

#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

#### SITE DETAILS

Site: BAT Bangladesh GLTP - Kushtia

Address: British American Tobacco Bangladesh Chourhas, 7000, Kushtia, BANGLADESH

Contact Person: Md Mahmudul Alam AWS Reference Number: AWS-000443

Site Structure: Single Site

#### **CERTIFICATION DETAILS**

Certification status: Certified Core

Date of certification decision: 2025-Jun-05

Validity of certificate: 2028-Jun-04

#### **AUDIT DETAILS**

Audited Service(s): AWS Standard v2.0 (2019)

Audit Type(s): Re-Certification Audit

Audit Start Date: 2025-Jan-19 Audit End Date: 2025-Jan-21 Lead Auditor: Galib Hossain

Audit team participants:

Sa-Myeong Gim

Mohammad Galib Hossain, Lead Auditor

Site Participants:

Hector Tamez, Regional Head of Sustainability Md. Mahmudul Alam, Sustainability Manager, Leaf Md. Tauhidul Islam, Utility & Site Service Executive

M Alam Khan, Plant Manager-GLTP Mahmudul Shuvo, Utility Assistant

Rumana Sharmin, Factory Sustainability Manager

#### **AUDIT TIMES**

Dates	Audit from	Duration	Auditor	Description
2025-Jan-1 9	09:00:00 - 17:00:00	08:00	Galib Hossain	
2025-Jan-2 0	09:00:00 - 17:00:00	08:00	Galib Hossain	
2025-Jan-2 1	09:00:00 - 13:00:00	04:00	Galib Hossain	

#### WSAS



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

#### **ADDITIONAL INFO**

Summary of Audit Findings: During the Re-Certification audit, 2 major non-conformities, 14 minor non-conformities, and 14 observations were raised. The major non-conformities were of sufficient concern to warrant the categorisation of the non-conformity as major and related to the identification of catchment boundaries, understanding of catchment water balance and WASH.

The Client is requested to perform a root cause analysis and define corrective actions for each of the non-conformities and to submit these to WSAS within 30 days of receipt of the audit report by 06 April 2025.

The major non-conformities must be closed within 90 days of receipt of the report. In order to meet this timeline evidence is to be submitted to WSAS (within 75 days) by 21 May 2025.

Minor non-conformities must be closed out by the time of the next annual audit.

The audit team recommends certification of BAT Bangladesh GLTP - Kushtia at Core level pending approval of the corrective actions plan for all non-conformities and closure of the major non-conformities.



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Scope of Assessment: The scope of services covers the Re-Certification audit for assessing conformity of BAT Bangladesh - Kushtia against the AWS International Water Stewardship Standard Version 2.0

BAT Bangladesh's Kushtia site, known as the Green Leaf Tobacco Processing (GLTP) factory, is located in Chourhash, Kushtia, Bangladesh. The GLTP factory commenced operations in 1994 and operates in two distinct seasons.

Processing Season: During this season, green tobacco leaves are processed as raw material for cigarettes. The operations include receiving the green leaf in the warehouse, processing it through machinery, storing the finished goods on racks for cooling, and then shipping them out.

Maintenance Season: This season is dedicated to overhauling the machines and implementing necessary replacements, modifications, and improvement projects to enhance efficiency.

The factory operates in three shifts (8 hours per shift) during the processing season, which includes morning, evening, and night shifts. During the maintenance season, the factory operates a single shift. There are approximately around 1,500 employees and workers who operate in three shifts during the processing season. Most employees travel to the factory from the Kushtia region, located approximately 6-8 kilometers from the facility. The factory is equipped with its own effluent treatment facility, water treatment facility, water reuse system, boiler, fire water system, canteen, and other essential services.

The GLTP factory comprises two separate processing lines. Green leaf tobacco is threshed using the shearing action of threshers, resulting in the separation of lamina and stem. The tobacco is then conditioned and dried to meet a specific moisture target. The lamina and stem are subsequently packed in C-48 corrugated cartons. The packed products from the GLTP are shipped to the Primary Manufacturing Department (PMD). Additionally, prized leaf from the GLTP is exported overseas every year.

The GLTP factory is situated within the Faridpur trough aquifer catchment, serving as a groundwater catchment, and is also near the Gorai River and Kaliganga River catchments, which provide surface water. Source water is extracted from on-site deep borewells, treated by the on-site water treatment plant (WTP), and used in the production process. Wastewater generated from the factory is treated at the site's Effluent Treatment Plant (ETP) before being discharged. The treated water is then released into the municipal drainage system, flowing into the nearby Gorai River.

The audit was conducted on-site from January 19 to 21, 2025.

The on-site visit included an assessment of the following areas: the on-site borewells, water reservoir tank, water treatment plant (WTP), effluent treatment plant (ETP), discharge point from the site, stormwater discharge point, chemical storage area, boiler room, WASH facilities, septic tank area, and the water receiving body (Gorai River).

#### **FINDINGS**

NUMBER OF FINDINGS PER LEVEL

Observation 14 Minor 14 Major 2

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#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

#### **FINDING DETAILS**

Finding No: TNR-016386

Checklist Item No: 1.1.1
Status: Closed
Finding level: Major

Due date: 2025-Jun-05

Checklist item: The physical scope of the site shall be mapped, considering the

regulatory landscape and zone of stakeholder interests, including:

- Site boundaries;

- Water-related infrastructure, including piping network, owned or

managed by the site or its parent organization;

- Any water sources providing water to the site that are owned or

managed by the site or its parent organization;

- Water service provider (if applicable) and its ultimate water source;

- Discharge points and waste water service provider (if applicable) and

ultimate receiving water body or bodies;

- Catchment(s) that the site affect(s) and is reliant upon for water.

Findings: - The site has established a 5 km radius physical scope around its

location, based on hydrogeological studies and administrative boundaries. However, it did not consider including the ultimate water receiving body, as well as the upstream and downstream areas, to identify the catchment that the site affects and is reliant upon for water. The area identified as catchment does not meet the definition of a catchment. A map of the surface water catchment was not provided.

- Additionally, the site did not provide the piping network/layout and the

mapping of water-related infrastructure on the map.

Corrective action: Site will revise the catchment based on input water source and ultimate

water receiving body as recommended and share accordingly.



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016815

Checklist Item No: 1.2.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: Stakeholders and their water-related challenges shall be identified. The

process used for stakeholder identification shall be identified. This

process shall:

- Inclusively cover all relevant stakeholder groups including vulnerable,

women, minority, and Indigenous people;

- Consider the physical scope identified, including stakeholders.

representative of the site's ultimate water source and ultimate receiving

water body or bodies;

- Provide evidence of stakeholder consultation on water-related interests

and challenges;

- Note that the ability and/or willingness of stakeholders to participate

may vary across the relevant stakeholder groups;

- Identify the degree of stakeholder engagement based on their level of

interest and influence.

Findings: 1) The evidence of stakeholder engagement and their water-related

challenges has not been adequately identified.

2) Relevant stakeholder groups were not recognized; for instance, stakeholders from the same industry were not identified to facilitate collaboration on WASH initiatives and other related efforts within that sector. Additionally, no minority or Indigenous communities were identified as stakeholders. The management stated that there are no minority or Indigenous people within the catchment area based on discussions with government agencies; however, no proper records of

these discussions were provided.

Corrective action: 1. We will enhance stakeholder engagement and effectively address

water-related challenges.

2. Collaboration with competitors within the same industry will be facilitated by engaging with the Corporate Affairs team. Meetings with government agencies regarding minority or Indigenous communities will

be documented with proper evidence.

Finding No: TNR-016390

Checklist Item No: 1.3.2 Status: Open

Finding level: Observation

Checklist item: Site water balance, including inflows, losses, storage, and outflows shall

be identified and mapped

Findings: Overall, the mapping traces the water flow. However, domestic water

(for social use) and ETP-treated water were not mapped to the next

location. Additionally, rainwater was not accurately mapped.

