Water Stewardship Malawi: Implementing the Alliance for Water Stewardship Standard with Phata Sugarcane Outgrowers Cooperative



This report documents the lessons generated in the application of the Alliance for Water Stewardship (AWS) Standard with the Phata Sugarcane Outgrowers Cooperative (Phata), a smallholder cooperative of sugarcane farmers in Southern Malawi. The cooperative received support to implement the AWS Standard from Water Witness International (WWI) as part of the Water Stewardship Malawi initiative, funded by the Climate Justice Fund of the Scottish Government. The objectives of the exercise were to:

1. Secure cost-effective and long-term management of water risks for Phata at the site and catchment level through supported implementation of the AWS Standard.
2. Establish the benefits and challenges of the AWS Standard in improving water security and wellbeing in a smallholder cooperative setting and disseminate lessons to inform improved water stewardship practice in Malawi and globally.
3. Explore the value of the AWS Standard to smallholder farmers when implemented simultaneously with several standards used in agricultural settings (the Fairtrade Standard for Small Producer Organizations [SPO Standard] and the AWS Standard).

The results, benefits and challenges are presented below, together with conclusions and recommendations for improving the AWS system and water stewardship practice.

Background and methodology

The site

Established in 2011, Phata Sugarcane Outgrowers Cooperative (Phata) is situated in Chikwawa district in Southern Malawi. With a membership of 1,110 farmers, the cooperative cultivates an area of 618 ha of both irrigated and rainfed sugarcane. 47% of the farmers are female, a surprisingly low number in an area where, according to customary practice, land passes through the female line.

Prior to growing sugarcane, the smallholder farmers grew rainfed cotton in the area, but this became less and less viable as rainfall patterns became increasingly erratic. Learning from nearby sugarcane growers, Phata farmers switched and in doing so engaged an agricultural development and management company, Agricane, to manage their cooperative.

Held accountable by the board of directors, Agricane implement the operational and governance decisions shaped by the farmers through democratic governance structures. Decision making is supported by four key sub-committees responsible for (i) farm monitoring, (ii) Fairtrade Premium spending decisions, (iii) environmental rehabilitation and conservation and (iv) oversight of a small revolving fund arising from sales of non-sugarcane crops grown on Phata land and from fishing.

In consort with farmer members, Agricane ensures rigorous financial management for Phata; guiding how dividends are paid to members, loans are serviced and reinvestments are made to to cover operating costs and build reserves. Agricane has played an important role in securing financing for irrigation infrastructure and expansion through two European Union grants, two loans from AgDevCo, a social impact investor in African agribusiness, and a loan from the Opportunity International Bank of Malawi. This has been possible as Phata has a consistent market for their crop for 25 years, having entered into a long term off-take agreement with Illovo Nchalo Sugar Mill.

Phata is located in Chikwawa District in Southern Malawi, conveniently located near the Illovo Nchalo Sugar Mill (Landesa, the Interlaken Group, LandNet & LSLBI, 2019).

Recognising water as critical in sugarcane production, Phata understand the significance of managing the resource well both now and in the future for the sustainability of their cooperative. It is for this reason that the cooperative decided to adopt the Alliance for Water Stewardship (AWS) Standard.

What is the Alliance for Water Stewardship Standard?

The AWS Standard offers a credible, globally applicable framework for major water users to understand their own water use and impacts, and to work collaboratively and transparently with others for sustainable water management within the wider water catchment context. Implementers follow the steps and guidance in the AWS Standard to achieve good water stewardship practices that improve site water performance and contribute to wider sustainability goals.

The AWS Standard is built around five steps, which each contain a series of criteria and indicators. Following the steps and criteria will lead to improved performance in five areas: water balance, water quality, healthy status of important water-related areas, good water governance and safe water, sanitation and hygiene for all. Sites making claims to good water stewardship are audited and certified by credible, third party auditors.

