projects are aligned with annual plan. Seven unions out of 12 in Kaliganj have annual plan and five unions have aligned project with that plan.

In Koyra data shows grim picture because three unions out of seven have annual plan in place. Similarly in Shyamnagar five unions out of 12 have annual plan and 50% unions in this sub districts have projects aligned with the annual plan. Much attention is needed in the Koyra and Shyamnagar sub districts to improve with respect this monitoring standards.

One sanitary latrine in each household was an indicator of the monitoring standard to measure improvement in sanitation condition. According to respondents, only three unions out of nine have met this standard in Dacope while two unions out of seven in Koyra, two unions out of 12 in Shyamnagar, three unions out of 12 in Kaliganj have met the monitoring standard on ‘access to sanitary latrines’. Data reflect that most of the unions in four sub districts do not have 100% access to sanitary latrines.

Number of UPs that met monitoring standards

Services	Dacope	Koyra	Shyamnagar	Kaliganj
Access to sanitary latrines	3 out of 9 UPs	2 out of 7 UPs	2 out of 12 UPs	3 out of 12 UPs
Access to safe drinking water	2 out of 9 UPs	0	0	0
Pond per villages	4 out of 9 UPs	3 out of 7 UPs	2 out of 12 UPs	0

Aleya Begum, a 25-year-old woman who lives at the Sutarkhali Union of Dacope. Waking up before dawn every day, Aleya Begum walks to a water plant about five kilometers away to collect fresh drinking water for her six-member family. It will be midday or even later before she returns home. Without this strenuous journey through an uneven path, and without any path to the plant near Sutarkhali Union Parishad, where pond water is treated, there will be no water for cooking and drinking.

One shallow tube-well for 50 persons and one deep tube-well for 80 to 100 persons were considered for setting monitoring standard with regard to ‘access to safe drinking water’. Only two unions out of nine in Dacope have met this monitoring standard whereas all unions in Koyra, Shyamnagar and Kaliganj could not meet this standard. This is an alarming state because according to data of monitoring standard vast areas in these four sub districts do not have access to safe drinking water.

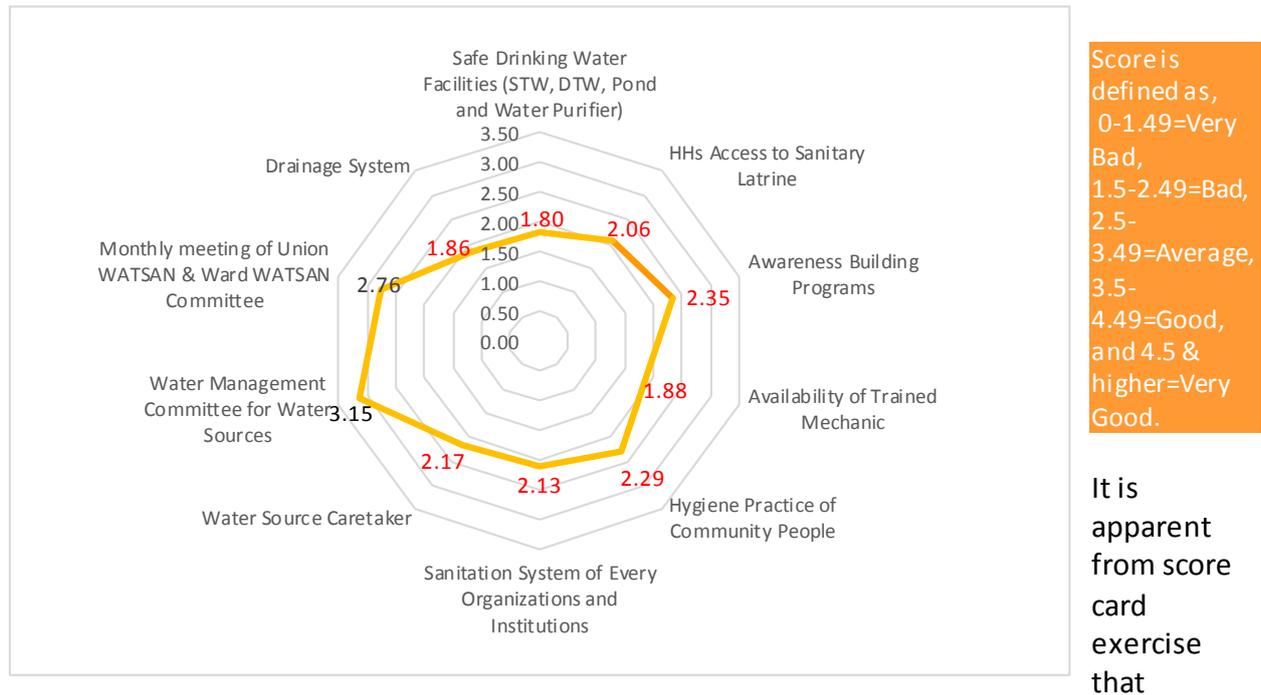
One pond per village was a criteria into the monitoring standard. It is found that four out nine unions in Dacope, two out of seven unions in Koyra, and two out of 12 unions have met this standard. All 12 unions in Kaliganj could not meet the standard. Data shows that there is significant lack of ponds in the villages of four sub districts.

