

## Water Stewardship Malawi: Implementing the Alliance for Water Stewardship Standard with the Kaporo Smallholder Farmers' Association



This report documents the lessons generated by one the first applications of the Alliance for Water Stewardship Standard with a smallholder agricultural cooperative, the Kaporo Smallholder Farmers' Association (KASFA) in the Karonga district of northern Malawi. They were supported by Water Witness International as part of the Water Stewardship Malawi initiative funded by the Scottish Government. The objectives of the exercise were to:

1. Secure cost-effective and long-term management of water risks for the Kaporo Smallholder Farmers' Association (KASFA) at the site and catchment level through implementation of the AWS Standard.
2. Support local capacity for good water stewardship practice through training of KASFA members.
3. Establish the costs, benefits, challenges and value of AWS Standard implementation in a smallholder farmer setting and disseminate lessons to inform improved water stewardship practice.

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

### Background and methodology

The Kaporo Smallholder Farmers' Association (KASFA), is a rice farmer's cooperative with nearly 7,200 members, based in Karonga district, northern Malawi. With plots of between 0.5 and 2 hectares, KASFA farmers are organised into clubs and zones within the District. KASFA is affiliated with the National Smallholder Farmers Association of Malawi (NASFAM), with whom they strive to produce social and economic benefits for members, their communities, and the country.

A notable committed partner of KASFA is Just Trade Scotland (JTS) who, under the Scotland Malawi Partnership (SMP), have facilitated the importation and distribution of rice from KASFA to the United Kingdom. JTS aims to provide sustainable income generation and wellbeing for small holder farmers, producers and their families.

Currently JTS is working with KASFA to implement a small grant from the Scottish Government to support irrigation expansion and sustainable water use amongst the KASFA membership through installation of shallow wells and pumps, with water resources management training and support from Mzuzu University.

In an effort to respond to the water challenges faced by their members, KASFA, along with JTS and Mzuzu University are collaborating with Water Witness International (WWI) to implement the Alliance for Water Stewardship (AWS) Standard, as part of WWI's Water Stewardship Malawi initiative which is also funded by the Scottish Government's Climate Justice Fund.

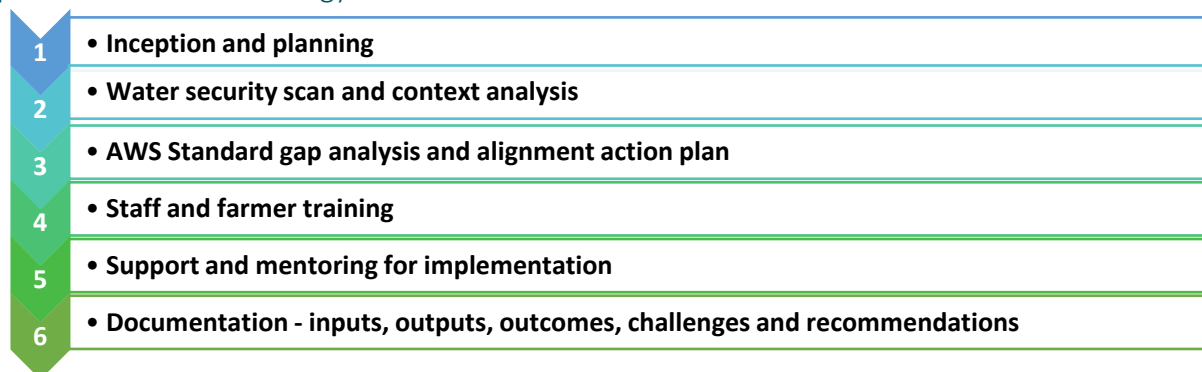
## What is the Alliance for Water Stewardship Standard?

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



Following an initial phase of inception and planning, WWI conducted an initial desk-based review of the water security context in Karonga to identify likely water risks and opportunities. The team also conducted a water risks and opportunities survey with 151 respondents from across the KASFA membership. The survey helped to identify key topics for targeted training, and to inform the development of water stewardship plans at a later stage.

Through site visits and documentation review, WWI conducted a gap analysis with KASFA to assess current performance relative to the criteria of the AWS Standard. This identified priority areas and needs for compliance. Following the gap analysis, the team drafted an action plan for KASFA to begin demonstrating compliance against the criteria of the Standard.

Based on the needs identified through the water risks and opportunities survey and gap analysis, Mzuzu University developed and delivered training to 250 KASFA lead farmers to improve water management

practices and achieve compliance with the AWS Standard. The 250 lead farmers then aimed to train 4,500 farmers within their respective associations through a farmer-to-farmer training approach. Training modules included: understanding the AWS Standard; water governance; water quality; domestic water supply and sanitation; conflict management; and climate change. Through the training, the lead farmers developed ‘water stewardship action plans’ to implement within their respective associations, actions for which included planting trees and vetiver grass, applying for water rights, and improved sanitation and hygiene practices.

