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Learning Report

Implementation of Alliance for Water Stewardship (AWS) Standard (Beta Version)

Project Name: Integrated Water Resource Management and Conjunctive use of water in the command area of water scarce irrigation systems of North Gujarat

Implementation Agency : Development Support Centre (DSC)
Supported By: Hindustan Unilever Foundation
State: Gujarat
District: Sabarkantha and Mehsana

Submitted By: Deloitte Touche Tohmatsu India Private Limited
Date: 26th August 2013

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Project Background

In 2008, Hindustan Unilever Limited commissioned SustainAbility to carry out a strategic stakeholder engagement as steps towards being a socially responsible and a sustainable business. As a result of the exercise undertaken Hindustan Unilever Foundation (herein referred to as HUF) was created as a vehicle for social investment in India. Water for Public Good with specific focus on livelihoods was identified as the key thrust for the Foundation.

HUF's approach involves combination of improving access to water wherever available, enhancing availability of water where it is scarce and finally improving productivity of water wherever it can be accessed and is available.

The impacts of the projects undertaken would reflect across the Triple Bottom Line performance where environmental, social and economic capital is created for the community

Alliance for Water Stewardship

AWS is a non-profit organization dedicated to promoting responsible use of freshwater that is socially and economically beneficial as well as environmentally sustainable.

It is a collaboration amongst some of the world's leading players in sustainable water resource management who are committed to driving collective responses to shared water risk through a stakeholder-endorsed International Water Stewardship Standard.

Water stewardship is defined as:
"*The use of water that is socially equitable, environmentally sustainable and economically beneficial, achieved through a stakeholder-inclusive process that involves site and catchment-based actions. Good water stewards understand their own water use, catchment context and shared risk in terms of water governance, water balance, water quality and important water-related areas; and then engage in meaningful individual and collective actions that benefit people and nature.*"
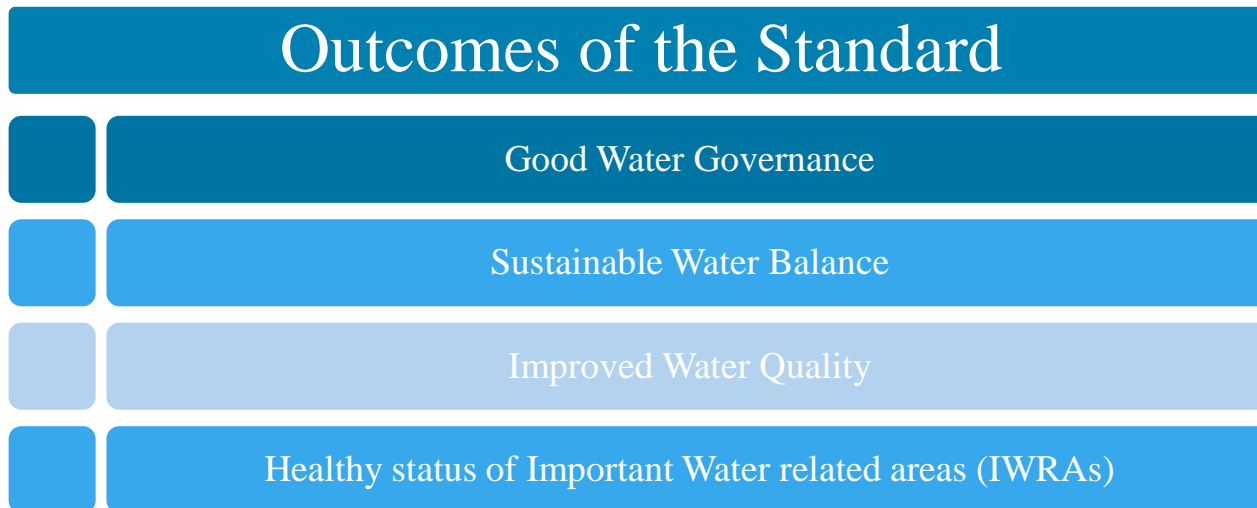
Alliance for Water Stewardship Standard

AWS is helping to drive collective responses to shared water risk through a stakeholder-endorsed **International Water Stewardship Standard**.