Due to the impact of climate change, the daily struggles of thousands like Aleya Begum are being exacerbated for accessing safe drinking water. Due to the extreme level of salinity and lack of long-term sustainable solutions, people in the coastal belt are suffering from scarcity of potable water. As water sources dry up and demands increase, women like Aleya Begum are forced to walk further and further to provide water for their family.<sup>10</sup>

<sup>10</sup> Potable water crisis in Southwest Bangladesh, for detail see, <https://www.thedailystar.net/opinion/environment/potable-water-crisis-southwest-bangladesh-1512511>

## Scorecard result

Nobo Jatra program had facilitated score card exercise among 4402 respondents and 1134 facilities in four sub districts. Series of scorecard exercises took place from February 2017 to June 2019. Performance measuring indicators were agreed through participatory discussions among stakeholders from grassroots to institutional level. Indicators were measured using happy and unhappy emoticons.



respondents gave average score with regard to water management committee and monthly meetings done by WatSan committees. According to respondents, score is bad (1.5-2.49) for most of the performance measures. This score card exercise indicates that respondents in four sub districts are not happy about safe drinking water facilities, drainage system, mechanics' skill, sanitary latrines, awareness and hygiene practice and caretakers of water sources.

## Outcome level results of Nobo Jatra program

Some changes happened through CVA process in terms of plans and budget of unions considering local context responding to citizen requests,

- 30%UPs incorporated budget for PSF construction
- 50% UPs provisioned for PSF repair
- 73% of UPs incorporated budget for water tanks and sanitary latrines

## Recommendations

Based on the monitoring standard data and score card exercises by community, greater attention of the concerned authorities is required in the following areas,

- There is significant lack in terms of access to sanitary latrines in four sub districts, thus, Union Parishad needs to allocate adequate budget through the open budget process to increase access to sanitary latrines as well as awareness on hygienic practices. Regular meetings of WatSan committees should be ensured at ward and union level.

- It is alarming that vast areas in four sub districts do not have access to safe drinking water. Upazila Department of Public Health & Engineering and Union Parishads need to invest more for safe drinking water facilities to overcome this hindrance.
- WMCs should take proactive initiatives to excavate ponds, which would be pathway to improve water condition at union level.
- Training and capacity development of caretakers of the water points is a catalyst for ensuring quality of drinking water. Sustainability of water options is linked to the skills and capacity of WMCs, particularly caretakers, to maintain, repair and mobilize funds (through tariffs and UP budget allocation). Local government institutions should develop a mechanisms for continuously providing training and skills of the caretakers. DPHE particularly can train WMC members on Water Safety Plans and Water Quality Testing.
- Prioritize and empower women to serve in these committees as they are directly involved in the transport storage and treatment of water.
- Coordination among government and nongovernment organizations should to be increased remarkably in Union Parishads of Kaliganj and Shyamanagar to overcome the existing setback.
- Local government institutions should have concrete plan for enhancing sustainability and ownership of water management committees and WatSan committees. Private sector engagement is essential in the provision of WASH services, through trained Local Service Providers and marketing of products (safe hand washing devices, hand washing soap, baby potty, sanitation products etc.).

For citation and references,

Ahsan, R & Sarker, N 2019, 'State of Water and Sanitation in South West Bangladesh: Pitfalls and Prospects', *paper presented in the 2<sup>nd</sup> Coastal Water Convention, Khulna, 1-2 August.*