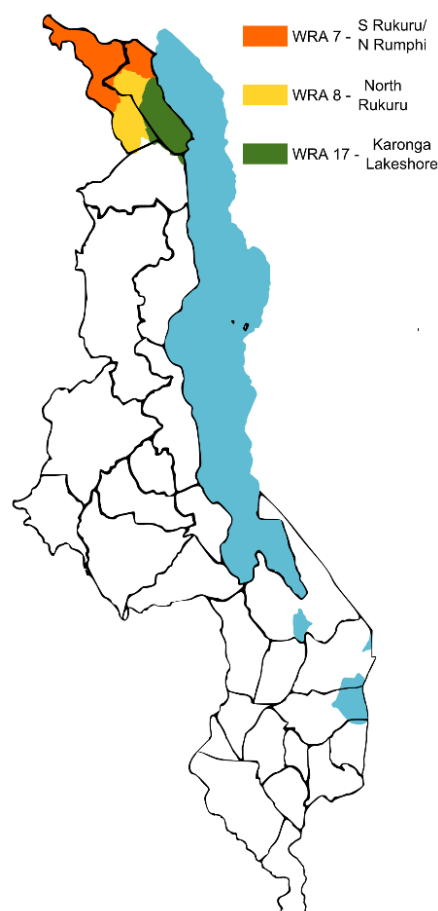
The WWI team provided training, guidance and support to the KASFA staff and management throughout the implementation process in the form of site visits, calls, and reviewing materials and plans.

### Water security: Site and catchment context

KASFA is located in Karonga district in the northern part of Malawi on the low-lying North Rukuru River floodplain, by the shores of Lake Malawi. Members are spread throughout the district, which covers the Karonga Lakeshore, North Rukuru and Songwe catchments, the latter of which is a transboundary catchment shared by Malawi and Tanzania.

Karonga is vulnerable to adverse impacts of climate change and extreme weather events such as floods and droughts. This situation is exacerbated by increasing poverty among rural communities, increasing population pressure on a limited land resource base, land degradation arising from agricultural expansion and the cultivation of marginal lands, and increasing deforestation to meet the increasing demands for energy, food and construction purposes.

The majority of KASFA members are solely dependent on rainfall for cultivation, and thus are especially vulnerable to adverse impacts of climate change. Key challenges identified through a Water Risks and Opportunities survey of 151 KASFA members include: erratic rainfall, flooding, catchment degradation, erosion, land and water conflicts, lack of regulatory implementation and compliance, and low levels of access to water, sanitation and hygiene.



### Changes driven by AWS Standard implementation

#### Shallow well management

As part of the AWS Standard’s requirements for good water governance and regulatory compliance, KASFA recognised the need to establish by-laws for the sustainable management and use of the recently installed shallow wells used by KASFA members. Bylaws were established for 11 shallow wells (Mwenengolongongo, Msomba, Kakoma, Mwakasungula, Kayimbili, Ntakisha, Chakwera, Mwenitete, Mwangosi, Mtendere and Pitala MACs). The by-laws stipulate that only KASFA members may use the shallow wells, and that they are responsible for the maintenance and upkeep of the shallow wells and pumps through financial contributions where required. The by-laws also prohibit activities in the immediate vicinity of the shallow wells that could

potentially contaminate the water, including the grazing of livestock and washing of clothes and other domestic items.



*KASFA member at shallow well*



*Irrigation from shallow*

### Tree-planting

Prior to implementation of the AWS Standard, tree-planting was a regular annual activity implemented by KASFA, with support from NASFAM. However, prior tree-planting efforts were not carried out strategically, and the survive rates of trees were generally poor. Given that catchment degradation and floods were identified as priority water risks by KASFA farmers, tree-planting was chosen as one of the key activities under KASFA's water stewardship plan. However, KASFA recalibrated their tree planting efforts to address the issues of catchment degradation and flooding by planting along riverbanks and in the heavily deforested areas. In consultation with the District Government, KASFA identified one catchment area as a priority for planting. In total, 8,257 trees were planted in 4 wards. It is hoped that by planting trees strategically, KASFA will be able to improve the health of important water-related areas in the catchment and mitigate flood risks.



*KASFA water stewardship plan development*



*KASFA member tree nursery*

## Benefits, challenges of AWS implementation

### Benefits of AWS Standard implementation

#### *Improved knowledge of water management*

KASFA management and staff report that the project, and water stewardship training in particular have changed the mindset of some farmers regarding management of water and the environment. Farmers have a better understanding of good WASH practices, catchment restoration, as well as water laws and regulations as they apply to them. As attested by several lead farmers, the project “helped in changing attitudes to bylaws, which help a lot if everyone understands and follows them”.

#### *Spirit of stewardship*

KASFA Field Officers report that since participating in water stewardship training, various KASFA members have taken it upon themselves to implement actions from their water stewardship plans. Farmers have planted trees and vetiver grass, repaired gulleys, and constructed pit latrines near their farms. Others have begun treating their drinking water at home and carrying it with them to the field, while a small number of farmers have applied for water rights. However, implementation has been inconsistent, as Alice Ngulube of Mzuzu University reports “Some farmers have taken activities forward themselves, others have not”.