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#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016817

Checklist Item No: 1.3.3 Status: Open

Finding level: Observation

Checklist item: Site water balance, inflows, losses, storage, and outflows, including

indication of annual variance in water usage rates, shall be quantified. Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high

and low variances shall be quantified.

Findings: The site has quantified the water balance by considering factors such as

water uses, storage, and annual variance. However, domestic water use (social use) was not quantified. Additionally, the water use for fire hydrants and domestic water use (social use) were not included in the

calculations for discharge water.

Finding No: TNR-016819

Checklist Item No: 1.3.5 Status: Open

Finding level: Observation

Checklist item: Potential sources of pollution shall be identified and if applicable,

mapped, including chemicals used or stored on site.

Findings: The site has identified the sources of pollution; however, an inventory of

chemicals was not provided.

Finding No: TNR-016391

Checklist Item No: 1.3.7

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: Annual water-related costs, revenues, and a description or quantification

of the social, cultural, environmental, or economic water-related value

generated by the site shall be identified and used to inform the

evaluation of the plan in 4.1.2.

Findings: The social, environmental, and cultural values generated by the site

have not been adequately identified. For instance, the social, cultural, or environmental water-related values were not clearly articulated. For example, the cost of water quality lab tests was identified solely as an

environmental value, despite it potentially representing both

environmental and social value. Additionally, the values were referred to

simply as "social" or "environmental" without providing a clearer

description of what they are.

Corrective action: The site will articulate the identification properly.



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016392

Checklist Item No: 1.4.1 Status: Open

Finding level: Observation

Checklist item: The embedded water use of primary inputs, including quantity, quality

and level of water risk within the site's catchment, shall be identified.

Findings: While BAT Bangladesh GLTP-Kushtia provided data on tobacco leaf

cultivation and water consumption across Bangladesh, the assessment did not include information on water quality or the level of water risk

specific to the site's leaf-growing farmers.

Finding No: TNR-016820

Checklist Item No: 1.4.2 Status: Open

Finding level: Observation

Checklist item: The embedded water use of outsourced services shall be identified, and

where those services originate within the site's catchment, quantified.

Findings: Water used by outsourced services for car washes was identified.

However, no list of outsourced services (such as transport vehicles for

raw materials or finished goods) was provided.

Finding No: TNR-016393

Checklist Item No: 1.5.2 Status: Open

Finding level: Observation

Checklist item: Applicable water-related legal and regulatory requirements shall be

identified, including legally-defined and/or stakeholder-verified

customary water rights.

Findings: Stakeholder-verified customary water rights have not been properly

understood or identified.

# WSAS WATER STEWARDSHIP ASSURANCE SERVICES

#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016821

Checklist Item No: 1.5.3

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2025-May-28

Checklist item: The catchment water-balance, and where applicable, scarcity, shall be

quantified, including indication of annual, and where appropriate,

seasonal, variance.

Findings: The presented catchment water balance is is prepared considering 3

upzillas. However, the water balance should account for all users in the catchment, not just irrigation and evapotranspiration. Additionally, the annual variance of the catchment water balance has not been determined. Although the site conducted a catchment water balance study in 2022, but it did not capture all the water balance components.

There has been no further study conducted since then.

Corrective action: Site will explore the opportunity to improve the catchment water balance

including seasonal variance based on latest available data from verified

sources.

Evidence of implementation: •

- A catchment water balance, also known as a watershed or basin water balance, is the accounting of all water entering and leaving a specific geographical area, including surface water and groundwater, over a defined period. It's a way to understand how water is distributed within that area, focusing on inputs (like precipitation), outputs (like runoff and evaporation), and changes in storage (like groundwater or soil moisture). The water balance of a catchment is composed of the elements P: Precipitation (as in rainfall) - primary water input. ET: Evapotranspiration – water lost to the atmosphere through soil evaporation and plant transpiration, R: Surface runoff - water flowing over land into rivers, lakes, or oceans, GWR: Groundwater recharge water infiltrating into aquifers, ΔS: Change in storage – net gain/loss of water in soil, groundwater, or surface reservoirs could be determined by means of the following equation: P=ET+R+GWR±ΔS. (Ref: Daly, Edoardo & Calabrese, Salvatore & Yin, Jun & Porporato, Amilcare. (2019). Hydrological Spaces of Long Term Catchment Water Balance. Water Resources Research. 55. 10.1029/2019WR025952)
- For the Kushtia basin, One of the criteria for estimation of runoff is to determine runoff coefficient based on land use classification. However, land-use data for the Kushtia area was not available. As neither quantities of storage changes in soil and groundwater are available, reliable calculations of Evapotranspiration can only be made for periods of several years i.e. 2015-2022. Therefore, surface runoff and groundwater recharge as well as storage change have been considered as a single component in the water balance equation represented as Water Balance. In addition to that, the potential groundwater storage (not recharge) of the Kushtia basin has been performed using NASA Global Land Data Assimilation System Version 2 (GLDAS-2.2) imagery datasets to figure out the monthly mean groundwater storage over the time period. Due to this unavailability of primary Data, Water balance has been calculated in such way.

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### Alliance for Water Stewardship (AWS)

Audit Number: AO-001440

Finding No: TNR-016822

Checklist Item No: 1.5.4

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: Water quality, including physical, chemical, and biological status, of the

catchment shall be identified, and where possible, quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be identified.

Findings: The quality of the catchment's groundwater has not been adequately

identified. The site presented its bore wells water quality data as representative of the groundwater catchment's water quality. However, groundwater quality data is unavailable for the catchment / community members who primarily use shallow tube wells for bathing, toilet use,

and handwashing purposes.

Corrective action: The site will test shallow aquifer quality.

Finding No: TNR-016823

Checklist Item No: 1.5.5 Status: Open

Finding level: Observation

Checklist item: Important Water-Related Areas shall be identified, and where

appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific information and

through stakeholder engagement.

Findings: - The site has identified an (IWRA) within a 5 km radius of its vicinity;

however, this identification should be revisited once the surface water

catchments are clearly redefined.

Finding No: TNR-016894

Checklist Item No: 1.5.6

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: Existing and planned water-related infrastructure shall be identified,

including condition and potential exposure to extreme events.

Findings: The water related infrastructure for catchment is not adequately

identified as it does not capture the storm water discharge from site to ultimate receiving water body, planned water related infrastructure.

Corrective action: Site will further explore additional water related infrastructure in the

catchment including condition and potential exposure to extreme events.

# WSAS WATER STEWARDSHIP ASSURANCE SERVICES

#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016397

Checklist Item No: 1.5.7
Status: Closed
Finding level: Major

Due date: 2025-Jun-05

Checklist item: The adequacy of available WASH services within the catchment shall be

identified.

Findings: Considering the national average WASH status in Bangladesh, the site's

catchment WASH adequacy is expected to be low. The site lacks appropriate data regarding the catchment population with access to adequate WASH facilities. Furthermore, the site has identified WASH facilities based solely on a limited shortlist of catchments, specifically

focusing only on Kushtia Sadar.

Corrective action: The site will provide consolidated report from other sources based on

the availability.

Finding No: TNR-016895

Checklist Item No: 1.6.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: Shared water challenges shall be identified and prioritized from the

information gathered.

Findings: No evidence of consultation efforts regarding stakeholder engagement

was presented to identify and prioritize the shared water challenges.

Corrective action: Site will update the slides provided so that it is clear how the challenges

were identified with proper prioritization.

Finding No: TNR-016399

Checklist Item No: 1.7.1
Status: Open

Finding level: Observation

Checklist item: Water risks faced by the site shall be identified, and prioritized, including

likelihood and severity of impact within a given timeframe, potential

costs and business impact.

Findings: The site assessment successfully identified several physical risks,

particularly concerning stormwater management. However, it fell short in recognizing additional physical risks, notably the potential for flooding

due to overflow from the nearby Padma River.



