



Platforms for Brokering and Learning

Lessons on Multi-Stakeholder Collaboration for
Farmer-Led Irrigation Development

SNV



Citation: Thottoli V, Zevenbergen H & van Veldhuizen L. 2019. Platforms for Brokering and Learning: Lessons on Multi-Stakeholder Collaboration for Farmer-Led Irrigation Development. SWA Kenya, SNV Netherlands Development Organisation

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Acronyms

AIP	Agriculture Innovation Platform
B2B	Business to Business
CIDP	County Integrated Development Plan
EMU SACCO	Ewaso Maji Users Savings and Credit Cooperative
ENSDA	Ewaso Ng'iro South Development Authority
FLID	Farmer Led Irrigation Development
IAP	Irrigation Acceleration Platform
JKUAT	Jomo Kenyatta University of Agriculture & Technology
KePHIS	Kenyan Plant Health Inspectorate Service
KCB	Kenya Commercial Bank
KIT	Dutch Royal Tropical Institute
LCB	Local Capacity Builder
LWF	Laikipia Wildlife Forum
MKWEP	Mt Kenya Ewaso Water Partnerships
MSP	Multi Stakeholder Platform
NGO	Non Governmental Organisation
NIAP	National Irrigation Acceleration Platform
SACCOs	Savings and Credit Cooperatives
SNV	Netherlands Development Organisation
SSA	Sub Saharan Africa
SWA	Smart Water for Agriculture
SWS	Smart Water Solutions
UNDP	United Nations Development Program
WARREC	Water Research and Resource Centre
WRUA	Water Resource Users Association

Executive summary

This publication draws lessons from the three years of experience in managing 'Irrigation Acceleration Platforms (IAPs)' established under the Smart Water for Agriculture project in Kenya. The project was proposed in response to the increased uncertainties smallholder farmers face due to climate change in Kenya, especially with respect to water, and aimed to support farmer-led initiatives in irrigation and promote market-based solutions which are appropriately adapted to meet farmer needs and opportunities. Within the project, IAPs were envisaged as multi-stakeholder arena's that provides an entry point for the assessment, development and promotion of existing and new irrigation solutions, taking into account the requirements of the farmers, as well as the business considerations of the solution providers.

This publication summarizes what was done and achieved in facilitating IAP formation and functioning, and captures lessons learnt using documentation and experiences of the SWA project and its staff. Feedback from stakeholders and IAP members captured during consultations and interviews in the final project year is also analysed.

The first chapter introduces Farmer-Led Irrigation Development (FLID) and establishes the need for IAPs for supporting FLID processes. This chapter analyses the way the IAPs have organized themselves, as well as the role of the IAP hosts, by describing what they did practically. This shows that the efforts of SWA to create maximum IAP ownership within local actors resulted in a diversity of IAP forms and activities. Chapter three reviews what the IAPs have achieved and contributed to accelerating FLID and shows the efforts to ensure sustainability of the platform. Chapter four identifies important lessons learnt throughout the establishment and functioning of IAPs, many of which may be applicable in other multi-stakeholder platforms (MSPs). The chapter also provides suggestions for overcoming some of the challenges faced during the operations of the IAPs.

This publication can be used by development practitioners, policy makers and private sector companies engaged in the irrigated agriculture sector, to gain a better understanding of the value, but also the complexities, of using MSPs as a way to create effective and long-lasting partnerships. And although the focus of the SWA project has been irrigated agriculture, these lessons learnt are also relevant for people looking to facilitate partnerships in other sectors.

Multi-Stakeholder collaboration for farmer-led irrigation development

1.1 The need for stakeholder collaboration

Realising lasting improvements in irrigated agriculture requires coordinated involvement of multiple actors with their respective products, services and expertise. In developing their enterprises, farmers interact with multiple actors, to source specific inputs, advice, output markets and other services. This is particularly true where farmers are undertaking irrigation on their own initiative. This is known as Farmer-led Irrigation Development (FLID); a process where farmers drive the establishment, improvement and/or expansion of irrigated agriculture (Box 1 has more details on FLID).

Farmer-Led Irrigation Development (FLID)

Farmers' irrigation initiatives are widespread and rapidly growing throughout sub-Saharan Africa (SSA). In many parts of Africa, although mostly unnoticed, small- and medium-scale farmers are making substantial investments in irrigation development, which, when combined, cover thousands of hectares. In these cases, farmers have assumed a driving role in developing or improving their water use for agriculture. In the process, they rely on and influence other farmers, private sector companies – such as agro-dealers and traders – extension agents, irrigation engineers and others. This is called FLID.

The farming practices associated with FLID processes are highly diverse in terms of scale, crops, irrigation technologies, market orientation and agro-ecological context among others. These include practices as diverse as backyard cultivation of vegetables using watering cans, rice cultivation in partially water managed wetlands and highly intensive emergent farming using solar pumps and micro sprinklers. Most of these initiatives are market oriented and driven by substantial profits. Successful development also requires a combination of conducive circumstances including useable land and water resources, suitable irrigation technologies and knowledge, functional institutions for addressing water distribution issues and access to funds to invest in the process.

Increasingly, governments and development organisations in Africa seek to effectively engage with these farmer-led processes, both to regulate them and to stimulate expansion and improvement of sustainable irrigation.

To make decisions regarding the most suitable irrigation technologies, related crops and their management, farmers require trustworthy information. On top of that, they also need to be able to access the technologies and mobilize or access funds to finance the investments. And they need

adequate access to output markets so that they can generate the additional income to pay back the loans. To be able to invest in irrigation, farmers thus need relationships with multiple actors such as extension service providers, irrigation technology providers, financial institutions, and market off-takers.

For the service providers, linkages with others is equally important for developing their businesses. A seller of irrigation equipment benefits from farmers' improved access to finance. Off-takers would be able to obtain a consistent quantity and quality of produce from farmers if they were able to invest in irrigation. In Kenya, examples of agricultural value chain stakeholders creating effective linkages to strengthen their businesses exist, however, collaboration among stakeholders involved in irrigation is relatively weak (SWA, 2016; Kilelu et al., 2017). In short, both farmers and their service providers are to gain from strengthened stakeholder interaction and effective partnerships amongst those involved in the irrigation value chain.

1.2 The Smart Water for Agriculture in Kenya project

The Smart Water for Agriculture (SWA) project was established in 2016 to help accelerate FLID in Kenya, improve the livelihoods of Small and Medium-sized Entrepreneurial (SME) farmers and increase water productivity by 20% (Box 2). Both scientific research (Bryan et al., 2013; Speranza, 2013) and case studies in rural Kenya show the increased need to invest in Smart Water Solutions (SWS) to deal with the decreasing amount of seasonally available water. Droughts in the dry season are more extreme, rainfalls in the wet season are less predictable. At the same time, Kenya has a huge irrigation potential estimated at 1,341,900 ha. By the end of 2015, approximately 180,503 ha of irrigation had been developed. This is about 13.5% of the potential leaving more than 80% of Kenya's irrigation opportunity untapped (National Irrigation Policy, 2017).

Kenya's National Irrigation Policy highlights the need for supporting community-based smallholder and private irrigation schemes (The Irrigation Bill 2017 (ken)). SWA fits into this bill by focusing on the quickly growing but complex FLID sector. Farmers in this sector collectively occupy and manage vast irrigable land in large numbers. Together they provide good opportunities for making important contributions to expand irrigated areas and increase food production, water use efficiencies and livelihood sustainability.