Water stewardship should simultaneously address shared water risk and generate positive outcomes for people, nature and the economy.

The Standard has global application and is focused on :

- Responsible on site water use
- Understanding the context in which site is operating, in particular the shared water risks
- Collective stakeholder consultation to develop and implement consensus based responses

Outcomes of the Standard

Good Water Governance

Sustainable Water Balance

Improved Water Quality

Healthy status of Important Water related areas (IWRAs)

It is designed to give companies and water service providers a systematic and verifiable way to assess their own water use and its impact on the surrounding catchment, while providing a mechanism through which they can engage constructively with other stakeholders.

Outcomes of Water Stewardship*

Outcomes	Definitions
Good Water Governance	Addresses both internal and external aspects of water governance. Internal governance relates to the procedures and rules established when implementing the Standard, local customary rights and the applicable regulatory framework. External governance relates to the formal and/or informal mechanisms in place at the catchment level to ensure that water is managed equitably as a resource for all.
Sustainable Water Balance	Addresses the amount and timing of water use, including whether the volumes withdrawn, consumed, diverted and returned at the site and in the catchment are sustainable relative to renewable water supplies and maintaining environmental flow regimes and renewable aquifer levels.
Improved Water Quality	Addresses the physical, chemical and biological properties of water, including whether water quality at the site and within the catchment(s) meets local regulatory requirements and is sufficient to maintain healthy freshwater ecosystems.
Healthy status of IWRAs	Addresses the spatial aspects of water, at the site and within the catchment(s), which provide important attributes to water quantity, quality and uses.

*Abstracts taken from the Beta AWS standard

Project Participants

The standard is currently being developed by a multi-stakeholder committee, appointed by AWS and a fully operational "Beta Version" has been released. The testing of the standard will be conducted until the end of 2013.

As a part of the knowledge building exercise for projects on 'water for public good', HUF has collaborated with the AWS to understand the applicability of the AWS Beta standard in context of participatory irrigation management within a project titled:

"IWRM and Conjunctive Use of Water in the Command Area of Water Scarce Irrigation Systems of North Gujarat"

The project is being implemented by the Development Support Centre (DSC) with the support of HUF.

DSC is a resource organization that provides knowledge based support to Non-Government Organizations (NGOs), government agencies and other stakeholders in the field of natural resource management.

DSC has a multi-disciplinary team of professionals that helps in capacity building of key functionaries, performs hand holding operations in the field, takes initiatives for appropriate policy changes and carries out field studies related to policy issues.

Deloitte Touche Tohmatsu India Pvt. Limited (herein referred to as DTTIPL) is involved as assurance provider to examine the applicability of the Standard within participatory irrigation management projects.

DTTIPL is a leading private professional services provider across the world. It is one of the most diversified professional services organizations, providing assurance and advisory, tax, management consulting, and enterprise risk management services.

The review was done by professionals from DTTIPL;

- Rajib Kumar Debnath, Director
- Tejas Saolapurkar, Manager
- Ria Bakshi, Consultant
- Sreerupa Guha, Consultant

Project Area

DSC has initiated the project in Sabarkantha and Mehsana districts of Gujarat State with the financial assistance of HUVF, India. It is envisaged that NABARD and other agencies will provide matching fund to carry out some important project activities according to the project plan.
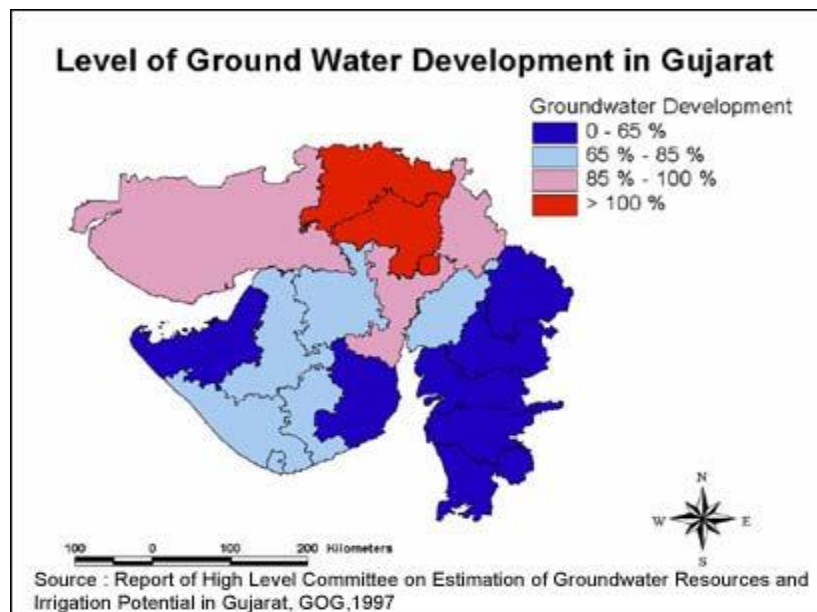
The project area lies around 80 kms from Ahmedabad.