Implementation methodology

1. **Inception and planning**
2. **Water security scan and context analysis**
3. **AWS Standard gap analysis and alignment action plan**
4. **Support and mentoring for implementation**
5. **Documentation - inputs, outputs, outcomes, challenges and recommendations**

WW conducted an initial desk-based review of the site and catchment water security context for Phata to identify likely water risks and opportunities. This was coupled with a participatory baseline survey targeting groups of Phata farmers to assess water stewardship risks and opportunities. Through site visits and a documentation review, WW Malawi then conducted a gap analysis with the site to assess current performance against the criteria of the AWS Standard. Phata then drafted their action plan based on priority areas identified, supported by Water Witness. In the subsequent implementation of their plan, they began to demonstrate compliance against the criteria of the Standard. The WW Malawi team provided training, guidance and support to Phata management, who cascaded training and water stewardship planning and implementation plans down to their members. Guidance and support were provided regularly through site visits, frequent calls, and in reviewing materials and plans.

The partnership with Phata was originally planned to run for two years with much of the second year focusing on implementing their water stewardship action plans. However, due to the coronavirus pandemic in 2020, programme implementation had to be adapted and reoriented, especially over the months of June, July and August 2020 when the peak of the first wave of coronavirus emerged in Malawi. This resulted in planned activities such as community WASH training and community sensitisation on catchment level resource management being delayed, as well as delays in conducting water quality testing around the site due to mobility restrictions. Instead the immediate priority became to provide easily accessible information to communities as to how to keep themselves safe from contracting COVID-19. Since September 2020, Phata has been able to return to implementing their broader water stewardship action plan, while respecting hygiene protocols and social distancing safety measures.

In November 2020, Phata representatives took part in a joint lesson learning workshop with another Fairtrade certified smallholder cooperative implementing the AWS Standard, Sukambizi Association Trust (SAT), in Mulanje district. The workshop was hosted by the SAT tea growers at their site. Both cooperatives appreciated meeting, exchanging experiences and learning from each other in both the field visits and the workshop. Following the workshop, in December 2020, Water Witness supported Phata to conduct a pre-certification audit against the criteria and indicators of the AWS Standard. This allowed Phata to take stock of their progress and update and re-prioritise their water stewardship action plan.

Water security context

Catchment context

The Phata Sugarcane Outgrowers Cooperative (Phata) is located within the Mwanza sub-basin along the lower Shire River in the Shire River Basin, in Chikwawa district, Southern Malawi. The Mwanza sub-basin is a wide floodplain and hosts biodiversity hotpots in marshy areas. Around Phata are the Lengwe National Park to the South West, Majete Game Reserve to the North and Elephant Marsh, a RAMSAR designated wetland of international importance, to the South.

Elephant Marsh, a RAMSAR site

While the Mwanza River flows all year, numerous tributaries of the Shire River in the Mwanza sub-basin are partially or fully dry for part of the year. The zone of the Lower Shire Basin where Phata is located is the characterised by unreliable rainfall and is the most drought affected areas in the country[1]. Climate change is predicted to alter the availability of water resources in Southern Malawi, with rainfall expected to become increasingly erratic and droughts and flooding more frequent. This is cause for alarm in an area where evapotranspiration rates from the Shire River Basin already regularly exceed annual rainfall, resulting in water stress and periods of drought[2]. Conversely, Mwanza sub-basin is particularly prone to floods, Chikwawa District being severely affected by flooding in 2015.

Despite monitoring data of water flows and pollutant loads in the Shire River Basin being incomplete, there are visible signs that water quality is being impacted. Soil erosion, siltation and algal blooms, attributed to deforestation, poor agricultural practices and untreated human sewage, are severely degrading the Shire River. It is estimated that agricultural run-off is the largest source of nutrient pollution into the Shire River Basin. Run-off from large sugar estates, which is rich in nutrients, is particularly high in Chikwawa District[3].