Stakeholder interaction creates avenues for joint learning: Field Day by Nakuru IAP(Photo: Vandana Thottoli, March 2019)



SWA project

The Dutch Government funded SWA project focuses on the needs and opportunities of Kenyan SME farmers with as little as 0.1-5 ha of irrigated land, who have achieved commercialization to a smaller or larger extent, and who often grow high value crops. SWA aims to realize improved income and livelihoods for at least 20,000 smallholder farmers, while improving water use practices. The project is also working to encourage and accelerate FLID by identifying, promoting and upscaling SWS.

The project's design is unique in that it targets the entire FLID 'sector' as opposed to just farmers. This approach allows the project to identify and address systemic constraints and opportunities at all levels of SWS value chains. The main components of the project are thus quite diverse – from the development of irrigation technologies and strengthening their supply chains, to the set-up of innovative irrigation financing mechanisms and addressing market and policy constraints. To support this, the project contributes to strengthening collaboration between diverse actors involved in FLID by establishing multi-stakeholder platforms specifically on irrigation, both at county-level and nationally.

The project's main features

Time frame	2016-2019
Budget	6 million Euro
Co-ordination	SNV Kenya
Core partners	MetaMeta, Practica Foundation, Aqua for All, KIT (Royal Tropical Institute)
Targeting	<ul style="list-style-type: none"> • SME farmers with 0.1-5 ha of irrigated land, often growing high-value crops • Private sector supplying or financing smart water products and services • Non-governmental organisations (NGOs) and county governments supporting FLID
Key targets	<ul style="list-style-type: none"> • 20,000 farmers to adopt SWS, at least 50% women • 200 SWS providers – for and not-for-profit – strengthened for improved service delivery to farmers • Access to finance for SWS for 12,500 farmers, from at least five providers • Five counties with a sustainable Irrigation Acceleration Platform (IAP), and one national level IAP • Over 8 million people aware of SWS through Shamba Shape Up, a weekly radio/TV programme • Ten+ Dutch and Kenyan companies supported to invest in SWS • Seven early stage/start-up entrepreneurs enter the sector to pilot innovative concepts
Project counties	Nakuru, Uasin Gishu, Laikipia, Meru, Machakos
Donor	The Netherlands Government

¹ Smart Water Solutions (SWS) covers a wide range of SMART Techs (Simple, Market-based, Affordable, Replicable and Technologically sound) across the irrigation technologies chain from water abstraction, storage, conveyance and on-farm water application, supported by improved access to finance, services, markets and knowledge. It essentially introduces new ways of doing agriculture: economical with water, resilient to climate change, less laborious, highly rewarding and attractive to all people, including women and youth.

1.3 Irrigation Acceleration Platforms

Realising the importance of strengthened stakeholder interaction, SWA assisted in setting-up IAPs, both in its five focus counties and at the national level. It thus aimed to create an environment where supply and demand can meet and interact, where innovation can be initiated and supported, and where the private sector, farming communities and other actors of the enabling environment can engage to analyse problems and propose new strategies. Further, the overall ambition was that the multi-stakeholder interaction would contribute to scaling effective SWS.

In close interaction with the stakeholders involved, the county level IAPs defined their key roles and functions in supporting FLID (Box 3).

Roles and functions of county-level IAPs

1. Connect stakeholders and facilitate interactions to achieve effective concerted action.
2. Provide opportunities to jointly assess and prioritize challenges and opportunities related to the uptake of SWS to find the best strategies to address these.
3. Mobilize resources and effective support services around promising options, including financial services and linkages to companies investing in SWA services and products.
4. Promote promising SWS, create demand and markets to allow their upscaling.
5. Allow sharing or access of information, knowledge, and experience related to SWS.

In facilitating the establishment of the IAPs, the SWA project was able to build on its other experiences of strengthening multi-stakeholder collaboration around developing agriculture, such as those of its agriculture innovation platforms'. These platforms are a systematic attempt to accelerate change through joint action, often for addressing complex problems. They also create an opportunity to share information, coordinate and undertake joint actions needed for innovation to take place. The platforms make sense when they manage to achieve the common goals while also realising and safeguarding individual interests. (eg: Kilelu et al 2007; Swaan 2013). SWA IAPs adopted many of the above features of agricultural innovation platforms, but with the specific objective of finding and scaling effective SWS to support FLID.

For SWA as a project, the creation of IAPs was one of its central strategies to support FLID and the FLID sector. At the same time, the IAPs also played a supportive and/or coordinating role in implementing other SWA project activities such as creating access to technologies, finance and markets in their respective counties.

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IAPs in practice

2.1 Initiation of county IAPs

To initiate the establishment of IAPs in the five focus counties, SWA made stakeholder interaction and collaboration an important agenda item during the rapid integrated assessments that started the SWA process in the counties in 2016. The rapid assessments involved the mapping of key stakeholders in each county and included a focused workshop to discuss and understand existing stakeholder dynamics. Each workshop concluded with a joint review of the need for strengthening synergy and collaboration in the county, and of key actors that needed to be involved.

The rapid assessments generally supported findings of existing research (eg: Mati, 2008) that suggested that there are insufficient services and organisational structures to support the specific context-based needs of SME farmers involved in FLID in Kenya. This “gap” is reducing their appetite for SWS and/or for improving their irrigation practices. The assessments thus generally confirmed the need for better coordination between different stakeholders in the smallholder irrigation sector, paving the way for setting up IAPs.

2.2 Identifying facilitating hosts

For setting up and sustaining an MSP such as the IAP, SWA felt it was important to work with locally-based credible organizations who could take initiative in facilitating the coordination of different stakeholders and guide the platform’s efforts in a concerted manner. The rapid assessments helped identify a number of local organizations that were willing and able to facilitate the IAPs. SWA had follow-up meetings with these and other organisations identified during the course of the project’s initial activities, to determine their credibility in the county, and their capacities in undertaking IAP hosting.

Organizations interested in hosting the IAPs confirmed this by sending a brief proposal with an indicative budget and the resumé of the organization’s identified facilitator. To select and choose the most suitable organization to facilitate each IAP, SWA used four sets of criteria (Table1). SWA added weights for each criterion and used information from interviews as well as research to assess the suitability of each host candidate.

Table 1: IAP Host Selection Criteria

IAP host selection criteria		
S.No.	Criteria	Elaboration
	General	
1	Local presence	The organisation is based in the county
2	Reach, all sub-counties	The organisation has reach across the county
	Organizations working areas and mandate	
3	Mandate	Own mandate includes facilitation of stakeholder interaction and collaboration, information sharing and facilitation of learning
4	Synergy with SWA-IAP vision	Organisation has working areas relevant for SWA and has similar mandates as with the project
5	Credibility among other Stakeholders	The organisation is reputable in the county and all stakeholders consider the organisation credible enough
6	Neutrality	The organisation does not have political affiliations and is a neutral organisation without conflicting agendas of its own; No commercial interest within the IAP
	Resources	
7	Human resources	Has capable staff who can become the IAP facilitator; and can have backup support from the organisation
8	Financial resources	Has own funds or donor supported (financial, non-financial); resources available to contribute to the IAP hosting and the activities; ability to mobilize resources
9	ICT infrastructure	Has access to internet, emails, phones etc. for efficient communication with local and national stakeholders / SWA project teams
	Other criteria	
10	Quick decision making	The administrative procedures of the organisation does not hamper the ability to move quickly on activities to be undertaken as IAP host
11	Past experience in hosting MSP	Experience in hosting MSP and mobilizing stakeholders in the county will be an added advantage
12	Cross-sectoral expertise (agriculture, water, business)	The organisation has experience that cuts across agriculture, water and business, gender and technology
13	Transparency	Accountable to the project budget guidelines and MoU; Accountability to the stakeholders within the IAP; Open communication
14	Conditions from organisation	Any specific conditions from the organisation for it to be able to host

The selected IAP host organizations included two NGOs (Caritas for Meru County and Inades for Machakos County), one NGO-cum-network (Laikipia Wildlife Forum for Laikipia County) and two universities (the University of Eldoret for Uasin Gishu County and Egerton University for Nakuru County). Apart from finding keen and capable hosts, the assessment process helped to identify other organizations that would be ready to actively support the county IAPs, including those that were not selected in the final shortlist for hosting, such as the Kaguru Agriculture Training Centre in Meru,

and the Nakuru Smallholder Farmers Association in Nakuru. These organizations were included as much as possible in the IAP capacity building activities, as well as for co-facilitation of the platform activities where needed.