The project covers 24 villages (12 each in Mehsana and 12 in Sabarkantha) benefiting about 6500 households in the command area of three water scarce irrigation systems of the state i.e. Guhai and Mazum in Sabarkantha and Dharoi in Mehsana.

Gujarat State
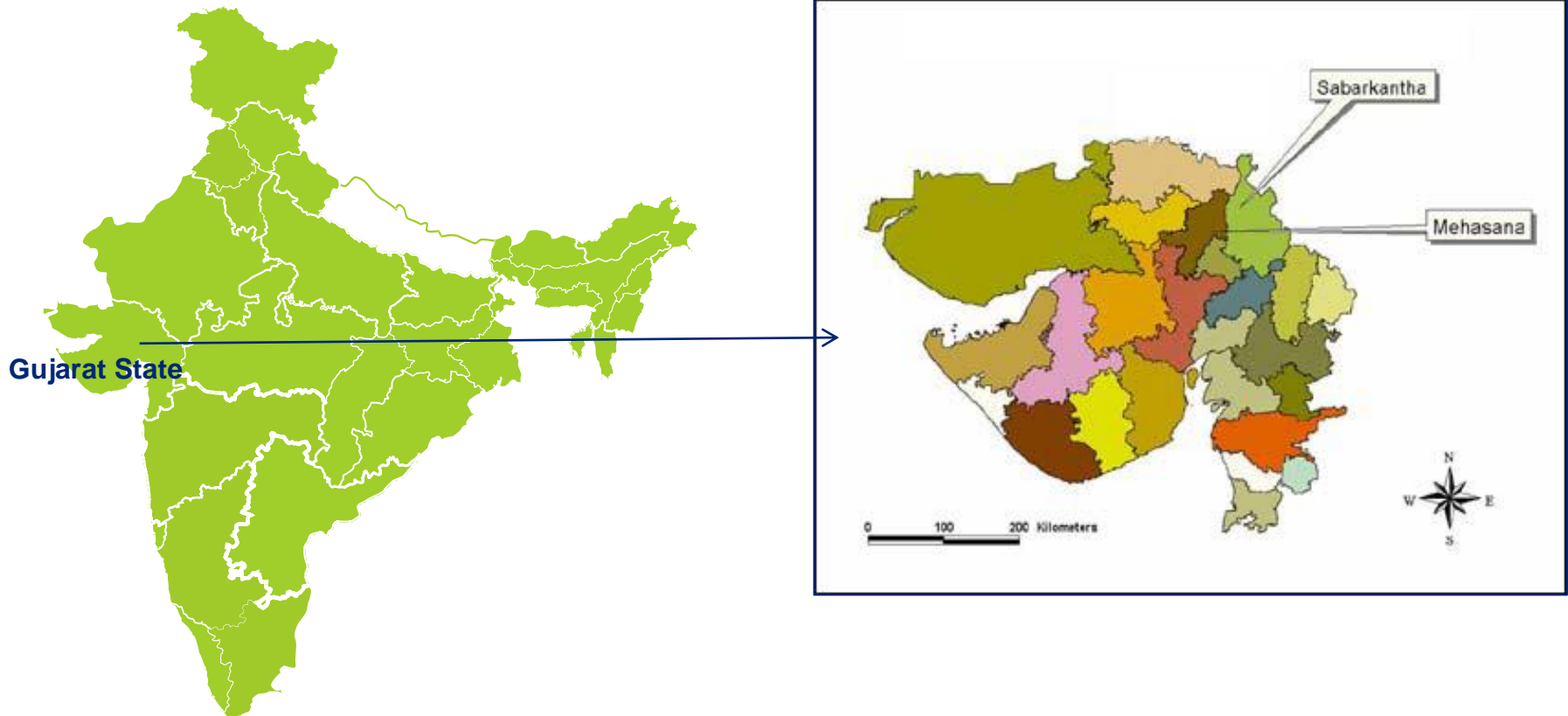
Hydrological Conditions

While all the 24 villages receive water from the three water deficit irrigation schemes of Mazum, Guhai and Dharoi, there is heavy dependency on ground water for irrigation. Water tables which are already at 600-800 ft are going lower year by year due to excessive pumping and very little recharge.

Level of Ground Water Development in Gujarat

Groundwater Development
- 0 - 65 %
- 65 % - 85 %
- 85 % - 100 %
- > 100 %

Source : Report of High Level Committee on Estimation of Groundwater Resources and Irrigation Potential in Gujarat, GOG,1997

The command area of Mazum dam covers 17 villages, Guhai 31 villages and Dharoi 90 villages. Based on the discussions with the villagers and the federation of Water Users Associations in these three schemes, 24 villages were selected – six each in Guhai and Mazum and 12 in Dharoi which were ranked on the basis of economic well being and water resource availability.

The six villages in Mazum have about 1800 households whereas those in Guhai have 1300 households. The twelve villages in Dharoi have about 3400 households. The six villages in Guhai have about 55% small and marginal farmers (less than 2 hectares of land), in Mazum there are about 40% whereas as the 12 villages in Dharoi have about 75% small and marginal farmers.