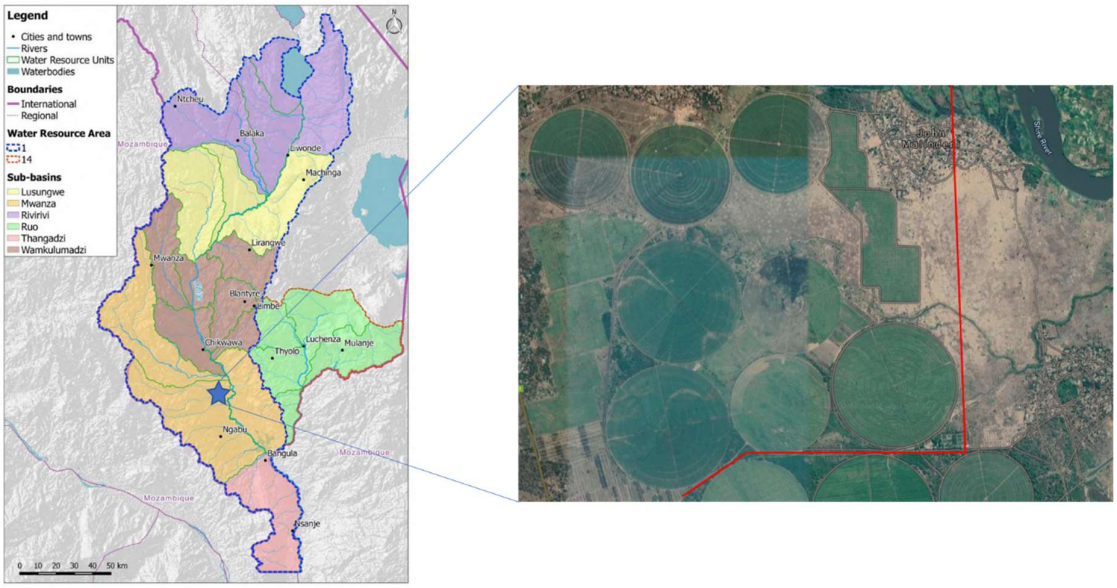
Nearly half of the people living in the Mwanza sub-catchment are reliant on unsafe water and three quarters of them do not have access to improved sanitation[4]. Access to safe water is a challenge to Phata farmers and their families in surrounding communities where handpumps have fallen into disrepair on some boreholes and some yield salty water. At the work site, water for drinking is withdrawn from the Shire River and made potable in a treatment plant owned by Phata. This is available for Phata's administrative office staff and is supplied by a bowser to farmers and seasonal workers working in the fields. Twenty sets of gender segregated latrines with handwashing stations are also available across the cooperative. While providing WASH services is challenging in an agricultural setting, this current level of WASH provision is considered to be inadequate by national and international standards.

Water for irrigation of the sugarcane at Phata is drawn from the Shire River through 12 centre pivots. While crops are largely irrigated in the dry season and when rainfall in insufficient in the rainy season,

[1] NIRAS, DHI and Bua Engineering Consultants (2016). Shire Basin Atlas.
[2] NIRAS, DHI and Bua Engineering Consultants (2016). Shire River Basin Management Project (Phase 1). Sub-component A1: Development of a Basin Planning Framework. Thematic Assessment: Surface Water Resources.
[3] NIRAS, DHI and Bua Engineering Consultants (2016g). Shire River Basin Management Project (Phase 1). Sub-component A1: Development of a Basin Planning Framework. Thematic Assessment: Water Quality and Pollution Management.
[4] NIRAS, DHI and Bua Engineering Consultants. (2016). State of the Basin Report for Shire River Basin.

farmers have increasingly observed a need to irrigate at the tail end of the rainy season in recent years. Irrigation can be disrupted by power outages and siltation in the river.

To combat deforestation and protect local wildlife, Phata has established a forest reserve near Lengwe National Park and have agreed to protect local biodiversity for future generations by preventing wildlife hunting in the area.



Map of sub-basins in Shire River Basin (left). Phata is located by the blue star in the Mwanza sub-basin (adapted from NIRAS et al. 2017). The circular and rectangular plots of land that are under sugarcane production at Phata are shown on the map to the right. Phata cultivated land is located to the left of the red line. The Shire River is clearly visible to the NE of Phata.