The SWA programme signed agreements with all the host organizations, and brought in the support of the other organizations as co-hosts of the IAPs wherever possible. The programme also supported the hosts with co-funding ranging from USD 10,000-20,000 per annum, to enhance the operations and activities planned in their proposals.

2.3 Building capacities and coaching

While all hosts were familiar with issues around stakeholder collaboration, SWA created an opportunity for in-depth capacity building of the staff selected for IAP facilitation and support. This involved an inclusive and effective 5-day intensive core training course covering all aspects of MSP facilitation, including monitoring and evaluation and sustainability strategies. The training was supported by providing all participants with a set of IAP facilitation guidelines developed by KIT to support the facilitators in IAP operation and management.

The guidelines highlighted the key performance areas and assessment criteria for the IAP facilitators.

Learning about 'Power Dynamics' - an important part of MSP training (Photo: Vandana Thottoli, January, 2017)



This first intensive training was followed by annual refresher workshops, where IAPs shared experiences and interesting examples of their work. The workshops also enabled further training on specific issues that needed attention, such as communication, documentation and feedback, resource mobilization as well as sustaining/financing IAPs beyond the SWA project period. Challenges encountered in IAP facilitation and activity implementation – and ways to address these – formed part of the agenda for these workshops.

In addition, the SWA IAP advisor provided continuous feedback and support to the facilitators on IAP operation and management. Advice was provided through calls and emails, by attending and/or co-facilitating key IAP events, and by regular visits to IAP hosts to review progress and address arising issues including the longer-term sustainability of the IAP.

² Table 1, IAP Guidelines, KIT

Table 2. Key performance areas and assessment criteria for IAP Facilitators

<i>Performance area</i>	<i>To be achieved</i>	<i>Assessment</i>
<i>Facilitation and brokering</i>	Facilitating interactions between stakeholders towards the common objective.	Number of stakeholder groups represented and actively participating in platform meetings.
	Establishing trust, establishing working procedures, fostering learning, motivating, and managing conflict.	Quality and interactivity of meetings.
	Brokering connections between actors that benefit from each other's services or roles. Bringing multiple actors together informally, more formally or bilaterally.	Bi/multi-lateral agreements (formal / informal) between different actors.
<i>Building networks</i>	Scanning, scoping, filtering, and matchmaking partners with complementary resources, including matching information or product demand and supply.	Number and diversity of stakeholder groups represented in the IAP.
<i>Clarifying key issues</i>	Help define main challenges and opportunities that the IAP will address.	Challenges and opportunities identified and activities developed accordingly.
	Solicit further studies if needed to deepen understanding.	
	Keep IAP focused on priority tasks agreed by members.	
<i>Mobilising external support</i>	Promoting the platform to ensure support and buy-in into the network by individuals and organisations that matter.	Quality of support provided by non-platform members.
	Lobbying essential stakeholders to join and contribute resources to the platform.	Resources committed to the IAP's activities.
	Representing the IAP and its members at higher levels.	Participation in external meetings, networks and fora.
<i>Problem solving and mediation</i>	Identifying, proposing and providing practical solutions to address bottlenecks hindering progress of multi-stakeholder action.	Technical advice provided and accepted by platform members.
	Undertaking conflict resolution and preventing (hidden) power struggles.	Number of conflicts addressed successfully.
<i>Capacity building</i>	Monitoring and identifying capacity gaps for implementing SWS and help find ways to develop the capacity required.	Capacity development plans for IAP members developed and implemented.
<i>Management</i>	Regular planning and reporting flows (narrative, financial) from stakeholders, through IAP to SWA and vice-versa.	Timeliness and quality of planning and reporting docs.
<i>Documentation</i>	Ensuring that process and results of meetings and activities are well captured so that they can be shared more.	Main findings and lessons learnt captured in well organised and accessible documents.

2.4 Setting-up the county IAPs

Following the core training, the IAP co-hosts undertook their own detailed county stakeholder mapping using a matrix mapping tool from the training. This looked at five key stakeholder categories in FLID (Table 2).

Table 3. Stakeholder categories involved in the IAPs³

1	SME farmers and SME farmer organisations	Implementation of SWS on the ground depends on them. Their views on what is feasible and relevant are crucial. They are part of any demonstration, testing, or research activity. Organisations can be formal or informal groups, water users' associations, cooperatives etc.
2	Businesses in the input-output chain	SWS technology supplying companies – both Kenyan and international – are important drivers for change. Businesses acting as produce brokers or direct exporters play an important role in securing farmer income.
3	Private and public service providers	Research and extension organisations provide agricultural and water knowledge and support SWS testing and development. Other organisations, including NGOs, provide managerial and business development services.
4	Financing institutions	Banks, Savings and Credit Cooperatives (SACCOs) and microfinance institutions facilitate access to SWS financing required for realising many innovations.
5	Policy and regulatory bodies	Public bodies that define policies and regulations. IAP facilitators may need to pay specific attention to government actors to ensure that they participate as much as others, but do not push their specific agendas or take over co-ordinating roles.

In all five counties, this stakeholder mapping process led to some form of stakeholder inception meeting and/or IAP launch event that effectively established the IAP in the county.

To increase the effectiveness of the platforms, and garner interest and support from the various stakeholders, all IAPs set up a steering committee. Composition and functioning of these groups varied across the counties depending on the local context. Generally, the committee composed of one or two members drawn from the five categories of stakeholders listed in Table 2. They generally met once every quarter to identify the challenges faced by the various stakeholders in FLID, and to plan activities that could help in overcoming some of these challenges.



Steering Committee meetings create opportunities for all stakeholders to influence the IAP agenda (Photo: Ernest Ronoh, February 2019).

2.5 IAPs at work

SWA really encouraged each county IAP to set its own priorities and plan activities accordingly. For example, in Laikipia, where issues of water scarcity lead to conflicts between upstream and downstream river water users, the IAP prioritized activities that

³ IAP Guidelines, KIT, 2018

highlighted basin wide water use and distribution, and involved members of the Water Resource Users Association (WRUA) as major stakeholders. The Machakos IAP, on the other hand, decided to form sub-county level IAPs due to the many different stakeholders active at the sub-county level as well as the large distances between the sub-counties.

In most cases, IAP steering group members undertook field visits to SWA project clusters to identify interested farmer groups and SWS providers, further discuss stakeholder challenges in improving irrigation practices, and assess stakeholder training needs. The following section highlights the main activities undertaken by most/all of the county IAPs.

Field days

All IAPs organized field days to promote SWS options and create business linkages between farmers/farmer groups and SWS providers. Field days have been organized either in university grounds or on farms. Apart from informing farmers of different SWS options, the field days were designed to provide opportunities for businesses to interact with each other and with farmer groups and relevant government agencies. Each county IAP organized six field days on average per year, and brought together over 200 farmers in every event.