### Challenges of AWS Standard implementation

#### *Monitoring and evaluation*

According to KASFA management and staff, one of the primary challenges of AWS implementation is the requirement for rigorous monitoring and evaluation. Reflecting on the experience of implementation, KASFA Manager, Masangwi Mangandale asked “Farmers are very scattered, so how do we evaluate if the Standard is being practiced?”. KASFA Field Officers feel that they lack the necessary expertise, and often do not have adequate resources to visit the field to carry out monitoring and evaluation visits. This is especially challenging given KASFA’s large and dispersed membership.

#### *Capacity constraints of KASFA members and staff*

Successful implementation of the AWS Standard in a group setting hinges on an adequate understanding of the Standard by all members. While KASFA’s lead farmers received water stewardship training, the scope and complexity of the subject matter, coupled with varying levels of literacy amongst the group, meant that not all subjects were fully understood. Lead farmers subsequently struggled to convey key concepts in farmer-to-farmer training sessions. Interest in, and attendance of farmer to farmer training was generally low, resulting in an inadequate understanding of water stewardship amongst the KASFA membership.

Neither the KASFA management, membership nor staff has previous experience in implementing standards or expertise in water. As Mr. Mangandale points out, “The AWS Standard needs someone with water expertise. There is a gap [at KASFA]”.

#### *Stakeholder buy-in*

The decision to pursue implementation of the AWS Standard was made by KASFA management, and the Board and staff of the organisation initially did not understand the objective, or importance of the project. Without any additional budget to carry out AWS activities, KASFA staff and members struggled to see the

benefit of the work, resulting in a low level of buy-in across the organisation. As Rochelle Holm of Mzuzu University points out “AWS [Standard] is imposed from the top, it’s not bottom up”.

## Barriers to AWS Certification

### *Group Certification Requirements*

Given that KASFA is an association of thousands of smallholder farmers, rather than a single site operation, it is classified as a group operation for the purposes of AWS certification. However, the AWS Certification Requirements stipulate that “An enterprise which occupies more than one catchment would not usually be eligible for AWS certification” (AWS Certification Requirements, 2015: p 21). KASFA members are spread across three catchments and thus are not eligible for certification. It is possible that KASFA members within the three distinct catchment area boundaries could be assessed as separate units, however this would have significant administrative and costs implications for the auditing and certification process.

### *Labelling guidelines*

For KASFA, the primary appeal of AWS Certification is to demonstrate their sustainable water use to consumers through an on-product label, and ultimately to increase the export and sales potential of their rice. In the words of KASFA Manager, Masangwi Mangandale, “We sell our rice in Scotland. Some buyers will not buy if we don’t protect our water”. The AWS Labelling Guidelines require that, in order to be labelled, a product must be processed and packaged at an AWS certified site. While KASFA carries out initial processing at its rice mill in Karonga, final processing and packaging of the rice occurs at a NASFAM owned facility in Lilongwe. Therefore, even if KASFA’s operations were AWS certified, their rice would not be eligible for an on-product label, even though the most significant water use occurs during production.

### *Infeasible criteria*

To a large extent, the AWS Standard was conceived with large commercial facilities in mind, meaning that certain criteria are either irrelevant or impractical for smallholder farmers to achieve. For instance, the Standard requires on-site access to drinking water, sanitation and hygiene for all workers. KASFA members maintain small plots devoted to rice cultivation, in varying proximity from their homes. In most cases it is physically and financially impractical, and largely undesirable for KASFA members to construct sanitation facilities on-site. Similarly, requirements to individually measure and monitor water balance and the water quality of run-off imposes an unworkable burden on farmers tending to small, and primarily rainfed plots.

### *Costs of Certification*

AWS Certification currently requires an initial on-site assessment and annual surveillance visits. While there is no standard pricing for certification services, prior experience in the region would suggest that this is likely to cost not less than \$3,000 USD per annum for KASFA. This represents a significant investment for an organisation that primarily serves to provide economic and social benefits for its members. Regardless of KASFA’s ability to pay, it is unclear whether the benefits of Certification would warrant this investment.

## Recommendations

1. **Develop Smallholder Guidance:** KASFA's experience highlights the need for specialised guidance to support implementation of the AWS Standard in smallholder settings where needs, capacity, organisational structure and management differ significantly from commercial agriculture.
2. **Revise Group Certification Requirements:** The requirement for members of a group seeking AWS certification to be located within one catchment should be reconsidered to allow for certification of dispersed smallholder cooperative operating in multiple, adjacent hydrological catchments.
3. **Amend AWS Labelling Guidelines:** Labelling guidelines should allow for the recognition of AWS certification in stages of the supply chain which represent the most significant water use and impact, rather than exclusively focusing on final sites of production.
4. **Closer Alignment with Smallholder Standards:** 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.