A Water Security Scan[5] identified the following priority water risks:

- Reduction in downstream flow in Shire River due to channelling water for irrigation by Phata and other upstream agricultural water users.
- Fertiliser and pesticide run-off from Phata's sugarcane fields and that of other upstream agricultural water users, causing water downstream to become salty and polluted. This affects the appropriateness of this water to be used by farmers downstream to irrigate their crops.
- Absence of water quality tests carried out on boreholes in communities, which supply drinking water to farmers and their families.
- Interrupted drinking water supply in surrounding communities due to broken handpumps, salty groundwater.

[5] Water Witness (2019) *Water Security Scan for Phata Sugarcane Outgrowers Cooperative, Chikwawa, Malawi.* Edinburgh: Water Witness.

Implementing the AWS Standard in parallel with other standards

Phata successfully achieved Fairtrade certification in 2015, meeting the Fairtrade Standard for Small-scale Producer Organizations and the Fairtrade Standard for Cane Sugar. Since then Phata have been receiving a Fairtrade sales premium from Illovo that is ring-fenced for community improvement projects. Ideas for community improvement projects are proposed through the Fairtrade Premium sub-committee and investment decisions are made with all cooperative members at the annual general meeting. Phata members recognise the need to improve the rigour of the selection process for community projects or initiatives to fund to assure that such investments are always needs-based.

The Fairtrade Standard system requires small-scale producers such as Phata to meet a set of core requirements for initial certification, followed by progressively stricter standards at years three and six. This is comparable to the AWS Standard, which requires core criteria to be met for certification and advanced criteria to aim for post-certification, to demonstrate progressive improvement on water stewardship.

As Phata prepares to meet the next step of stricter Fairtrade requirements by 2021, they will invest in more sustainable production practices and focus more on pollution prevention; environmental impacts beyond the farm; more progressive working rights and conditions for members (including safe WASH access); and delivering more targeted farmer training. Within the scope of this more ambitious phase of Fairtrade Standard implementation, Phata has the opportunity to streamline implementation of the AWS Standard.

Water Witness recently completed a benchmarking exercise[6] between the Fairtrade Standard for Small-scale Producer Organizations and the AWS Standard. This identifies and summarises the similarities and differences between the two standard systems and highlights where compliance can be demonstrated by one or a few actions to meet the requirements of both standards. A further benchmarking exercise was carried out to highlight areas of greatest complementarity between both standards, specifically regarding Fairtrade criteria that certified sites must comply with on the sixth year following initial Fairtrade certification.

The Fairtrade Standard for Small Producer Organizations [SPO Standard] and the AWS Standard are international ISEAL-compliant standards. ISEAL is a global membership organisation for voluntary sustainability systems and accreditation bodies that commit to a set of core values for effective sustainability standards and to the ISEAL codes of good practice. Smallholder organisations seeking to be compliant with more than one ISEAL standard, recognise certain principles, processes and administrative practices that are hallmarks of all ISEAL standards, including:

- Stakeholder inclusion, openness and transparency;
- A regular standard system review process, which aims to integrate implementation lessons from a wide group of stakeholders;
- The standard is based on voluntary actions;
- Compliance with standard system criteria is assessed through a (typically third-party) auditor. How smallholder farmers should present evidence or proof of compliance varies with different standard systems.

[6] Water Witness (2020) *Water Stewardship Malawi: Benchmarking Exercise (draft).* Edinburgh: Water Witness.

Changes driven by AWS Standard implementation

Phata is making progress in the implementation the AWS Standard, although it is still in the early stages. This is due in part to understanding and siloed communication of water stewardship and the AWS approach between Agricane management and the outgrowers, affecting buy-in and subsequent decision making at site and community levels. Despite these initial challenges, Phata has already brought about positive changes through implementing the AWS Standard which include:

Integrating regulatory compliance into standard operating procedures

Building regulatory compliance and the principles of water stewardship through the AWS approach into everyday standard operating procedures is a strong signal that water stewardship is beginning to become embedded in the way Phata operates.