Key Stakeholder Groups

Stakeholder Group 1: Village Communities **(Water Stewards)**

Village Groups formed: Following are the details of the existing village wise *Sujal Samitis* (SS). There were total of 24 *Sujal Samitis* formed during the Assessment Time Period (ATP) of December 2011 till March 2013.

Corner Meets were conducted with the aforementioned CIGs for assessing rise in Agricultural Income/Yield in the case of Potatoes, Wheat etc. Proceeding books were checked of the sample CIGs engaged with.

The Sujal Samitis formed consist of women members and members from minority groups and hence their selection represent 1. Social Diversity 2. Equal participation, across all community strata 3. Materiality of the output.

Hence, sample of **6 *Sujal Samitis*** out of total 24 Sujal Samitis (~25%) were selected to understand their interpretation of the standard and its principles.

Basis for Sampling: The sample of **6 Sujal Samitis** out of total 24 Sujal Samitis were selected based on the rationality of "covering Sujal Samitis from each of the districts and covering maximum approved area for treatment formed and under each Water Scarce Irrigation Systems". This rationale was accepted to ensure maximum coverage of the defined scope and boundary.

Stakeholder Group 2: Project Implementation Agency (PIA)

Project Implementing Agency: Meeting with the Executive Director of DSC, Mr. Sachin Oza and discussions with the implementation team was conducted to understand the controls and processes for implementing the project.