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016400

Checklist Item No: 1.7.2 Status: Open

Finding level: Observation

Checklist item: Water-related opportunities shall be identified, including how the site

may participate, assessment and prioritization of potential savings, and

business opportunities.

Findings: Potential cost savings associated with each opportunity were not

adequately identified.

Finding No: TNR-016825

Checklist Item No: 1.8.1 Status: Open

Finding level: Observation

Checklist item: Relevant catchment best practice for water governance shall be

identified.

Findings: - The site has not conducted a broad investigation of best practices in

water governance across the catchments or relevant sectors.

Finding No: TNR-016826

Checklist Item No: 1.8.3

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: Relevant sector and/or catchment best practice for water quality shall be

identified, including rationale for data source.

Findings: There are no relevant best practices identified for water quality of the

catchment as well as relevant sector.

Corrective action: The site will trigger independent study.



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016403

Checklist Item No: 2.3.2

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: A water stewardship plan shall be identified, including for each target:

- How it will be measured and monitored

- Actions to achieve and maintain (or exceed) it

Planned timeframes to achieve itFinancial budgets allocated for actions

- Positions of persons responsible for actions and achieving targets

- Where available, note the link between each target and the

achievement of best practice to help address shared water challenges

and the AWS outcomes.

Findings: The site's water stewardship plan did not include a sufficient action plan,

including a budget, to achieve its targets, particularly concerning unsafe WASH facilities in the local community, inadequate WASH facilities within the physical scope, and improperly maintained WASH facilities.

Moreover, current WSP does not capture - How targets will be

measured and monitored.

Corrective action: The site will update the WSP with relevant PROBAHO related budget.

Site will also update the action plans with KPIs so that it can be

measurable. Site will also monitor its action plan in sites Quarterly AWS

meetings with site AWS team.

Finding No: TNR-016404

Checklist Item No: 2.4.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: A plan to mitigate or adapt to identified water risks developed in

co-ordination with relevant public-sector and infrastructure agencies

shall be identified.

Findings: The mitigation plan for external risks has not vet been developed in

cooperation with public agencies; the site has only had discussions with

these agencies.

Corrective action: Site will further engage with relevant public sector and infrastructure

agencies to develop a plan to mitigate or adapt to identified water risks.



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016406

Checklist Item No: 3.2.2 Status: Open

Finding level: Observation

Checklist item: Where water rights are part of legal and regulatory requirements,

measures identified to respect the water rights of others including

Indigenous peoples, shall be implemented.

Findings: While the onsite drinking water quality is tested against 17 parameters

(as confirmed in indicator 1.3.4), the water quality of the PROBAHO Plant (provided to the community) is measured for only two parameters, and there is no justification for this limited assessment" with something

similar to "how is the water quality at those locations".

Finding No: TNR-016865

Checklist Item No: 3.3.2 Status: Open

Finding level: Observation

Checklist item: Where water scarcity is a shared water challenge, annual targets to

improve the site's water use efficiency, or if practical and applicable,

reduce volumetric total use shall be implemented.

Findings: The presented document indicates a year-on-year progress in

volumetric water use and water intensity. However, the site has not outlined any actions taken to achieve the water reduction targets.

Finding No: TNR-016827

Checklist Item No: 3.9.2 Status: Open

Finding level: Observation

Checklist item: Actions towards achieving best practice, related to targets in terms of

water balance shall be implemented.

Findings: - Similarly to the indicator 3.3.2, the presented document indicates a

year-on-year progress in volumetric water use and water intensity.

However, the site's action related to targets in terms of water balance

was not implemented.



### Alliance for Water Stewardship (AWS)

Audit Number: AO-001440

Finding No: TNR-016829

Checklist Item No: 4.1.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: Performance against targets in the site's water stewardship plan and the

contribution to achieving water stewardship outcomes shall be

evaluated.

Findings: The site has provided a value creation chart that outlines the actions and

performance in general terms for most of the actions. However, it is unclear whether the site has evaluated its performance against the

targets set in the water stewardship plan.

Corrective action: Site will update the WSP V 2.0 with recommended performance

evaluation of WSP V 1.3

Finding No: TNR-016830

Checklist Item No: 4.1.3

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: The shared value benefits in the catchment shall be identified and where

applicable, quantified.

Findings: The site's provided evidence does not identify specifically the shared

value benefits in the catchment. Site described some of shared value benefits in generic terms like - awareness campaign done, attended and

knowledge sharing done.

Corrective action: The site will take further action to quantify shared value benefits.

Finding No: TNR-016831

Checklist Item No: 4.4.1
Status: Open

Finding level: Observation

Checklist item: The site's water stewardship plan shall be modified and adapted to

incorporate any relevant information and lessons learned from the evaluations in this step and these changes shall be identified.

Findings: Clarity is lacking what were the lessons learned or the changes made



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Finding No: TNR-016833

Checklist Item No: 5.1.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: The site's water-related internal governance, including positions of those

accountable for compliance with water-related laws and regulations shall

be disclosed.

Findings:

The site's provided evidence does not mention about site's water-related internal governance / positions of those accountable for compliance with

water-related laws and regulations.

Corrective action: Site will discuss with legal team whether they can further share this

relevant information publicly.

Finding No: TNR-016407

Checklist Item No: 5.3.1

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: A summary of the site's water stewardship performance, including

quantified performance against targets, shall be disclosed annually at a

minimum.

Findings: Performance for activities other than water balance against targets has

not been disclosed. It is difficult to consider this as sufficient information

for interested parties to gain an understanding.

Corrective action: All the 5 AWS outcomes have been drafted for 2024 year's ESG Report.

Finding No: TNR-016834

Checklist Item No: 5.4.2

Status: In Progress - CA plan approved

Finding level: Minor

Due date: 2026-Jan-18

Checklist item: Efforts made by the site to engage stakeholders and coordinate and

support public-sector agencies shall be identified.

Findings: The site's provided evidence does not reflect the effort made by the site

to coordinate and support public-sector agencies.

Corrective action: No further rectification is required based on findings.



### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

Report Details	
Report	Value
Report prepared by	Mohammad Galib Hossain
Report approved by	Amit Singh
Report approved on (Date)	28/02/2025
Surveillance	

#### Proposed date for next audit

2026-Jan-18

#### **Stakeholder Announcements**

Date of public	cation	Location
08/01/2025		https://www.daily-sun.com/epaper/20 25-01-08/4
09/12/2024		https://watersas.org/stakeholder-anno uncements/
09/12/2024		https://a4ws.org/certification/stakehol der-announcements/
Comment	- The site published a stakeholder anno 2025.	ouncement in a regional newspaper on January 8
	- The AWS and WSAS published a stak website.	ceholder announcement on the AWS & WSAS
	- The WSAS published a stakeholder a	nnouncement on the AWS website.
Comment		



### **Alliance for Water Stewardship (AWS)**

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#### **Catchment Information**

#### **Catchment Information**

The GLTP factory is located within the Faridpur aquifer catchment as ground water catchment, and Gorai/Kaliganga River catchment as surface water catchment. The source water is pumped up from on-site deep borewells, treated by on-site water treatment plant (WTP), consumed for the production process. Wastewater generated from the factory is treated through the site's Effluent Treatment Plant (ETP) before being discharged. The discharged water is flows into nearby rivers (Gorai). Gorai river is the major river catchment. Gorai-Madhumati River is a principal distributary of the Ganges.



GLTP site Catchment.png



#### **Alliance for Water Stewardship (AWS)**

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#### **Client Description and Site Details**

#### Client/Site Background

BAT Bangladesh's Kushtia site, known as the Green Leaf Tobacco Processing (GLTP) factory, is located in Chourhash, Kushtia, Bangladesh. The factory is located in an area that consists of both industrial and agricultural zones. The GLTP factory commenced operations in 1994 and operates in two distinct seasons.