*IAPs organising farmer training on driplines
(Photo: James Mwangi, September 2019)*

Demonstrations and farmer trainings

part from the field days open to public, the IAPs also organized farmer trainings on the use of suitable specific smart water technologies for their respective counties. This was often done in combination with on-farm demonstrations. In Uasin Gishu, the IAP demonstrated the use of sub-surface solar pumps, for instance, very suitable for the shallow wells widely used in the county. The use of ThirdEye flying sensors for providing extension support was demonstrated with interested farmers by the Meru IAP, in particular with support from the co-host, the Kaguru Agricultural Training Centre. Farmers were trained on the use of pond/dam liners/ in Machakos, since rainwater harvesting is crucial for irrigation in the county.

Considering that access to finance is one of the biggest challenges for accessing SWS, additional farmer training was provided by the financial institution members of the IAPs, such as Equity Bank, KCB and Eclof, at their own cost. The training focused on book keeping, financial management and use of financial products. The IAPs mobilized the farmers and decided on the location of the training, which was usually conducted in groups of 30.

Pilots and tests

County IAPs supported the SWA project in organising tests and pilots of new smart water technologies such as the mini pivots, Barsha pumps and Mobile Irrigation Systems. The tests and pilots were organised in the fields of farmers' identified through the IAP, who showed interest in being involved in research and development of new technologies.



Technology tests such as for the use of mini pivots, were an important step in SWS technology introduction (Photo: Vandana Thottoli, May 2019)

The SWA paper *SWS for Enhanced Livelihoods and Profitable Agribusiness* has more details on how demos and pilots were organized and operationalized, as well as the IAP achievements and challenges.

⁴ SWA identified clusters within the project counties, that have already have groups of farmers practicing irrigation

Participation in trade fairs and exhibitions

Several IAPs have facilitated member participation in trade fairs and exhibitions. This served the double purpose of promoting the use of county relevant SWS as well as showcasing the work of the IAPs themselves. For example, in Uasin Gishu, IAP members participated in the Eldoret Agribusiness Trade Fair held at the University of Eldoret, which usually has over 10,000 farmers attending. The Meru and Machakos IAPs helped organize the annual County Agriculture Stakeholder Forums – enabling them to highlight SWS to county government representatives. Laikipia and Nakuru IAPs participated in the agriculture shows organized by the respective county governments every year. These shows attract thousands of farmers and present a great opportunity for the IAPs to promote the work of the platform as a whole, as well as the products and services of individual members.



At trade fair in Uasin Gishu, where the IAP facilitated various technology suppliers to showcase their products (Photo: Vandana Thottoli, October 2017).

Farmer exchange visits

Some of the IAPs supported farmer groups to visit interesting farms located within and outside of their own county. For example, in collaboration with the Uganda-based Regional Universities Forum for Capacity Building in Agriculture, the Nakuru IAP organized a group of 10 farmers from Molo in Nakuru County to go on an exchange visit to Kisima farm in Timau, Meru County.

The Meru IAP organized farmers to visit a demo farm in Laikipia, with the support of the respective IAPs. Such inter-county IAP support helped farmers to understand the challenges faced by farmers in other counties as well as learn about the innovations that have been developed and adopted to overcome those challenges

Communication and outreach activities

Communication within stakeholder platforms is always critical in maintaining momentum of the platform's activities. All of the project IAPs used SMS and WhatsApp to reach out to their members with information on events and activities, and SWS and their applications. Other forms of communication and information dissemination included email, and radio and tv programmes. In the case of Meru, the IAP engaged WeruTV and WeruFM to share information regarding field days, as well as on how to use the latest technologies, such as flying sensors. The Nakuru and Laikipia IAPs sent out newsletters to members once or twice a year.



Farmers from different counties visit a model farmer in Nakuru county (Photo: Hannah Zevenbergen, September 2019).

Platform meetings

As part of their regular operations, the IAPs organize platform meetings to share experiences, initiate joint activities and create 'business to business' and 'business to farmer' linkages in the counties. These meetings allow farmer group representatives to meet with county agriculture and irrigation officers as well as private sector companies providing smart water technologies, financial products and market opportunities. The Nakuru IAP organized specific meetings for farmer representatives with companies such as the Gilgil Factory, Njoro Canning and Frigoken to discuss supply contracts, and with irrigation engineers to develop community level irrigation infrastructure.

The Uasin Gishu IAP organized a 'business to business' linkages forum to connect 48 youth farmer group representatives to 14 private sector exhibitors, consisting of technology and input providers, financial institutions, market off-takers as well as regulatory bodies such as the Kenya Plant Health Inspectorate Service.

Supporting the SWA project

Generally, the IAPs have also been the entry point for other specific SWA project activities. SWA's local capacity builders (LCBs) used the support of IAPs, for instance, to mobilize farmer groups for providing them with training on group registration and management, access to markets and finance, as well as smart water technologies and good agriculture/irrigation practices. Moreover, the IAPs supported the SWA team in jointly identifying farmers to join the lead farmers' network and providing them with the necessary training and business linkages.

The county IAPs provided support to SWA's work with selected companies to improve and expand their services. They provided market entry support, for example, for new agricultural innovations such as ThirdEye Water, promoted the use of solar pumps from SunCulture and Futurepump, and organized events for the Kenya Union of Savings & Credit Co-operatives to train county SACCOs on smart water for agriculture loan products. More details on this part of SWA's work are available in the SWA publication *Finance and Business Strategies for FLID*.

2.6 Initiating a national IAP

From the start, it was evident that county level multi-stakeholder collaboration on its own would not be enough to tackle all the issues of scaling SWS in Kenya. The county IAPs focused on horizontal scaling of SWS by reaching out to and involving more people in the project. They also promoted business growth by ensuring adequate demand and awareness of the locally relevant quality SWS. The pilots, tests and demos played an important role in this process. However, many systemic changes in the FLID sector, such as the creation of an enabling environment, and the development and implementation of supportive policies and regulations, require efforts at higher levels. SWA thus felt there was also a need to set up some form of IAP at the national level that could focus on vertical scaling of SWS.

SWA partnered with the Water Research and Resource Centre (WARREC), which focuses on water management at the Jomo Kenyatta University of Agriculture and Technology (JKUAT), to be the host organization for the National Irrigation Acceleration Platform (NIAP). WARREC is well established in the (international) irrigation sector and has many connections with government agencies, greatly increasing the visibility and credibility of NIAP.

With support of SWA, WARREC selected and invited 30 national level stakeholders involved in FLID to an agenda-setting workshop in April 2018. This workshop reviewed and confirmed the need for a national platform. It also identified key issues and activities that would help accelerate FLID in Kenya. The workshop used a bottom-up approach to foster a “pull” effect from stakeholders based on their specific personal interests.

2.7 The national IAP at work

By design, the county IAPs provide feeder material that the NIAP uses to converse with national-level stakeholders and policy makers. The measure of success for the NIAP is therefore related to the extent to which it can package important issues emerging from the counties, interact with decision makers at the national level, and inform future policy related to smallholder irrigation development.

NIAP created a website to showcase the efforts of county IAPs to all stakeholders and to create a knowledge repository on FLID – www.niap.or.ke. NIAP also organized a series of activities in Nairobi, inviting different private and public sector actors, to highlight the lessons learnt through SWA and IAP activities at the county level, and to influence the FLID sector at a national level. Three so-called masterclasses were organized to address some of the key issues around scaling SWS in Kenya. Two masterclasses focused on farmer access to finance and brought together: financial service providers, investors, donors, technology providers and market off-takers, to share knowledge and experiences around emerging finance models in agriculture, and jointly develop potential financial models that could unlock opportunities in financing FLID in Kenya. From these sessions, four workable financial models were highlighted. SWA followed this up by supporting development of one of the models which involved in-house credit by input suppliers for increasing the uptake of inputs and irrigation technologies, particularly by small-scale farmers. The other three models were to be taken up by other private sector partners to be developed further.