Community Interactions
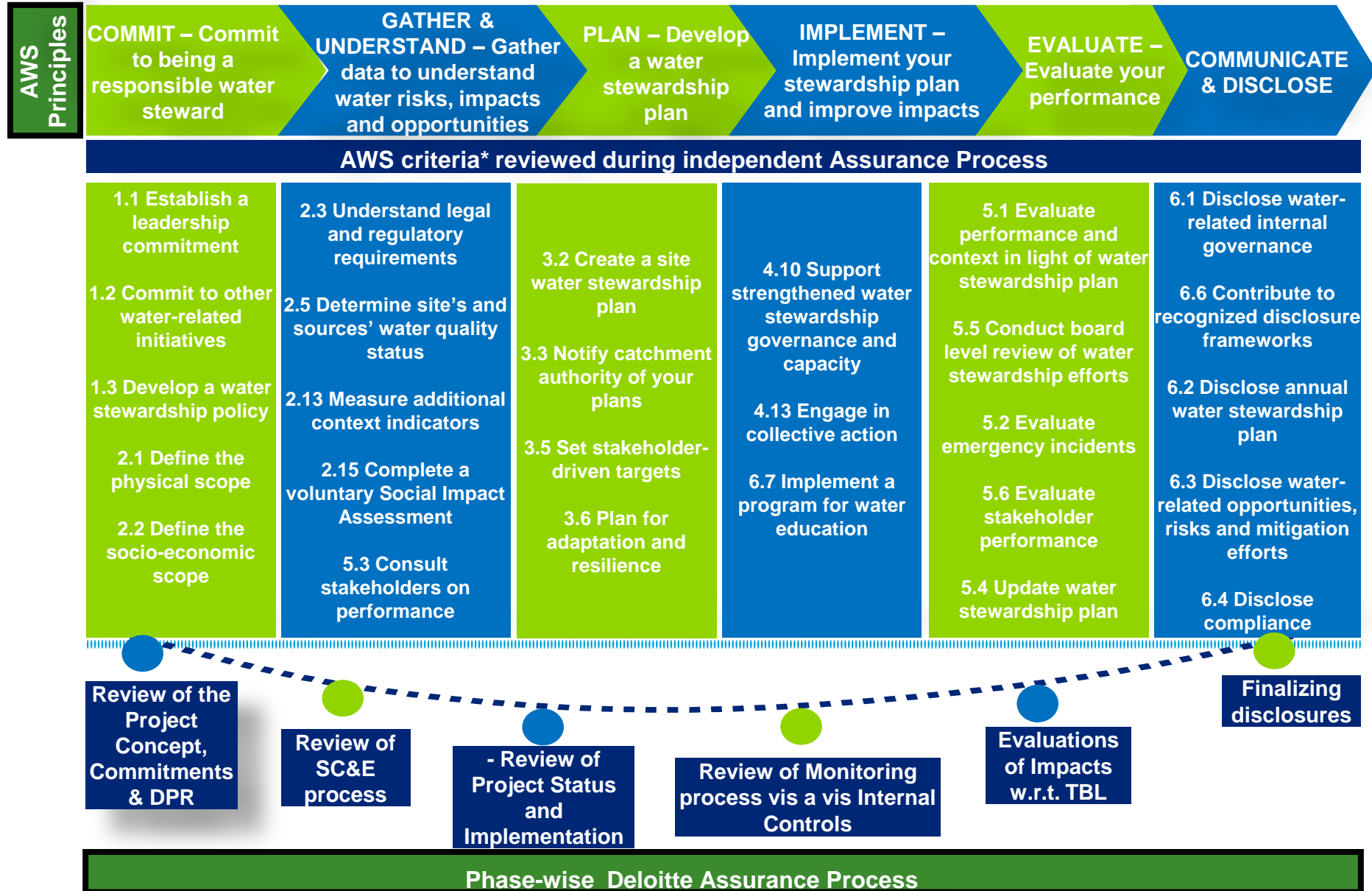
AWS- Interpretation by Water Stewards (Community)

Outcomes of Water Stewardship as per AWS	Relevant Aspects w.r.t DSC's community based water project	Definition	Auditable *
Good Water Governance	▪ Multi-functionality of water	Actions, processes and systems that further the multi functionality of water infrastructure for multiple end uses	Yes
	▪ Institutional	Institutional issues (e.g. working arrangements that enable government and community institutions to deliberate in hydrological boundaries)	Yes
	▪ Knowledge System	Knowledge systems (e.g. interdisciplinary knowledge on water and creating professionals with this) and efforts to contribute to public policy by providing information, speaking to key decision makers, demonstrating benefits of policy change and other associated activities that encourage adoption of policy change	Yes
Sustainable Water Balance	▪ Water Demand	Measures to have additional quantity of water conserved / saved	Yes
	▪ Water Supply	Measures to have additional quantity of water made available	Yes
Good Water Quality	▪ Chemical Properties e.g. salinity, alkalinity	Average monthly & daily quantity of chemicals e.g. Ammonia, Pesticide, Phosphorous etc.	Yes
	▪ Physical Properties	Average monthly & daily quantity of physical parameters e.g. TDS, TSS etc.	Yes
	▪ Biological Properties	Average monthly & daily count of biological parameters e.g. e-coli and fecal coliform etc..	Yes