Processing Season: During this season, green tobacco leaves are processed as raw material for cigarettes. The operations include receiving the green leaf in the warehouse, processing it through machinery, storing the finished goods on racks for cooling, and then shipping them out.

Maintenance Season: This season is dedicated to overhauling the machines and implementing necessary replacements, modifications, and improvement projects to enhance efficiency.

The factory operates in three shifts (8 hours per shift) during the processing season, which includes morning, evening, and night shifts. During the maintenance season, the factory operates a single shift. The above is being updated as "There are approximately around 1,500 employees and workers who operate in three shifts during the processing season. Most employees travel to the factory from the Kushtia region, located approximately 6-8 kilometers from the facility. The factory is equipped with its own effluent treatment facility, water treatment facility, water reuse system, boiler, fire water system, canteen, and other essential services.

The GLTP factory comprises two separate processing lines. Green leaf tobacco is threshed using the shearing action of threshers, resulting in the separation of lamina and stem. The tobacco is then conditioned and dried to meet a specific moisture target. The lamina and stem are subsequently packed in C-48 corrugated cartons. The packed products from the GLTP are shipped to the Primary Manufacturing Department (PMD). Additionally, prized leaf from the GLTP is exported overseas every year.

The site has two borewells for extracting groundwater, which serves as the primary water source. The secondary source is rainwater, although very little rainwater is harvested.

Water is used in the production process for conditioning and drying green leaf tobacco to achieve the desired moisture content. Additionally, water is utilized in the boiler for steam generation and for WASH (Water, Sanitation, and Hygiene) purposes. Moreover, a portion of the water is also used for fire hydrant systems.

The site's water-related infrastructure includes borewells, Effluent Treatment Plant (ETP), Water Treatment Plant (WTP), water reservoir tank, rainwater collection tank, septic tanks, fire water tank, and boiler.

The GLTP factory is situated within the Faridpur trough aquifer catchment, serving as a groundwater catchment, and is also near the Gorai River and Kaliganga River catchments, which provide surface water. Source water is extracted from on-site deep borewells, treated by the on-site water treatment plant (WTP), and used in the production process.

The wastewater generated from the process is treated at the site's Effluent Treatment Plant (ETP) before being discharged into the municipal drainage system, which flows into the nearby Gorai River. Sewage wastewater is stored in a septic tank and later collected by the Kushtia Municipality. Additionally, stormwater is also discharged into the municipal drainage system, ultimately flowing into the Gorai River.

WSAS



### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440



GLTP site physical scope.png

#### **Summary of Shared Water Challenges**

#### **Summary of Shared Water Challenges**

- 1. Threats to water quality within the catchment area.
- 2. Water scarcity resulting from the potential establishment of water-intensive manufacturing plants within the designated catchment area.

  3. Limited community awareness and engagement in water management within the identified
- 4. Inadequate wastewater discharge practices.
- 5. Ground water level depletion, and insufficient water in dry season for irrigation.

Comment

0.1	General Requirements for Single Sites, Multi-Sites and Groups	
0.1.1	Eligibility Criteria	
0.1.2		
0.1.2.1 Comment	Have any water source locations and water-related discharge locations been visited during the audit, if so, which and where? If none were visited please provide justification.  Water source: Borehole (onsite) Water discharge location: Gorai river.	Yes
	Both the water source and water discharge locations were visited.	
0.1.1.1	The site(s) occupy one catchment OR an exception has been granted.	<b>⊘</b> Yes
Comment	The site occupy one catchment	
0.1.1.2	The scope of the proposed certification shall be under the control of a single management system.	<b>⊘</b> Yes
Comment	The scope of the proposed certification is under the control of a single management system	١.
0.1.1.3  Comment	The scope of the proposed certification shall be homogeneous with respect to primary production system, water management, product or service range, and the main market structures.  The scope of the proposed certification is homogeneous with respect to primary production	Yes
	system, water management, product or service range, and the main market structures.	



### **Alliance for Water Stewardship (AWS)**

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#### STEP 1: GATHER AND UNDERSTAND

- 1.1 Gather information to define the site's physical scope for water stewardship purposes, including: its operational boundaries; the water sources from which the site draws; the locations to which the site returns its discharges; and the catchment(s) that the site affect(s) and upon which it is reliant.
- 1.1.1 The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including:
  - Site boundaries;
  - Water-related infrastructure, including piping network, owned or managed by the site or its parent organization;
  - Any water sources providing water to the site that are owned or managed by the site or its parent organization;
  - Water service provider (if applicable) and its ultimate water source;
  - Discharge points and waste water service provider (if applicable) and ultimate receiving water body or bodies;
  - Catchment(s) that the site affect(s) and is reliant upon for water.





#### **Alliance for Water Stewardship (AWS)**

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#### Comment

#### Site's Water Use

- The site sources water from five borewells, and some portion of rain water within the factory premises and has no other water sources. The extracted water is used for two purposes: domestic use and production use.

#### Domestic Use

- Water from borewells is directly supplied to toilets, washstands, and the canteen. For drinking water stands, the water is filtered through individual purification units installed at each stand before consumption.
- All used water is collected in a septic tank, where solid waste is periodically removed by a government agency. During the rainy season, sub-runoff carries it into nearby rivers through municipal drinage system.
- Flow Path: Borehwells  $\to$  Domestic Use  $\to$  Septic Tank  $\to$  Removed by a government agency  $\to$  Catchment

#### **Production Use**

- Extracted water passes through the on-site Pre-Treatment Plant , then Water Treatment Plant (WTP) and boilers before being supplied to various consumption points. Some water is lost as steam during tobacco leaf processing, while the rest flows into the Effluent Treatment Plant (ETP).
- Wastewater from production is treated at the ETP through chemical and biological processes, followed by Reverse Osmosis (RO). The treated water is reused as boiler feedwater, and RO reject water is repurposed for toilet flushing.
- Rainwater and RO reject overflow from the site are discharged into the nearby rivers via municipal drinage.
- Flow Path: Borewells  $\to$  WTP  $\to$  Production Line  $\to$  ETP  $\to$  Mostly Recycled, Small Amount Discharged to Municipal drinage  $\to$  Catchment

#### Catchment

- The site defines its groundwater catchment as the Faridpur Trough Aquifer, from which it sources water, and its surface water catchment as the Gorai River-Kalinganga River-Gorai Canal-Kushtia Canal, which ultimately receives its effluent.
- The site set its physical scope as a 5 km radius around its location, considering hydrogeological studies and administrative boundaries. However, clear evidence of hydrogeological studies has not been provided, and it remains unclear whether the precise boundaries of the surface water catchments have been identified or justified.

#### Water source

The site has two bore wells for extracting groundwater, which serves as the primary water source. The secondary source is rainwater, although very little rainwater is harvested.

#### Water receiving body

The wastewater generated from the process is treated at the site's Effluent Treatment Plant (ETP) before being discharged into the municipal drainage system, which flows into the nearby Gorai River. Sewage wastewater is stored in a septic tank and later collected by the Kushtia Municipality. Additionally, stormwater is also discharged into the municipal drainage system, ultimately flowing into the Gorai River.

Finding No: TNR-016386

1.2 Understand relevant stakeholders, their water related challenges, and the site's ability to influence beyond its boundaries.



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

**1.2.1** Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall:



- Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people:
- Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;
- Provide evidence of stakeholder consultation on water-related interests and challenges;
- Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups;
- Identify the degree of stakeholder engagement based on their level of interest and influence.