⁸ LCBs are consultants used by the SWA project to support farmer trainings and business linkages

Towards the end of 2018, NIAP organized a workshop to share SWS knowledge with all the national stakeholders (policy makers, universities, private sector and development partners). The aim was to incorporate the experiences and approach of SWA's FLID project within high level conversations around achieving the Kenyan government's Big Four policy agenda on food and nutrition security. The workshop saw the attendance of 55 members, including Kenyan governments' Principal Secretary for Irrigation, who lauded the efforts of NIAP in bringing transformative ideas for upscaling adoption of irrigation among smallholder farmers in Kenya.



NIAP Masterclasses searching for ways to improve farmer access to finance (Photo: NIAP Secretariat, 2018)

NIAP in News:

By Science Direct

<http://africasciencenews.org/niaps-promotion-of-irrigation-best-practices-to-boost-food-security-lauded>

Standard Media Group

<https://www.standardmedia.co.ke/business/article/2001305775/ministry-lauds-promotion-of-irrigation-best-practices>

⁶ Big Four Agenda of the Kenyan Government prioritizes projects of affordable housing, food security, universal healthcare and enhanced manufacturing, to achieve rapid economic growth in the country.

Following requests from participants in the Nairobi based masterclasses and workshops, the NIAP decided to undertake learning events in the separate counties, bringing national level policy makers and other FLID stakeholders to the field to learn about specific county IAP activities and available SWS options and innovations, and interacting directly with farmers and county SWS providers. Such learning visits have so far been undertaken in Meru and Nakuru. The NIAP facilitators also organized meetings with key irrigation policy makers to garner support for FLID and the NIAP.

Though still young, the NIAP, through its secretariat, undertook a systematic stakeholder consultation in 2019 to review the need to continue operations post SWA and arrive at a clear strategy to realize this. All NIAP members were consulted via email, and this was followed with in-depth interviews with members representing all stakeholder categories. The consultation covered the value of NIAP for the stakeholders (both as individuals and organizations), the activities relevant to them, and measures for ensuring the sustainability of NIAP. All stakeholder responses confirmed the need for NIAP to continue beyond the SWA project period, as the challenges it addresses are important and no other platforms concentrate specifically on smallholder irrigation development. Some form of formalizing the NIAP by registering it as a separate entity was suggested as way forward as this would provide visibility for the NIAP and help it to gain trust from all stakeholders, which would in turn help in resource mobilization for sustaining the platform.

03

IAP achievements

Realising the work of the IAPs – and the associated support provided by SWA – the question remains whether the platforms met the expectations of the project in terms of facilitating the acceleration of FLID. A number of achievements are already noticeable even at the early stage of IAP operation.

3.1 Knowledge gained through interaction

The IAPs have actively involved over 200 private and public sector FLID stakeholders in Kenya, including SME farmer group representatives, county governments, private sector SWS suppliers, water resource users' associations, market off-takers, and financial institutions, among others. The county IAPs collectively reached out to over 20,000 farmers with information on SWS, helping farmers gain knowledge on existing and new smart water technologies, good agricultural/irrigation practices for increasing productivity, financial products and potential market off-takers.

Through visits to lead farmers, field days and inter-county exchange visits, farmers did learn about practical on-farm applications of SWS and the benefits of using these, such as the case of water pan design and lining in Machakos (Box 4).



Farmer group members help each other in constructing and lining water pans (Photo: Jackline Muturi, 2018)

Improved knowledge: the case of water pan design and lining in Machakos

Machakos County is known for using water pans for irrigation and has hundreds if not thousands of operational water pans. The Machakos IAP, supported by the SWA team and LCBs, trained farmers and service providers on improved water pan design, the use of liners to stop water seepage, as well as on the use of related technologies for water extraction and application, such as solar pumps, drips and sprinklers. SWA created a mobile application for pond sizing, and training was provided to service providers on using the same.

Farmers were also provided with specific knowledge on financial packages to purchase relevant smart water technologies, and received training on how to link with markets to sell their produce. The Machakos IAP provided training through field days in Katangi, Yeemwatu, Kiliku, Kayatta, Kabaa and Mango clusters within Machakos County, where the relevant technology product and service providers, as well as the financial service providers and market off-takers interacted with the farmers directly. With this knowledge, farmers in some of the Machakos clusters have formed groups to help each other with the construction of water pans.

² From the SWA project M&E database which collected data from the reports received from the IAP hosts.

3.2 Business-to-farmer linkages

Through many county IAP activities, farmers have been linked to over 200 businesses that helped them gain access to farm inputs, irrigation technologies, financial products, markets for their produce, as well as general capacity building, training and extension support. An example of this can be seen in the case of access to solar pumps in Uasin Gishu (Box 5). SWA is aware of at least 195 farmer-business partnerships that have been created during the project.

Farmers access solar pumps in Uasin Gishu county

Farmers in Uasin Gishu county irrigate with water from shallow wells or rivers. Shallow wells are usually closer to the homesteads, and women draw the water using buckets for both household as well as farming purposes. In some cases, gasoline pumps are used, but this increases the overall cost of production.

The Uasin Gishu IAP facilitated the introduction of Futurepump, SunCulture and Sunlight solar pumps to the county during the Eldoret University Annual Agribusiness Trade Fair in 2017. Since SunCulture's submersible solar pump seemed most suitable for the shallow wells in the county, the Uasin Gishu IAP supported demonstrations of their Rainmaker pumps to over 3000 farmers. SunCulture's technical and sales teams trained the farmers on the usage of the pumps, and showcased the cost-benefit analysis of using their pumps – especially their “pay-as-you-grow” finance model, where farmers could replace the cost of purchasing diesel/petrol with paying low instalments for owning the Rainmaker pump. Over the last 2 years (2017-2019), over 250 farmers from Uasin Gishu purchased Rainmaker pumps, helping farmers reap benefits of reduced labour (especially of women) as well as production costs.



Farmer group members help each other in constructing and lining water pans (Photo: Jackline Muturi, 2018)

3.3 Business-to-business linkages

By organising or contributing to trade fairs, field days and exhibitions, the IAPs facilitated business-to-business (B2B) linkages. This has led to a series of practical business deals between different private sector companies involved in FLID such as between market off-takers and SWS providers (Box 6). In Uasin Gishu county alone, 131 B2B linkages were recorded over the past 3 years.

Business linkages between market off-takers and SWS providers' increase uptake of SWS

Market off-takers active in exports of green beans, avocados and herbs such as Frigoken, Meru Greens and Vegpro usually face shortage of produce during the dry season in Kenya. These companies have in-house extension service providers, who provide training to farmers on good agricultural practices, and supply the farmers with high quality inputs on credit. During county as well as national IAP events, market off-takers have engaged with technology providers such as SunCulture, Futurepump and Amiran, enabling joint trainings of farmers. While such business linkages have not been in the form of formal contractual arrangements, the companies trained farmers together and helped increase uptake of SWS among the farmer groups. Sunculture has trained farmer groups of Habex Agro, Vegpro and Mace Foods in Uasin Gishu, and has recorded over 271 unit sales from the county.