As assessed by DTTIPL

AWS- Interpretation by Water Stewards (Community)

Outcomes of Water Stewardship as per AWS	Relevant Aspects w.r.t DSC's community based water project	Definition	Auditable *
Healthy status of Important water related areas (IWRAs).	▪ Labour days Generated	Additional Labour days generated due to the project and incidental activities	Yes
	▪ Agriculture Yield	Additional yield achieved in terms of produce and income due to enhanced productivity or product mix	Yes
	▪ Area stabilized	Command area treated and stabilized due to increased availability of water	Yes
	▪ Social Equity	Access of water to small landholders and involvement of various sections of the local community in the project , dead storage in storage structures for other end uses	Yes
	▪ Behavioral change	Collective action to water, trends in improved productivity of water, participation in private land management by making contributions for the same, asset maintenance processes are some of the ways in which such behavior can be looked at	Yes
	▪ Timely availability of water	Availability of water during times of crop stress for agriculture, duration of water availability in year for other end uses	Yes

DTTIPL, has assessed the feasibility of implementation and auditability of the standard for this project (Participatory Irrigation Management). DTTIPL concluded that all the requirements of this standard can be assessed however the existing version of the standard may require modifications in order to align it with such types of projects (where community is the water steward). DTTIPL, has observed that the assessor / auditor may have different interpretations of the standard (subjectivity) which may result into ambiguous / inconsistent conclusions. The standard may provide some guidance on audit process, qualifications of the auditors and their capacity building.

Mapping the Assurance process with AWS criteria

AWS Principles

| COMMIT – Commit to being a responsible water steward | GATHER & UNDERSTAND – Gather data to understand water risks, impacts and opportunities | PLAN – Develop a water stewardship plan | IMPLEMENT – Implement your stewardship plan and improve impacts | EVALUATE – Evaluate your performance | COMMUNICATE & DISCLOSE |

AWS criteria* reviewed during independent Assurance Process

1.1 Establish a leadership commitment	2.3 Understand legal and regulatory requirements	3.2 Create a site water stewardship plan	4.10 Support strengthened water stewardship governance and capacity	5.1 Evaluate performance and context in light of water stewardship plan	6.1 Disclose water-related internal governance
1.2 Commit to other water-related initiatives	2.5 Determine site's and sources' water quality status	3.3 Notify catchment authority of your plans	4.13 Engage in collective action	5.5 Conduct board level review of water stewardship efforts	6.6 Contribute to recognized disclosure frameworks
1.3 Develop a water stewardship policy	2.13 Measure additional context indicators	3.5 Set stakeholder-driven targets	6.7 Implement a program for water education	5.2 Evaluate emergency incidents	6.2 Disclose annual water stewardship plan
2.1 Define the physical scope	2.15 Complete a voluntary Social Impact Assessment	3.6 Plan for adaptation and resilience		5.6 Evaluate stakeholder performance	6.3 Disclose water-related opportunities, risks and mitigation efforts
2.2 Define the socio-economic scope	5.3 Consult stakeholders on performance			5.4 Update water stewardship plan	6.4 Disclose compliance

- Review of the Project Concept, Commitments & DPR
- Review of SC&E process
- Review of Project Status and Implementation
- Review of Monitoring process vis a vis Internal Controls
- Evaluations of Impacts w.r.t. TBL
- Finalizing disclosures

Phase-wise Deloitte Assurance Process

*For detailed list of criteria ,please refer to the Beta AWS standard, It was observed that the project can fulfill some other criteria and can achieve relevant credit points provided the documentation requirements are fulfilled

Key Learning and Recommendations

- In this trial implementation the community is considered as water steward (and also the primary user). The community recognizes the importance of stewardship and its embedded principle (governance, water quantity and quality, other important areas), as discussed with them during stakeholder meetings. The project ensures community participation in best possible way but scope lies in further inculcating the true sense of "water stewardship". For eg. A good water steward would not immediately change the agricultural pattern (due to surplus availability of water , cropping change from wheat to cotton), a good water steward would ensure socially equitable distribution of water.