Comment

- Government bodies, neighboring factories, suppliers, NGOs, and local residents are included in the stakeholder (SH) list.
- The Water Development Board was identified as the representative responsible for three major rivers, the ultimate receiving water bodies of the site, and site's stakeholder.
- From May to December 2024, multiple visits and meetings were conducted with the community, neighboring factories, and government agencies to distribute brochures and discuss shared water challenges. Photo evidence, meeting minutes, and attendance records were presented for review.
- A risk assessment was conducted for each stakeholder, considering factors such as their influence, distance to the river, and water consumption.
- Stakeholders' distance from the site, location within the catchment, willingness, interest, influence, and methods of influence were identified.
- On March 24, 2024, a stakeholder meeting was held in observance of World Water Day to discuss issues such as river erosion, waterborne diseases, global warming, and water misuse. The minutes of the meeting and the attendance list were reviewed.
- On December 23, 2024, a stakeholder meeting was conducted to discuss AWS (Alliance for Water Stewardship) and water sustainability. The minutes of the meeting and the attendance list were reviewed.
- PROBAHO users (residents of nearby villages) were identified as a vulnerable group and included in the site's SH list.

Finding No: TNR-016815

1.2.2 Current and potential degree of influence between site and stakeholder

shall be identified, within the catchment and considering the site's

ultimate water source and ultimate receiving water body for wastewater.



Comment

- The site indicated that it has identified the "influence between the site and each stakeholder" by taking into account factors such as the distance from the site to the stakeholders, regulatory bodies for water sources, receiving bodies, community members, suppliers, NGOs, and others.

1.3 Gather water-related data for the site, including: water balance; water quality, Important Water-Related Areas, water governance, WASH; water-related costs, revenues, and shared value creation.

**1.3.1** Existing water-related incident response plans shall be identified.





#### **Alliance for Water Stewardship (AWS)**

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#### Comment

- An emergency response plan specifying actions, PIC (Person in Charge), and responsibilities for five scenarios like failure of the distribution system, leakage(s) in distribution lines, failure of WTP, failure of ETP, and flash flood (rain water) related emergency plan was presented. It was revised to version 2.1 in December 2024.
- A flood, typhoon, and drought response plan, shared across all BAT Bangladesh sites, was additionally presented. The head of the department at BAT Bangladesh headquarters is responsible for executing roles and providing instructions to subordinates. It was last revised and recorded in July 2024.
- A water contamination management procedure was presented as part of the incident response plan related to chemical spills.
- **1.3.2** Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped
- Borewells, water tanks, consumption points, Pre Treatment Plant, WTP, ETP, septic tanks, and rainwater were mapped.
  - Re-use water was mapped in a separate colour, including ETP-treated water reuse and condensed return to boiler feed.
- 1.3.3 Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified.

  Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified.

#### Comment

- Water meters are installed at various points within the site, including borewells water sources, ETP inlet/outlet/reject, WTP inlet/outlet, boiler, and condensate return. These meters are calibrated annually.
- Domestic water use (including toilets, handwashing, and drinking water) is estimated based on per capita daily consumption (5L for drinking water, 30L for other uses). Process water use is also estimated.
- Total loss, including evaporation and leakage, is estimated by the difference between water withdrawal and consumption.
- 1.3.4 Water quality of the site's water source(s), provided waters, effluent and receiving water bodies shall be quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be quantified.



Q

Obs.

Comment

- Water quality samples were collected from various points, including drinking water, source water (borewells), and ETP, on July 8, 2024.
- All water quality tests were conducted by SGS, analyzing 17 parameters, including COD, BOD, TDS, TSS, arsenic (As), iron (Fe), pH, chromium (Cr), chloride, and sulfate.
- The water quality of the site's water source and discharge water was quantified as seasonal, showing high, low and annual variance.
- 1.3.5 Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.

  Q
  Obs.
- Comment Thirty-six potential pollution sources, including wastewater points, hydraulic oil, chemical spillage, lubricant oil, and transformer oil were appropriately identified along with their locations and risk levels.
- 1.3.6 On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural yalues.
- Water-related infrastructure was presented; however, due to the absence of shared value, there is no on-site Important Water-Related Areas (IWRA).



### Alliance for Water Stewardship (AWS)

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**1.3.7** Annual water-related costs, revenues, and a description or

quantification of the social, cultural, environmental, or economic water-related value generated by the site shall be identified and used to

in progress

inform the evaluation of the plan in 4.1.2.

Comment

- Water-related costs for 2024 were identified, including operation and maintenance, chemical supply, repairs, boiler (diesel), water quality testing fees, and stakeholder engagement costs. The total water usage and incurred costs for the year 2024 were presented.

- IWRA-related costs were not included, as they are covered by the headquarters.

- Water savings and cost reductions were presented from water network revamping, utility

central monitoring system, steam line revamping, and rain water harvestings.

Finding No: TNR-016391

**1.3.8** Levels of access and adequacy of WASH at the site shall be identified.



Comment

- The number of toilets (male, female) and drinking water points, along with photos, locations, and compliance with national laws, were provided, and all requirements were met. Since the site regulation indicates that people with disabilities cannot work at the site, no related facilities are necessary.
- The site performed a WASH-related self-assessment using the BAT group form and achieved 100% compliance in all categories: food hygiene, hand hygiene, sanitation, and water supply.
- 1.4 Gather data on the site's indirect water use, including: its primary inputs; the water use embedded in the production of those primary inputs the status of the waters at the origin of the inputs (where they can be identified); and water used in out-sourced water-related services.
- **1.4.1** The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.

Q Obs.

Comment

- The site is a primary processing factory for tobacco green leaf, with primary inputs including tobacco green leaf.
- Information on each farmer's extension center (the site's engagement point for farmers), irrigated area (hectares), water consumption, and irrigation type (whether water-saving or not) was identified.
- Across Bangladesh, 902 hectares of farmland are cultivated by 824 farmers, supplying tobacco green leaf through eight extension centers, with some sourced from farms near Kushtia. While packaging materials are imported, no related documentation was provided.
- Salinity is a key water quality parameter for tobacco farming, and internal guidelines require avoiding coastal areas to mitigate salinity risks.
- The site has implemented an initiative for Alternate Furrow Irrigation (AFI) since 2021. By 2024, the site covered 606 hectares and achieved a water savings of 2.8 million cubic meters (M³).

#### Findings

- While BAT Bangladesh GLTP-Kushtia provided data on tobacco leaf cultivation and water consumption across Bangladesh, the assessment did not include information on water quality or the level of water risk specific to the site's leaf-growing farmers.

**1.4.2** The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.

**Q** Obs.

Comment

The site's cars are washed by a service provider located within the catchment. The site has eight cars, which require washing approximately every 45 days. In 2024, the site introduced the service provider to a high-pressure jet system for car washing, which reduced water usage. As a result, a total of 1,622 liters of water was consumed by the service provider for car washing in 2024.

#### WSAS



#### **Alliance for Water Stewardship (AWS)**

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1.5	Gather water-related data for the catchment, including water
	governance, water balance, water quality, Important Water-Related
	Areas, infrastructure, and WASH

**1.5.1** Water governance initiatives shall be identified, including catchment plan(s), water-related public policies, major publicly-led initiatives under way, and relevant goals to help inform site of possible opportunities for water stewardship collective action.



Comment

- Bangladesh's water-related policies, regulations, and water management authorities have been identified.

- The site has identified the completed and ongoing projects of governance, e.g. Bank protective work dredging in Gorai river (2018-2025), Gorai River Restoration Project (2009-2014), Ganga Kapotaksha Irrigation Scheme Rehabilitation Project (2012-2016), etc.

**1.5.2** Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.

**Q** Obs.

Comment

- The site's legal register includes drinking water quality and discharge water standards, as well as regulations related to boilers, borewells, and fire safety.

- A license tracker was presented, documenting water-related permits and licenses, including those for borewells, boilers, fire safety, and Environmental Clearance, and explosive license.

Finding:

- Stakeholder-verified customary water rights have not been properly understood or identified.

The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.

in progress

Comment

1.5.3

- Catchment water inflow consists of surface runoff, evapotranspiration, groundwater recharge, and rainfall. The data has been obtained from the Bangladesh Water Development Board (BWDB), and Water Resource Planning Organization (WARPO) which was analyzed by Institute of Water Modelling (IWM) in the year 2022.