Irrigated carrots being cleaned and packed before delivery to market off-takers (Photo: Vandana Thottoli, 2018)

3.4 Increased market access

The IAPs helped companies to enter new markets for innovative water solutions by undertaking joint testing of the products and helping to introduce them to the market. They also worked to link the companies with county governments for the necessary permits; to training institutes in order to spread knowledge of the product; to local distributors to stock and sell the products; and to financial service providers to offer credit for product purchase. Such support from the IAPs increased the availability of new as well as existing technologies locally for the farmers, as in the case of market entry for the flying sensor technology in Meru (Box 7). In another example, the Uasin Gishu IAP introduced SunCulture and Grekkon, and products from Davis & Shirliff and Irrico into the county, increasing farmers access to the same. Each county IAP linked at least five irrigation technology suppliers to over 200 farmer groups on average, increasing market outreach for the suppliers.

Market entry of flying sensors through the Meru IAP

Since 2017, Future Waters has been piloting 'ThirdEye', a patented integrated process which uses drone-borne sensors to determine crop water requirements and crop health. The crop water requirements are instantaneously relayed to farmers and extension services for rapid decision making for optimal irrigation amount, duration and intervals. Future Waters used the support of the Meru IAP, to establish a separate commercial entity in Kenya with the name "ThirdEye Water". The IAP, specifically the co-host of Meru IAP – Kaguru ATC, provided support for obtaining the necessary permits to fly the drones in Meru county, in hiring and training the drone operating teams, providing the team with office space and demonstrating the solution to farmers during quarterly field days themed "Innovative Technologies for Enhanced Agricultural Productivity". Since its establishment, over 800 farmers have used and (partially) paid for extension services from ThirdEye Water for advanced information on crop pests and diseases, fertiliser use, as well as soil and water management.

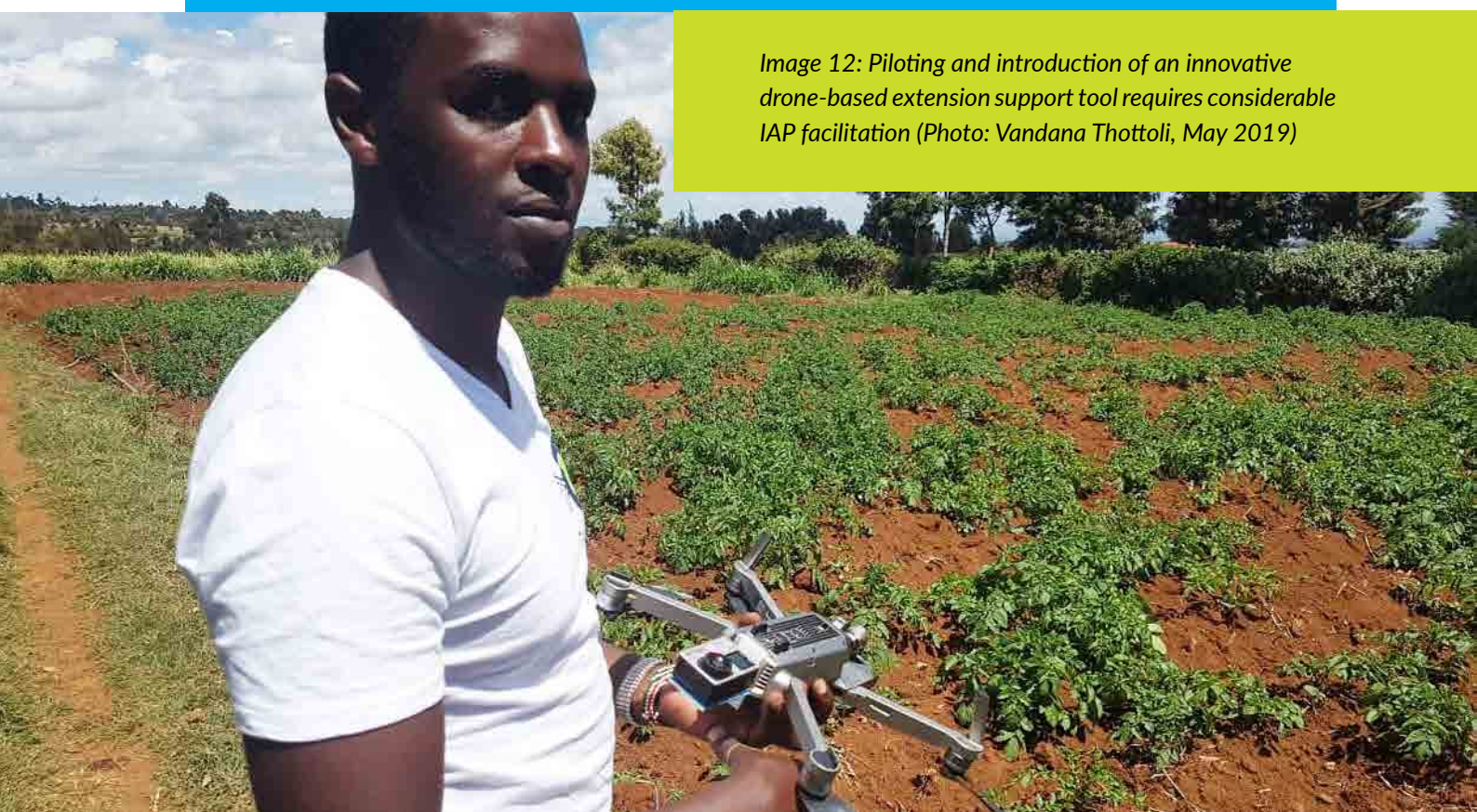


Image 12: Piloting and introduction of an innovative drone-based extension support tool requires considerable IAP facilitation (Photo: Vandana Thottoli, May 2019)

3.5 County policy change

County officers have been active members of all IAPs and have been showing an increased interest in FLID towards achieving the county food and water security agenda. All counties have seen an increased interest in smallholder irrigation solutions from the county governments – with increased budgets ear-marked for irrigation technologies such as drips, sprinklers and water pan/pond liners for farmers, as well as training for county extension staff on SWS. For example, comparing the budget allocation for irrigation in Uasin Gishu County’s Integrated Development Plan (CIDP) 2013-2017 and 2018-2022, there is a clear increased interest and allocation of budgets towards smallholder irrigation. There was no specific allocation for drips, water tanks, etc. in the 2013-2017 budgets. However, the 2018-2022 budget allows for drip irrigation kits and tanks (Ksh 75 Million), water pumps (Ksh 9 Million), small-scale irrigation schemes (Ksh 100 Million), and greenhouse installation and outdoor irrigation (Ksh 7 Million).

3.6 Increased articulation of needs

As a result of increased interaction between stakeholders through the IAPs, there has been an increase in the number of focused requests for activities – especially by farmers (see Box 8) – as well as for support from the different stakeholders. IAP hosts have been approached by farmers to conduct training on or demos of various smart water technologies that they found relevant, as well as for increasing their access to markets for specific products. The Nakuru IAP, e.g., has been approached by farmer groups for finding markets for herbs such as chives. The Laikipia, Machakos and Uasin Gishu IAPs have been approached to facilitate access to finance for community irrigation projects, while the Meru IAP was approached for the same to support borehole drilling.

Larger market off-takers such as Frigoken and Fundisho Farm have requested IAPs to share knowledge and information to their farmer groups on SWS to ensure that they receive year-round produce from the farmers. Financial institutions such as Eclof Kenya and Juhudi Kilimo have solicited the support of the platforms to mobilize farmers to introduce their products and increase their market outreach.

Articulation of farmer demand to improve water use efficiencies in Uasin Gishu

A youth farmer group from Uasin Gishu approached the co-facilitator of the Uasin Gishu IAP and the county irrigation engineer to request support from the county agriculture office. The support regarded the purchase of drip kits and water storage tanks to ensure year-round production of watermelons. The request was spurred by an open day organized by the Uasin Gishu IAP with the theme “Promoting Youth Involvement in Innovation and Agri-preneurship”, which has seen the participation of 85 youths representing 39 youth groups from all the six sub-counties of Uasin Gishu.