- The existing status of ground water levels and the long term water usage profile in the area of influence could be studied in order to arrive at a water balance equation. The catchment water balance (on volumetric basis) needs to be defined as per the requirement of core criteria #2.4 of AWS. It is required to study the performance on sustainable water balance. Also a detailed study will be required to understand the indirect water use (as defined in core criteria #2.7 of AWS). A committee (8-10 members) can be formed to own and sustain the AWS certification. Members can be selected from Sujal Samitis (24) and roles, responsibility and accountability can be drafted (aligned with 6 steps of AWS, from Commit to disclose). The aforesaid study will be part of implementation (core criteria 2.7) and hence will be owned by the committee/community. Certain challenges have to addressed:
  - Competence of committee members
  - Uniform interpretation of the requirements
  - Cost of owing the studies and the certification
  - Motivation and Driving Factor for owing it and achieving AWS certification (typically organizations would do it for brand enhancement, sustainability agenda etc)
  - Direct Engagement with AWS for certification and audit

If the above challenges are amicably addressed and agreed by community, then a governance structure can be put in place to drive AWS agenda and   prepare it for certification

Key Learning and Recommendations

- The project has established formal and informal mechanism (eg sujal samitis) to addresses the requirement of "good water governance"(as defined in the standard). Fostering camaraderie is one of the key impacts generated out of formation of Sujal Samitis at village level. There is high level of commitment among the members of the Samitis, as per the discussions they would like to continue their Samiti's work even after project closure. The scope lies in developing a formal process to ensure their sustenance (post exit of implementing agency)

- The water quality status (chemical and biological) can be studied and performance on this outcome can be tracked(as defined in the standard). The possible indicators could be salinity or salt load in ground water, pesticide load etc.

- The area of influence has many cotton farmers and hence possibility of convergence with other program such as Better Cotton Initiative (BCI) can be explored. For eg. BCI has outlined criteria for water use optimization, erosion, pesticide application, water extraction etc.

- The project and community (water steward in this case) has developed a mechanism to capture the certification requirements of AWS (as defined in 6 steps from commit to communicate and disclose). The project is in nascent stage and lot of work is anticipated in future. The project and community should start collating the requirements as defined implementation checklist in in order to become eligible for such certifications. The project and community may think of setting up an internal verification mechanism (internal audit) to ensure compliance with standard's implementation and documentation requirements.

Key Learning and Recommendations

- The project and community may consider a half yearly/annual review of performance on core and advanced criteria of AWS and as per the indicators defined for every criteria. This would help to eliminate the gaps in implementation and certification requirements of AWS.

- The project may consider a comprehensive capacity building program to cover implementation requirements, documentation requirements inclusive of intent , guidance, references and verification process.

- A water stewardship policy and plan (as defined in core criteria # 1.2 ,3.2 and 6.2 of AWS) needs to be developed and disclosed.

Key Learning and Recommendations

- Scope lies in aligning the future drafts of standards with such projects (where the water steward is a community/institutional arrangements of watershed and not an organization that withdraws and consumes water as a resources. For eg in this case sujal samitis are water stewards)

- The standard may incorporate some guidance on stakeholder engagement, consultation and disclosure in the future drafts.

- The standard may incorporate audit procedure/guidelines to evaluate the performance related to its broad outcome. For eg. Audit procedure/guidelines   to evaluate performance on Important areas related to water. Scope lies establishing coherence with internationally established assurance standards for non-financial assurance such as ISAE 3000 and AA1000 in The standard may also think of multiple engaging audit agencies to arrive at acceptable and cost effective verification procedure.

- The standard has given some guidance (step4 of guidance document) on this however scope lies in incorporating guidance on methodologies to study water usage profile and water balance equation for a such projects (participatory irrigation management).

- The standard may provide some cost benefit analysis of AWS certification for various levels (core gold platinum) and for different sectors and for stewardship projects like integrated watershed management.