Finding No: TNR-016821

1.5.4 Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible, quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be identified.

in progress

Comment

- The water quality of major rivers (Gorai, and Kaliganga Rivers) was collected based on the parameters pH, TDS, DO, BOD, COD, Chloride, with data sourced from the Department of Environment (DoE). It was recorded that the water from these rivers is not suitable for drinking but can be used for other purposes. Seasonal variance for parameters was presented through monthly data.

- Groundwater quality was presented through the site's borehole test (refer to 1.3.3).

- The presence of high Arsenic (As) content in shallow tubewells was discussed as a common issue in Bangladesh. The site recognized this and implemented the Prohabo plant project to provide Arsenic-free water to local residents through deep tubewells.

Finding A

Finding No: TNR-016822

1.5.5 Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.

Q Obs.

Comment

- The site identified ten IWRA in the catchment including Gorai and Kaliganga Rivers.
- The water quality of the two rivers was confirmed in Section 1.5.4.

WSAS



#### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

**1.5.6** Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.

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in progress

Comment

Comment

- The site considered the context of Kushtia to identify and visit the government provided public toilets, Kushtia medical toilets, and BAT Banglades's provided PROHABO Plant, to

assess their condition.

Finding No: TNR-016894

1.5.7 The adequacy of available WASH services within the catchment shall

No

be identified.

- Site presented photos of WASH facility (public toilets, and PROBAHO Plant).

Finding No: TNR-016397

1.6 Understand current and future shared water challenges in the

catchment, by linking the water challenges identified by stakeholders

with the site's water challenges.

1.6.1 Shared water challenges shall be identified and prioritized from the

information gathered.

in progress

Comment

- A number of shared water challenges were identified and prioritized into Low, Medium, and High categories, reflecting stakeholder engagement based on the available data (excel sheet).

Finding
- No evidence of consultation efforts regarding stakeholder engagement was presented to

identify and prioritize the shared water challenges.

Finding No: TNR-016895

1.6.2 Initiatives to address shared water challenges shall be identified.

Yes

Comment

- Stakeholders and site's initiaves have been identified.

- The initiatives by the government related to river bank protective work dredging in Gorai river

(2018-2025) was identified (refer to 1.5.1).

1.7 Understand the site's water risks and opportunities: Assess and

prioritize the water risks and opportunities affecting the site based upon the status of the site, existing risk management plans and/or the issues

and future risk trends identified in 1.6.

1.7.1 Water risks faced by the site shall be identified, and prioritized, including

likelihood and severity of impact within a given timeframe, potential

Q Obs.

costs and business impact.

Comment

- A total of fifteen risks were identified, including inadequate calibration of water measuring devices, future restrictions/licensing on water supply, and polluted water within the catchment area.

-Each risk was assessed based on its likelihood, damage level, and timeline.

Finding

- The site assessment successfully identified several physical risks, particularly concerning stormwater management. However, it fell short in recognizing additional physical risks, notably the potential for flooding due to overflow from the nearby Padma River.

1.7.2 Water-related opportunities shall be identified, including how the site

**Q** Obs.

may participate, assessment and prioritization of potential savings, and business opportunities.

WSAS



### Alliance for Water Stewardship (AWS)

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#### Comment

- Four opportunities have been identified, including collaborations with enforcement agencies, rainwater harvesting, and water sensor tab installation, along with how the site may participate.

#### Finding

- Potential cost savings associated with each opportunity were not adequately identified.

1.8 Understand best practice towards achieving AWS outcomes:

Determining sectoral best practices having a local/catchment, regional,

or national relevance.

**1.8.1** Relevant catchment best practice for water governance shall be identified.

**Q** Obs.

Comment

- Pakistan Tobacco Company's (PTC) water-related data disclosure was identified as a good water governance best practice.

- Bangladesh Water Development Board (BWDB)'s best practice like town protection dam in Gorai river.

**1.8.2** Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified.



Comment

- PTC's pipeline elevation project (above-ground installation to reduce losses).

- BATB Kushtia site's initiatives, including water-saving tap installations and reuse of RO reject water for garden sprinklers were investigated as best practice.

1.8.3 Relevant sector and/or catchment best practice for water quality shall be

A

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identified, including rationale for data source.

in progress

Comment

-- BATB Savar site's in-house ETP lab, which conducts regular water quality monitoring to enhance management capabilities were presented as best practice

- PTC's five filtration plants and monthly log sheets tracking pH and TDS were presented.

Finding No: TNR-016826

**1.8.4** Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.



Comment

- The initiatives of Kushtia municipality were presented as best practices and include: the use of a vacuum truck for sludge cleaning, co-composting of sludge, and the preservation of water bodies

**1.8.5** Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.



Comment

- BATB Savar's WASH improvements were presented as best practices and include: touchless water taps and soap dispensers, the implementation of a toilet hygiene checklist, and the installation of hand dryers.
- Kushtia municipality has achieved 96% sanitation coverage in line with SDG standards, along with the provision of public toilet facilities that cater to both gender-based needs and individuals with disabilities.
- A mobile toilet facility has been provided by the Department of Public Health Engineering (DPHF)
- The PROBAHO plant, which aims to provide safe drinking water in the catchment area, was also highlighted as a best practice initiative of the site.



#### **Alliance for Water Stewardship (AWS)**

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#### 2 STEP 2: COMMIT & PLAN - Commit to be a responsible water steward and develop a Water Stewardship Plan

Commit to water stewardship by having the senior-most manager in 2.1 charge of water at the site, or if necessary, a suitable individual within the organization head office, sign and publicly disclose a commitment to water stewardship, the implementation of the AWS Standard and achieving its five outcomes, and the allocation of required resources.

A signed and publicly disclosed site statement OR organizational 2.1.1 document shall be identified. The statement or document shall include the following commitments:



- That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes
- That the site implementation will be aligned to and in support of existing catchment sustainability plans
- That the site's stakeholders will be engaged in an open and transparent way
- That the site will allocate resources to implement the Standard.

Comment

- The site has prepared AWS policy document signed by Area Director of APMEA Central & GM Bangladesh and Area Operation director of APMEA Central.
- The site's AWS commitment policy is posted on an internal notice board and shared via email with stakeholders.
- The site's AWS policy document includes the following commitments:
- "Engage stakeholders in an open and transparent manner to identify shared water challenges"

"Implementation of good water governance to ensure better catchment water quality and to support of existing catchment sustainability plans"

"Maintain the organisational capacity necessary to successfully implement the AWS standard, including ensuring that staffs have time and resources necessary to undertake the implementation"

- 2.2 Develop and document a process to achieve and maintain legal and regulatory compliance.
- 2.2.1 The system to maintain compliance obligations for water and wastewater management shall be identified, including: - Identification of responsible persons/positions within facility organizational structure



- Process for submissions to regulatory agencies.

Comment

- The site has established a legal register, license tracker, and a review process to ensure compliance with legal obligations. The Litigation counsel in Legal team at the Headquarters are responsible for reviewing, assessing changes, updating the register/tracker, sharing updated documents. Afterward, Plant Managers are responsible for following up on actions to
- Regulatory agencies verify site violations through the issuance of licenses, which must be renewed annually. The water-related permits are detailed in 1.5.2.
- 2.3 Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.
- 2.3.1 A water stewardship strategy shall be identified that defines the overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard.



Comment

- The site's water stewardship strategy has been appropriately presented, including its mission and vision.





#### **Alliance for Water Stewardship (AWS)**

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2.3.2 A water stewardship plan shall be identified, including for each target:

- How it will be measured and monitored
- Actions to achieve and maintain (or exceed) it

in progress

- Planned timeframes to achieve it
- Financial budgets allocated for actions
- Positions of persons responsible for actions and achieving targets
- Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.

Comment

A water stewardship plan has been presented, including targeted AWS outcomes, risks & opportunities, actions, measure of success, budget, timeline, responsible person, and status.