3.7 Increased synergy and collaboration between stakeholders

Apart from interaction between private sector actors involved in FLID, the IAPs have helped to realize increased collaboration with and between NGOs and government actors. All county IAPs have brokered partnerships between the county agriculture and irrigation departments and the SWS providers active in the counties. The Nakuru IAP, e.g., has forged partnerships with the Ewaso Ng'iro South Development Authority (ENSDA), a state institution mandated to conserve water towers and basins in Nakuru, Kajiado and Narok. ENSDA committed to support three farmers and two youth groups farming along Njoro river.

The Laikipia IAP supported the set-up of Ewaso Maji Users Savings and Credit Cooperative Society – specifically to finance farmers to purchase and install water saving structures on their farms. The Laikipia IAP has also seen increased support from other NGOs such as Wetlands International, Fauna and Flora International, Conservation International, and The Nature Conservancy, which now focus on supporting smallholder irrigation.

3.8 The initial results of the NIAP

Given its short existence, the NIAP has yet to fully address the policy and regulation issues around FLID scaling as raised by the stakeholders. Through the host organization, the NIAP did manage to create wider awareness on and acceptance of the importance of FLID among irrigation policy makers. Moreover, it highlighted the work of county IAPs and SWA to the Principal Secretary for Irrigation through a workshop that deliberated the partnerships needed to scale SWS and enable the Kenyan Government in achieving its Big Four Agenda on Food and Nutrition Security. The NIAP facilitator also held consultations with the State Department of Irrigation to set up an irrigation sector working group along with NIAP members, which was well received. The consultations with

the department and the Principal Secretary led to the decision of formalising NIAP as an association, enabling it to continue beyond the SWA project and support FLID in Kenya.

At the same time, the platform has considerably increased knowledge of and attention to issues around access to finance for small-scale irrigation and FLID among the institutions involved. This is leading to the development new financial initiatives such as Madaraka currently being piloted by Amiran, which involves an in-house credit facility for inputs and irrigation solutions. Participation in NIAP events has also led to a variety of new business partnerships at the national level, such as between Meru Greens and Musoni for providing loans for irrigation solutions to farmer groups of Meru Greens. Another example can be seen between Acre Africa and Frigoken, in which Acre Africa is provided with historical data on farmers and risks associated with farming by Frigoken in order for them to design specific insurance products.



Member consultation on the need to institutionalize the NIAP (Photo: Vandana Thottoli, September 2019)

The NIAP has established its own website (www.niap.or.ke) to publicly share activity reports and other types of information. Since July 2019, the NIAP host has also been sending out monthly newsletters with the latest updates around FLID and activities undertaken by NIAP to all registered members.

⁸ CIDP 2018-2022: <https://www.usingishu.go.ke/?s=cidp>

3.9 Sustainability

From the beginning, the issue of the future of the IAPs beyond the SWA project period has been put on the agenda for all involved. Recent discussions between the county IAP facilitators and members, as well as through a NIAP stakeholder consultation, suggest there is clear interest to continue activities of IAPs beyond SWA. Members feel that there are no other platforms that concentrate specifically on smallholder irrigation (or FLID) in Kenya, and that the IAPs are well placed to influence private sector partnerships as well as county level policies in the FLID 'sector'.

The feedback from the NIAP member consultation is being used by the platform facilitator to create targeted activities that can help the NIAP become an independent body to support FLID in Kenya in the long run. The aim is to register the NIAP as an independent corporation, which would then enable it to gain credibility as well as mobilize resources from stakeholders such as the Kenyan Government. Following registration as a separate entity, it is proposed that NIAP be domiciled at the National Water Harvesting and Storage Authority (NWHSA).

Most of the county IAP hosts have been trying to mobilize resources to ensure continuation of the IAP facilitation and activities. This has been quite a challenging endeavour for many, due to the relatively limited time that the IAPs have been active so far.



A collage from the inauguration of Climate and Water Smart Agriculture Centre hosted in Egerton University, as part of activities to sustain the Nakuru IAP (Photos: Hannah Zevenbergen, September 2019)

Inades, the Machakos IAP host, has recently received funding from the United Nations Development Programme Global Environmental Fund to continue to promote solar irrigation pumps in the county, following on from their previous work in this area. Several activities of the Machakos IAP will therefore continue through this new programme. In Uasin Gishu and Nakuru, the IAP hosts are the universities' outreach centres.

The universities have a mandate that includes supporting multi-stakeholder collaboration and thus facilitating the IAPs. Both hosts have already raised activity-based funds from the private sector (e.g. from Equity Bank, Eclof, Davis etc. who have all contributed up to Ksh 30,000 per field day) and are currently exploring funds through governments and NGO programmes, especially for financing the operational costs of the host/facilitator. Further, the Nakuru IAP has been brought under the newly launched Climate and Water Smart Agriculture Centre at Egerton University, which enables the university to support the platform's activities through their own budgets as well as through those raised by other agriculture projects (Box 9).

While there have thus been serious attempts to ensure IAP sustainability, it is fair to acknowledge that some of the IAPs – or some of their activities – may not sustain beyond the SWA project period. While raising funds directly from stakeholders for focused activities has proven to be possible, mobilizing funding from them to support IAP facilitation – especially to cover the host organization's expenses such as a regular salary for the facilitator – so far seem to be difficult.

Laikipia IAP support to the Mt. Kenya Ewaso Water Partnership

Smallholder farmers in Laikipia County share meagre water resources on the leeward side of the Mt. Kenya water catchment with a wide range of public as well as private sector actors involved. The county has seen frequent conflict over water use between the farmers upstream of rivers originating from Mt. Kenya and pastoralists downstream of the rivers, especially during the dry season.

The host of Laikipia IAP, the Laikipia Wildlife Forum (LWF), has been supporting activities to reduce conflicts in the region and has been in the forefront of setting up and managing the Mt. Kenya Ewaso Water Partnership (MKWEP), a public-private partnership to ensure sustainable use of water resources in the Ewaso Ng'iro catchment area. LWF, wishing to highlight the issues faced by smallholder farmers in the county, as well as to sustain the IAP beyond the SWA programme, incorporated the IAP as a sub-chapter of MKWEP. This move brought issues of sustainable water use among smallholder farmers to the county government. The county government has since increased budget allocations in their CIDP to improve on-farm water productivity of the smallholder farmers, thereby trying to reduce over-extraction of water from the rivers by the same farmers.

04

Analysis and lessons learnt

Effective partnerships are critical for advancing FLID, and IAPs played their role in building relevant partnerships for the same in Kenya. However, building and sustaining effective partnerships through MSPs such as IAPs has had its fair share of challenges. This chapter reflects on the issues encountered by SWA while supporting IAPs, as well as the measures taken to address them, and possible approaches for the future.

4.1 The IAP host organisation

The SWA project selected the organisation in each county to host the IAP based on their knowledge on smallholder irrigation, their credibility in the county, their synergy with the SWA mandate and so on (Ref: Table 1 in chapter 2 – IAP host selection criteria). The project selected three universities, two local NGO's and one network-cum-NGO as the host organisation. The type of organisation chosen influenced the performance as well as the direction taken by the IAPs in different ways due to the inherent differences in the organisational structure, culture, and internal processes.

The NGO's were quite agile in their decision making and had existing networks to build on. This enabled them to establish the IAPs and scale their activities quickly. Generally, they also proved to be in a good position to build partnerships – playing the role of bridging between farmers, government and the private sector. However, they were quite stretched for human resources which, over-burdened their facilitators in many cases and, led to reduced effectiveness of IAP activities over a period of time. In such cases, the SWA project had to intervene and bring co-facilitators on board to reduce the workload of the NGOs.