In adherence to clear guidelines, Agricane ensures that all water abstracted from the Shire River for irrigation is checked and recorded. Through building the regular collection and analysis of such monitoring data into their standard operating procedures at farm management level, they are able to demonstrate the cooperative's compliance with their water abstraction permit. Additionally, by carrying out more regular water quality monitoring of site runoff, they are able to demonstrate compliance with environmental regulations on effluent water quality of discharge leaving the site.

> ***"The project has helped us in improving several areas. For instance, we have developed better management and documentation systems to ensure we adhere to regulatory requirements."***
>
> **Thokozani Chakwantha, Environment, Health & Safety Officer (EHSO), Agricane**

Through regular data collection, Phata has been able to focus attention on their site's water abstraction and water quality trends. The cooperative is able to set targets and track progress not only to increase their irrigation efficiency, but also to adopt more sustainable fertiliser storage and application practices to reduce impacts of fertiliser runoff and pollution risks.

In understanding of the importance of site and catchment water balance in the AWS Standard, smallholder farmers are well positioned to optimise water use efficiency, ensuring that their water use remains inside environmentally sustainable limits. To achieve this Phata will continue to strengthen their water data collection and analysis both directly and through existing available sources to identify priority actions affecting the site and catchment.

Addressing environmental degradation

Deforestation has intensified in the Shire Valley to make way for new agricultural developments over the years. This has profound effects on the environment, such as increasing the risk of soil erosion and siltation as well as being a primary contributor to climate change. The impacts are felt by many residents in the surrounding communities, especially women who are normally responsible for collecting firewood. Increased awareness of catchment resource management has resulted in the planting of 15,000 trees along the river, particularly in areas impacted by erosion within the catchment.

> ***"The community can feel the impact of deforestation and want to help support replenish trees in the community."***
>
> **Stivellia Chipatala, Female community member from Kazumba Village**

With World Bank funding, Phata launched an initiative planting wood-lots of fast-growing endemic trees on land unsuitable for sugarcane production. These are to be used as a sustainable source for charcoal production, reducing the need to utilise the existing forest as well as offering people an affordable form of fuel.

Drinking water and improved hygiene practices

Having experienced significant water, sanitation and hygiene (WASH) challenges at community level, especially safe drinking water supply, Phata aimed to improve WASH practices as part of their water stewardship action plan.

To achieve this, Agricane integrated training on safe WASH access and practices into health and safety training. Phata invested in two water kiosk stations for community use, supplied by water pumped from their water treatment plant. While these were welcomed by community members, the demand for safe drinking water available on a regular basis at community level remains high. Phata is supported to meet WASH needs in communities by the district government's Health Surveillance Officer who provides training in safe WASH practices. It is important to note that the AWS Standard framework has opened up space for communities facing water insecurity on a daily basis to have a platform where their needs can be expressed and a mechanism for these needs to be acted upon.

> ***"We were engaged by Phata to raise water challenges being faced in our community and we highlighted water scarcity. Now we have a kiosk (although there are still challenges)."***
>
> **Ellen Billiati, Female community member from Kazumba Village**

Benefits of AWS Standard implementation

Stakeholder engagement

Many of Phata's achievements, such as tree planting in the catchment as well as improving WASH both in the workplace and in the surrounding communities, are underpinned by engaging stakeholders successfully for collaborative action. Stakeholder engagement is essential to the achievement of benefits and impacts described by the 5 main pillars of the AWS Standard.

Phata started to strengthen engagement within their association and take the first steps to involve wider stakeholders in implementing the Fairtrade Standard. Through the AWS Standard, Phata are engaging more systematically with more catchment stakeholders including with communities in the surrounding area and local and national government.

Strategic focus on water resources management at a catchment perspective

With the focus of the AWS Standard being at both site and catchment level, Phata have become increasingly aware of their wider strategic role as responsible water resource managers. The structure of the AWS Standard framework, with rigorous with data collection, documentation and stakeholder engagement, has highlighted challenges and opportunities to improve the management of both Phata's site and shared water risks.