- Most water governance-related actions focus on achieving AWS Standard Step 1.
- Water balance targets: 35% reduction compared to 2017 by 2025.
- Water quality improvement, specially COD, and BOD parameters.
- Identify water quality trend of IWRA (Gorai river).
- Catchment WASH improvement actions: PROBAHO plant installed in driniking water

scarced area, Public toilet installed in 15 different places of Kushtia, etc.

Finding No: TNR-016403

2.4 Demonstrate the site's responsiveness and resilience to respond to

water risks

2.4.1 A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies

in progress

Comment - In 1.7.1, water risks have been identified, including potential discharge of untreated effluent,

and polluted water within the catchment—issues that the site cannot address alone.

Finding No: TNR-016404



### **Alliance for Water Stewardship (AWS)**

Audit Number: AO-001440

3	STEP 3: IMPLEMENT - Implement the site's stewardship plan and improve impacts
3.1	Implement plan to participate positively in catchment governance.
3.1.1	Evidence that the site has supported good catchment governance shall be identified. Yes
Comment	<ul> <li>Social Forest Development Project: To prevent flooding during the monsoon season, the site distributed 500 saplings to employees and planted them around the Kushtia water body on World Environment Day (June 2024).</li> <li>Visited the Bangladesh Water Development Board to discuss and communicate on water stewardship.</li> <li>Six PROBAHO plants have been installed in the Shatkhira.</li> <li>Hosted local stakeholders at the site, providing awareness on BATB's stewardship plan and best practices while also learning about the challenges faced by stakeholders. Meeting photos were presented as evidence (conducted in March 2024).</li> <li>Visited vulnerable groups in the region, distributed water stewardship brochures, and conducted basic educational sessions. Photo evidence was provided.</li> </ul>
3.1.2	Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.  Yes
Comment	- A WASH facility like PROBAHO plant provided in the community for safe drinking water.
3.2	Implement system to comply with water-related legal and regulatory requirements and respect water rights.
3.2.1	A process to verify full legal and regulatory compliance shall be implemented.
Comment	<ul> <li>The site's legal register includes drinking water quality and discharge water standards, as well as regulations related to boilers and fire safety.</li> <li>Water-related permits and licenses, including those for borewells, boilers, fire safety, environmental clearance, and explosive permits were provided.</li> </ul>
3.2.2	Where water rights are part of legal and regulatory requirements, measures identified to respect the water rights of others including lndigenous peoples, shall be implemented.  Obs.
Comment	<ul> <li>Legal requirements related to drinking water and WASH exist, and compliance with these requirements was confirmed through 3.2.1.</li> <li>To comply with drinking water regulations for the PROHABO Plant, quality tests are conducted, focusing on two key parameters of concern: Arsenic (As) and Coliform.</li> </ul>
3.3	Implement plan to achieve site water balance targets.
3.3.1	Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.  Yes
Comment	<ul> <li>The site has set a target to reduce water withdrawal by 35% compared to 2017 by 2025 and achieve 25% water recycling by 2025.</li> <li>Level 2 meter was installed and as of 2024, water withdrawal has been reduced by 11% compared to 2017.</li> </ul>

#### WSAS

compared to 2017.

at 21%.

- To support water recycling, a condensate water return system and RO filter were installed. The monthly recycling amount has been measured, with the last recorded recycle rate in 2024



### Alliance for Water Stewardship (AWS)

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3.3.2	Where water scarcity is a shared water challenge, annual targets to improve the site's water use efficiency, or if practical and applicable, reduce volumetric total use shall be implemented.	<b>Q</b> Obs.
Comment	<ul> <li>The site has set a target to reduce total volumetric water use by 35% compared to 2017 be 2025 and has currently achieved a 11% reduction as of 2024.</li> <li>To achieve this target, the site is working on increasing the water recycling rate using ETF RO and condensate return water, as well as improving water use efficiency through the GR system.</li> </ul>	, ⊃,
3.3.3	Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.	<b>⊘</b> Yes
Comment	<ul> <li>Re-allocation of water to social, cultural or environmental needs are not applicable</li> <li>The site provided the water quality test report for the RO reject water, which is discharged into the catchment river through the municipal drainage system.</li> </ul>	I
3.4	Implement plan to achieve site water quality targets	
3.4.1	Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.	<b>⊘</b> Yes
Comment	<ul> <li>The site's water quality target is to comply with ECR guidelines, which has been achieved and is being maintained, as confirmed by water quality test results.</li> <li>The site planned to establish an in-house lab for real-time monitoring of boiler feedwater, ETP in/out, and RO reject water quality.</li> </ul>	ļ
3.4.2	Where water quality is a shared water challenge, continual improvement to achieve best practice for the site's effluent shall be identified and where applicable, quantified.	Yes
Comment	<ul> <li>The site upgraded the ETP to the Upflow Anaerobic Sludge Blanket Reactor (USABR) where sult improvement of RO reject discharge water quality of COD and BOD parameters.</li> <li>The site has provided COD and BOD parameters test result for the last 3 years.</li> </ul>	ich
3.5	Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.	
3.5.1	Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.	<b>⊘</b> Yes
Comment	<ul> <li>The site has designated the PROHABO Plant borehole, which is used by local residents for drinking water, as an IWRA. Regular management and water quality testing are conducted through the headquarters and service provider.</li> <li>As part of the Social Forest Development Project, the site distributed 500 saplings to employees for planting along the riverbanks.</li> <li>The site has started to plant trees as shore protection along the bank of GK Canal.</li> <li>Awareness: Conference on climate change (inadequate safe drinking water, river erosion, social water misuse, and heat wave) in April 2024,</li> <li>Future action has been set forIWRA's water quality data analysis.</li> </ul>	
3.6	Implement plan to provide access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers at all premises under the site's control.	
3.6.1 Comment	Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.  - Considering the site's onsite WASH facilities and compliance with legal requirements, the practice is deemed appropriate. Refer to 1.3.8 for details.	Yes



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3.6.2 Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective.



Comment

- The site's water discharge amount is relatively low, and water quality is managed, resulting in minimal impact on the catchment.
- The site has established a target for groundwater withdrawal.
- Given the site's WASH practices, employees' water rights appear to be adequately respected.
- The site has installed and maintains two PROHABO Plants (boreholes) to improve local community access to drinking water.
- 3.7 Implement plan to maintain or improve indirect water use within the catchment:
- 3.7.1 Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.



Comment

- The site has set a target to reduce indirect water use by 5% by 2025. Compared to 2020 by recommending Alternate Furrow Irrigation (AFI) to suppliers, which uses 11% less water than traditional irrigation methods. (Refer to indicator 1.4.1).
- Farmers have reduced water use from 1,950 tonnes/ha in 2020 to 1,820 tonnes/ha in 2023. The target for 2025 is 1,800 tonnes/ha, and data collection is ongoing. (Refer to indicator 1.4.1).
- The site is in the test phase of deep spading irrigation, a more efficient technology than AFI, and plans to expand its application to a larger cultivation area.
- 3.7.2 Evidence of engagement with suppliers and service providers, as well as, when applicable, actions they have taken in the catchment as a result of the site's engagement related to indirect water use, shall be identified



Comment

- Farmers supplying green leaf to the site are all contacted and communicated with through a dedicated department at the BATB headquarters.
- The adoption rate of Alternate Furrow Irrigation (AFI) among farmers is increasing due to the site's engagement, from 50% in 2022 to a target of 85% by 2025. The next plan is to introduce drip irrigation on farmers' lands. (Refer to indicator 1.4.1).
- 3.8 Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have.
- 3.8.1 Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.



Comment

- There is no government-operated shared water-related infrastructure around the site. The only shared infrastructure is the PROHABO Plant, which was installed directly by the site.
- 3.9 Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.
- 3.9.1 Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.



Comment

 The site has publicly disclosed its water stewardship commitment through newspapers and engaged with stakeholders via emails, invitations, and direct visits, including outreach to a local women's community to discuss water stewardship. Supporting photos have been provided.