> ***"The project became as an eye opener on water resources management. We have started to seriously look at water resource management as a key component to our activities."***

Public health benefits: COVID19 response

WASH is an integral part of the AWS Standard, being an essential part of well-developed water stewardship strategy. Not only is this the first line of defence against many diseases, including the novel coronavirus, but is also crucial to the resilience of Phata's business operations, supporting productivity through supporting the health and safety of their workforce and their families.

By incorporating the AWS Standard guidance and criteria on site WASH provision and access, Phata had already updated their site emergency response and safety policy when coronavirus arrived in Malawi. At the height of Malawi's first wave of COVID-19, Phata responded by installing handwashing stations at the entrance to all administrative buildings and at strategic locations around the site. They also shared signs, flyers and posters with safety information across the site, distributed face masks and put a temporary halt to cooperative meetings[7]. At catchment level, Phata participated in the COVID-19 response committee, mobilising farmers to support the Health Surveillance Assistants to reach communities and reinforce safe WASH practices, especially handwashing with soap.

Phata cooperative members believe that the preventative safety measures taken to protect staff and outgrower members from the beginning, allowed them to carefully continue their operations throughout the first wave of coronavirus in Malawi. The site observed no positive cases of COVID19 throughout this period.

> ***"WASH is one of the pillars of the standard. As a result, we had to assess our WASH practices and make improvements and this has helped with prevention of COVID19. By prioritising WASH, we have not seen any cases of COVID19 and we have been able to work through the pandemic."***
>
> **Thokozani Chakwantha, EHSO, Agricane**

Challenges & lesson learned from AWS Standard implementation

While there are positive signs of progress, with more staff and interns being assigned to help action the water stewardship plan, Phata has faced some challenges in implementing the AWS Standard.

Navigating Phata's internal governance structures to achieve full buy-in

The rate of progress in implementing the AWS Standard was slower than expected. This was due in part to the departure of the key staff member leading the implementation of the water stewardship action plan in Agricane. In addition, information, messaging and training on the potential value of the AWS Standard to Phata and the benefits of water stewardship and related action plans had not reached the committees that represent outgrower members, particularly the committee governing decisions on the use of Fairtrade premiums. The opportunity to use these premiums to address shared water challenges at community level was therefore not taken up.

[7] To learn more about Phata's COVID19 response, see: https://www.phatasoc.com/assets/docs/20200402151032.pdf

Water Witness has worked with Agricane to identify the bottlenecks in communication and find ways to overcome them. The renewed buy-in achieved at operational level in the final phases of programme implementation, was evident during the joint learning session held with SAT in December 2020.

Mobilising human and financial resources for AWS Standard implementation

A core team of seven staff members from Agricane were tasked with implementing the AWS Standard. They found developing and implementing the water stewardship plan difficult due to the different levels of understanding and subsequent engagement both within the management team and among farmers. Agricane's Environmental Health and Safety Officer (EHSO), Thokozani Chakwantha, acknowledged that Water Witness's technical and mentoring support to the core water stewardship team was important in progressing with implementation of their action plan.

> ***"Our orientation to the AWS standard was good but there was need to train other staff as it only targeted those who were part of the stewardship team. But if all were trained it would make it easier in implementing as they would all know why newly introduced activities need to be done."***
>
> **Tione Malizani, Extension Officer, Agricane**

Implementation of the AWS Standard requires prioritising of financial resources to address elements of the water stewardship action plan. As a profit-making entity, investment decisions to allocate profits to water stewardship activities are made in Phata at key decision points throughout the year, where the board of directors assess each case for investment from a business perspective. The water stewardship team are keen to approach the board of directors to mobilise a part of Phata's profits to train more staff and outgrower members on the AWS Standard, with the continued support of Water Witness as a mentor. As a profit-making entity, their organisation is driven to reduce costs where possible at the site and to look for evidence of a return on investments in the near-term, therefore a clear business case would have to be made, ensuring that the board and management are fully informed of the benefits of water stewardship through the AWS approach. Securing executive buy-in and understanding of the benefits of implementing the AWS standard is a vital step to embedding water stewardship within Phata's business operations and operational budgets.

> ***"Implementation of some activities to us is a challenge since we are profit making entity our focus is to make profits hence delays in carrying out some activities as they require our financial support."***
>
> **Thokozani Chakwantha, EHSO, Agricane**

With resilience to climate change growing in importance at the global level, Illovo may see value in Phata managing longer-term water and climate risks to secure their supply and may be willing to support this, particularly as the exclusive buyer with a lengthy off-take agreement. Another financing route that may be more successful in future and that has been chosen by other cooperatives producing Fairtrade goods, is through the use Fairtrade Premiums.

Accountability in WRM and WASH sector governance

In their joint learning session, the Phata participants highlighted several difficulties in navigating the regulatory compliance systems for water resource management (WRM) and WASH. These included difficulties in understanding what the law actually requires them to do as well as not being aware of

support resources such as guidance documents and how to source them, for example borehole drilling guidance.

Despite the willingness of local authorities to engage, this is not often straightforward. For example, water permit applications are approved at national level through the National Water Resources Authority (NWRA), which is still to become a fully operational regulator, capacitated with adequate financial and human resources to complete its mandate[8]. Therefore following up on their water permits is not easy at a local level.

Local authorities such as the District Water Development Office (DWDO) are willing to advise on regulatory compliance and carry out regulatory checks on, for examples, newly built drinking water infrastructure, but very rarely have the financial resources to make site visits. Thus, sites are faced with the option of either paying their costs to prove regulatory compliance or foregoing such checks. To assist in assuring regulatory compliance in the water sector, it will be important to build understanding at local and national government levels as to how water users like Phata are able to meet certain regulatory requirement through implementing the AWS Standard.

Delays in AWS Standard implementation due to the coronavirus pandemic

Reflecting on the progress made in implementing their action plan, the core water stewardship team at Phata remain focused on reaching the goal of AWS certification. However, the global coronavirus pandemic has affected the pace at which they have been able to implement their ambitious water stewardship plan, affecting their ability to achieve certification by the end of 2020.

> ***"Certification is our goal, but the challenge could be lack of funds, limited time as one year is not enough and the impact of COVID19."***
>
> **Thokozani Chakwantha, EHSO, Agricane**

Despite delays in community-level engagement on WASH due to restrictions around social gatherings, and not being able to meet easily with government authorities, Phata shows determination to continue their water stewardship journey. With support from Water Witness, Phata has completed a pre-certification audit of their progress against the AWS Standard, the findings of which will help the cooperative to prioritise the next iteration of their water stewardship action plan.

Quality of work and sustainable management of community water supply

While the installation of two water kiosks was welcomed by community members, these are not able to provide an uninterrupted supply of drinking water to meet the high level of demand due to both the design of the kiosks and the capacity of the pumping system. Phata has communicated this challenge to community members and has reengaged the contractors to try to resolve the issues, while also striving to ensure regulatory compliance.

With restrictions on engagement posed by COVID-19, a community-led water point management committee is yet to be established and trained, though community members are currently running the water kiosks and cleaning them as required. Once it is feasible to do so, Phata will ensure that a community management system in place to sustain the water kiosks.

[8] To learn more about Malawi's water permit systems and recent WRM policy reforms, see: http://africa.iwmi.cgiar.org/wp-content/uploads/sites/2/2017/04/Water-Permitting-Malawi-Country-Report-PI_IWMI-March-2017.pdf

Conclusion

Phata's core water stewardship team recognise the benefits of the Standard as a systematic means of monitoring water use, ensuring compliance with legislation and international best practice, and demonstrating responsible water use to catchment stakeholders. There are real opportunities to highlight such benefits to water authorities, such as the Department of Water Resources and the National Water Resources Authority (NWRA), demonstrating how the AWS Standard can support cooperatives both to be good water stewards within the catchment and in regulatory compliance. In the face of climate change the importance of ensuring cost-effective and sustainable management of water risks at the site and catchment level becomes increasingly clear.