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3.9.2	Actions towards achieving best practice, related to targets in terms of	Q
	water balance shall be implemented.	Obs.

Comment

- The site has set a target to reduce total volumetric water use by 35% compared to 2017 by 2025 and has currently achieved a 11% reduction as of 2024.
- To support water recycling, a condensate water return system and RO filter were installed. The monthly recycling amount has been measured, with the last recorded recycle rate in 2024 at 21%.
- To achieve this target, the site is working on increasing the water recycling rate using ETP RO and condensate return water, as well as improving water use efficiency through the GRI system.
- **3.9.3** Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.



Comment

- In 2024, the site installed a new RO filter in the ETP to reduce wastewater discharge and is currently maintaining it.
- The site is preparing to establish an in-house lab by adopting the best practice from BATB Savar site, where frequent sampling and water quality monitoring have enhanced water quality management capabilities.
- 3.9.4 Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.



Comment

- The preservation of the catchment (IWRA) the Gorai River barrage, was presented as measures to protect against erosion.
- The site conducts maintenance activities in collaboration with their headquarters for the PROHABO plants in the catchment area.
- The site distributed approximately 500 saplings to employees in the Kushtia region for planting near the river shore to help protect against river erosion.
- **3.9.5** Actions towards achieving best practice related to targets in terms of WASH shall be implemented.



Comment

- Site has been providing safe drinking water to employees through UV/RO filtration and maintaining handwashing and toilet facilities for both men and women.
- The site has installed PROHABO Plants (boreholes) in the Kushtia community and has been maintaining them for a long period to ensure access to safe drinking water for local residents.



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4	STEP 4: EVALUATE - Evaluate the site's performance.
4.1	Evaluate the site's performance in light of its actions and targets from its water stewardship plan and demonstrate its contribution to achieving water stewardship outcomes.
4.1.1	Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be in progres evaluated.
Comment	<ul> <li>- Water Governance: The site has completed initial AWS Standard Step 1 activities (gathering water-related data, stakeholder engagement, data disclosure).</li> <li>- Water Balance: The site has set a target to reduce total volumetric water use by 35% compared to 2017 by 2025 and has currently achieved a 11% reduction as of 2024. To support water recycling, a condensate water return system and RO filter were installed. The monthly recycling amount has been measured, with the last recorded recycle rate in 2024 at 21%.</li> <li>- Water Quality: The site adheres to Bangladesh Department of Environment's ECR standard, which serves as its current water quality target. On-site WTP and ETP are operational, and regular water quality testing ensures compliance. Site targeted for discharge water quality improvement, specially COD, and BOD parameters.</li> <li>- IWRA: The water quality of IWRA (Gorai river) to be evaluated. The site has aloacated budget as well as responsible person. The discussion with the government agency is ongoing.</li> <li>- WASH: PROBAHO plant installed in driniking water scarced area, Public toilet installed in 15 different places of Kushtia with the timeline Q4 2025. Responsible resouurce assigned.</li> </ul>
	Awareness, discussion have been done for other WASH related targets.  Finding No: TNR-01682
4.1.2	Value creation resulting from the water stewardship plan shall be evaluated.
Comment	<ul> <li>The site evaluated the costs of activities in the Water Stewardship Plan (WSP) and the corresponding economic benefits.</li> <li>The site has evaluated value creation resulting from various actions of Water stewardship plan</li> <li>in terms of economical value, the site had saving of US\$ 22,488 per month in 2024.</li> </ul>
4.1.3	The shared value benefits in the catchment shall be identified and where applicable, quantified.
Comment	- The site has engaged in discussions, meetings, and consultations with stakeholders, including KNB Agro, Car Solution and WASH, 20 students from Kustia Islamic University, FSCD, BWDB, DoE, BADC, and Kushtia Pourashava, regarding the shared value benefits for the catchment.
	Finding No: TNR-01683
4.2	Evaluate the impacts of water-related emergency incidents (including extreme events), if any occurred, and determine the effectiveness of corrective and preventative measures.
4.2.1	A written annual review and (where appropriate) root-cause analysis of the year's emergency incident(s) shall be prepared and the site's ye response to the incident(s) shall be evaluated and proposed preventative and corrective actions and mitigations against future incidents shall be identified.
Comment	- The site reports an incident of flooding due to heavy rainfall in October 2024, and a corrective and preventive action plan has been outlined, specifying the target timeline and the individuals responsible for implementation

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individuals responsible for implementation.



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4.3 Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.

**4.3.1** Consultation efforts with stakeholders on the site's water stewardship performance shall be identified.



Comment

- The site shared its Water Stewardship (WS) Plan and performance through meetings and brochure distribution.
- A survey was conducted during a meeting for gathering feedback from stakeholders.

- Stakeholders provided various input on the outcomes of the Water Stewardship (WS) Plan.

Feedback received from the stakeholders:

- Increase awareness among people about the proper use of water.
- Reduce the quantity of wastewater and initiate efforts for water recycling.
- Evaluate and update the site's water stewardship plan, incorporating the information obtained from the evaluation process in the context of continual improvement.
- 4.4.1 The site's water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the evaluations in this step and these changes shall be identified.
- The WSP was updated quarterly through Sustainability Pillar meetings, the latest version is 2.0. effective date December 2024.



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5	STEP 5: COMMUNICATE & DISCLOSE - Communicate about water stewardship and disclose the site's stewardship efforts
5.1	Disclose water-related internal governance of the site's management, including the positions of those accountable for legal compliance with water-related local laws and regulations.
5.1.1	The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.
Comment	- The site's provided evidence reflect the disclosur of AWS commitment.  Finding No: TNR-016833
5.2	Communicate the water stewardship plan with relevant stakeholders.
5.2.1	The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to Yes relevant stakeholders.
Comment	- Water stewardship plan shared with the stakeholders through the meeting on 23 December 2024, and the same was communicated them through email on 18 January 2025.
5.3	Disclose annual site water stewardship summary, including: the relevant information about the site's annual water stewardship performance and results against the site's targets.
5.3.1	A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.
Comment	<ul> <li>BAT Bangladesh manages the performance of its four domestic sites collectively and discloses some details through its annual ESG report.</li> <li>In 2023, the ESG report included disclosures on water withdrawal and recycling targets and</li> </ul>
	performance. Finding No: TNR-016407
5.4	Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges;engagement with stakeholders; and co-ordination with public-sector agencies.
5.4.1	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.  Yes
Comment	<ul> <li>The site has identified shared water challenges through communication with various stakeholders, including a meeting representatives from nearby companies.</li> <li>The effort made to address the challanges were disclosed to the SH through emails.</li> </ul>
5.4.2	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.
Comment	- Site presented communication/disclosure of water stewardship plan, Shared Water Challenges and AWS Policy.
	Finding No: TNR-016834
5.5	Communicate transparency in water-related compliance: make any site water-related compliance violations available upon request as well as any corrective actions the site has taken to prevent future occurrences.
5.5.1	Any site water-related compliance violations and associated corrections shall be disclosed.  Yes

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Comment	- There were no water related compliance violation	
5.5.2	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.	<b>⊘</b> Yes
Comment	<ul> <li>No necessary corrective actions were required as there were no water related compliand violation</li> </ul>	ce
5.5.3	Any site water-related violation that may pose significant risk and threat to human or ecosystem health shall be immediately communicated to relevant public agencies and disclosed.	Yes
Comment	<ul> <li>No water related compliance violations that may pose a significant risk and threat to hun or ecosystem health were recorded.</li> </ul>	nan,
	Photographic Evidence from Audit	
	Photographic Evidence from Audit	<b>⊘</b> Yes
Comment	Photographic Evidence from Audit  Photos have been redacted for confidentiality reasons	<b>⊘</b> Yes
Comment		<b>₹</b> Yes
Comment	Photos have been redacted for confidentiality reasons	Yes