Phata's experience highlights the complementarity of implementing the AWS Standard in parallel with other standards, especially with the more advanced indicators of the Fairtrade Standard. Progress made in strengthening internal management processes and standard operating procedures to address WASH and legal compliance requirements demonstrates how sites can sustainably embed water stewardship into their daily operations. The global coronavirus pandemic has disrupted implementation to some extent, but not immeasurably. Prioritisation of investing in WASH in communities at site-level could not have been more timely in these circumstances.

In September 2020 Water Witness was able to introduce lessons learned from such smallholder application of WASH in Malawi to the first draft of AWS WASH guidance which has been refined and adopted by AWS and WASH4Work to inform practice globally. This is to be published in 2021. Sharing lessons with SAT, another Fairtrade certified smallholder cooperative implementing the AWS Standard underlined the importance of securing finance to implement water stewardship action plans. Phata learned how Fairtrade Premiums can be mobilised successfully to address shared water challenges at community-level, including access to safe drinking water. Phata can also build on experience in sourcing alternative funding to carry out site-level changes such as tree planting and sustainable charcoal production.

Despite encountering a number of challenges, Phata has continued to press forward with implementation of its water stewardship plan. In December 2020, through a pre-certification audit, Water Witness supported Phata to take stock of their progress and update and re-prioritise their water stewardship action plan. Their continued progress and drive for AWS Standard certification is a reflection of their perseverance and commitment to water stewardship and is a strong signal to the value of the AWS Standard system to other smallholders building climate resilience.

Insights gained through Phata's implementation of the AWS Standard will help inform future work funded by the Scottish Government to systematically appraise accountability in Malawi's WRM and WASH sectors. This aims to identify potential opportunities to strengthen governance in the sector and coordination between institutional actors and ultimately, to strengthen accountability to water users like Phata.

Recommendations

1. **Ensure guidance to support implementation of the AWS Standard is applicable in smallholder settings.** With the pending publication of both WASH and agricultural guidance for the AWS Standard, there is a need for these to support implementation of the AWS Standard in smallholder settings where needs, capacity, organisational structure and management differ significantly from commercial agriculture.

2. **Engage authorities to ensure regulatory compliance and strengthen accountable water resource management.** Effective engagement with government is key to the integrity and effectiveness of water stewardship initiatives. The AWS Standard framework offers a mechanism to bring authorities, regulators and smallholders together on the farm to constructively discuss compliance efforts and share best practice. Strategic engagement with water authorities, such as the Department of Water Resources and the National Water Resources Authority (NWRA), is essential to ensuring regulatory compliance and strengthening accountable water resource management.

3. **Alleviate the financial and administrative burden for smallholders through closer alignment between Standards:** There is strategic complementarity between the AWS Standard and other standards used in agricultural settings, such as the Fairtrade Standard for Small Producer Organisations (SPO Standard) and the Rainforest Alliance's Sustainable Agriculture Standard. Integrating aspects of water stewardship into existing smallholder standards, or developing an AWS add-on, represents a significant opportunity to mitigate the financial and administrative burden of implementing the AWS Standard for smallholders. This would strengthen complementarity on water resources management components without compromising the integrity of each standard system.

4. **Collaborate and cost-share to manage water resources effectively**: To accrue the benefits of safe-guarding water resources to maintain agricultural livelihoods for smallholders requires significant investment of resources. A study of budget allocation to and within the water sector is needed to highlight shortfalls for the Department of Water Resources and the National Water Resources Authority (NWRA), who have primary responsibility for water development and management. SAT's experience demonstrates how opportunities for cost-sharing investments on shared water challenges can be identified and capitalised on. Lessons should be documented and shared to support uptake of the AWS Standard by smallholder farmer cooperatives globally.