In cases where outreach centres within universities were the IAP hosts, the signing of agreements and decision making on human and financial resource allocation took a lot of time. IAP facilitators had to constantly deal with organisational bureaucracy, affecting the implementation of the IAP activities. The project had to undertake constant follow-ups to ensure that the activities were on-track and to provide additional coordinators to support the facilitators. However, their reputation, status and their networks were of immense help for the effective functioning of the IAPs. Moreover, university hosts provide short cuts for involving students in various IAP activities and helping to motivate young men and women to take up farming.

The key takeaway from these examples is that while the project might not have much choice in the type of organization selected, nor have control over the internal processes, structures and culture of the organizations, the project can ensure effective performance from the host by monitoring the platforms, and providing continuous feedback, support and training.

4.2 The facilitator

The SWA project had based the selection of the host organization on the rapid assessments and interviews as mentioned in Chapter 2. However, the project was not involved in the selection of the host facilitators. This task was left to the host organizations. Considering that the success of the IAPs, and of MSP's in general, depend greatly on the effort and motivation of the individual facilitators, it is important to carefully select individuals with the complex set of qualities and attitude required. Knowing what is required for this job, it would have been beneficial for the project to interact with the host and be involved in the facilitator selection process. This could include support in formulating the job description, shortlisting the resumés and taking part in the interviews.

Moreover, some IAP members interviewed for this publication felt that the IAP facilitators needed to take a more active and neutral role in facilitating and brokering linkages between different businesses. For example, the facilitators could provide a brief introduction on the different stakeholders attending B2B events before the actual event to make networking easier for the businesses. The IAP facilitator also needs to objectify the information coming in from various competing stakeholders, for example, when selecting financial institutions to provide training to farmers on loan products, where the service provider could withhold vital information on the actual cost of credit/interest rates for the purpose of increasing their clientele. Taking an active and neutral role in facilitating such trainings could help increase the credibility of IAPs in supporting FLID.

4.3 Organising and managing the platform

In all county IAPs, steering committees were formed to set the agenda for the IAP and supervise activities. In practice, most of the activities were undertaken by the IAP host/facilitator including that of monitoring. Considering that most IAP activities involved outreach to a wide network of stakeholders, continuous follow-up as well as systematic documentation, the IAP facilitators had to put in considerable effort to successfully undertake the activities.

It is therefore important to encourage IAP facilitators to delegate work to other active platform members including members of the steering committee. Annual work plans could and probably should specify platform members responsible for or involved in activities with concrete deliverables from this mentioned. Those members can be provided with some form of honorarium for work or support that goes (far) beyond their regular work, if need be. This would also mean more time for the facilitators to monitor and document the outcomes of the various activities undertaken. This would, however, increase the demand for external resources.

There is clearly no one-size-fits-all recipe for platform organisation and management. The platform has to be tailored to meet the needs of the specific county dynamics and those of the hosts. This calls for a very open process in each location allowing local actors to transform the overall and agreed objectives and principles of IAPs into practical structures and arrangement that they think would work best in their context. In Machakos, for example, the IAP found that the county is too vast for having a single IAP at the county level. Therefore, it decided to set up sub-county level IAPs that bring together farmer groups, private input-output service providers, sub-county extension staff etc, and strengthened networks of stakeholders involved in irrigated agriculture at the sub-county level.

4.4 Representation

For the IAPs to influence FLID processes, it is important to ensure that the right people are present. Steering committees need members representing major stakeholder groups so that their different voices and perspectives are brought to the table. In the one case where there was no farmer representation in the IAP steering committee, the transmission of knowledge to farmers and feedback on existing local knowledge from farmers was limited. It is also important to check whether lead farmers chosen to represent other members are indeed able to accurately represent them. Lack of representation from one group could affect the overall ability of the platform to build constructive partnerships between all stakeholders and support FLID.

Moreover, individuals representing their respective organisations on the platforms do change either due to leaving their current jobs, positions or location. It is therefore very important to have the buy-in of the organisation for the platform goals, and not just the interest from a particular individual within that organisation, although the latter is also important. Whenever possible, member organisations should also ensure that the same person attends key IAP events, so as to retain continuity in knowledge and support. The organisation should also request the member attending the platform meetings to document and share the proceedings, so as to retain the knowledge in the event of the particular member leaving the organisation.

IAP hosts encouraged private sector participation from the outset of the project. This has led to active participation of the private sector in all IAP activities, with increased requests coming from them to IAP hosts for linkages to other stakeholders as well as organizing specific events. Private sector representation on the IAPs has helped the platforms to generate activity based funding from them, thereby reducing the overall cost of organizing events such as fairs, demos and field days. This could also help in sustaining the platforms beyond a project period.

4.5 Clarity of IAP objectives and roles

Imbalances can develop between what the host sees as the core objectives of the IAP, and what members find the most important ones. This misunderstanding of course limits the strength of the platform and its capacity to act. For example, one host sees knowledge sharing to be the main objective of the platform. It thus invites each time different stakeholders to the IAP events, to allow as many as possible to benefit from the knowledge sharing. Private sector stakeholders feel that this does not give them enough regular opportunities to connect well enough to those that they find interesting as a basis for forming long-lasting relationships, an objective that may be key to them.

Differences in understanding of IAP roles and responsibilities between IAPs and their hosts and the SWA project leads also to confusion, frustration at times and a decrease in energy with the platforms. The role of the IAPs in relation to another SWA flagship activity, the farmer capacity building program working with so-called Local Capacity Builders is one example of this. The roles of these LCBs and those of the IAPs seemed to overlap which led to confusion on who was responsible for training the farmer groups, and also about who was accountable and reported to whom in a county. Through series of discussions with the IAPs their roles were again clearly defined and linked to direct project work through the LCBs. For example, LCB's were tasked with providing direct on-farm training to farmer groups but field days were to be organized by the IAPs. LCB's agreed to report to the IAPs on the activities undertaken on a regular basis, and get the support of the IAPs to create business linkages for the farmers trained. Moreover, one farmer representative from every farmer group trained by the LCB was asked to join the IAPs for continued support after the trainings.

The key lesson here is not just to give adequate space initially to discuss, clarify and negotiate the platforms central objectives and roles with all stakeholders but also to monitor regularly and create space for interaction and discussion with them to address emerging frustrations on the way the objectives and roles are given shape by the project and/or the IAP hosts. External support can be called upon where needed for deepening understanding of the objectives and roles. In all this the fundamental issues are around who controls the activities, resources and processes of the platform.

4.6 Implementation of activities

IAPs need time to experiment with various SWS and also with various types of activities before they fully evolve into effective platforms. All the county IAPs have been through a process of trial and error before understanding what SWS worked in their respective counties, as well as which events were useful for promoting knowledge on SWS and for brokering business linkages. Although this process took at least half a year, it is recommended over providing an “institutional fix” from the side of the project. MSPs are always more enthusiastic about activities and management forms that fit their context and needs and this also proved to be the case with the IAPs. The Uasin Gishu and Nakuru IAP hosts undertook many farmer trainings to improve farmer agronomy practices by themselves as universities. In other IAPs, such farmer training was provided by the private sector or government members of the IAPs.

It is at times difficult to ensure participation of key stakeholders in all activities. Frequent “emergency” situations could arise, with members not showing up for activities at the last minute, especially meetings. In some cases, organisations sent different representatives to different IAP events, making it difficult to structurally share knowledge and create long-term partnerships. This leads to disruption in key planned activities and reduces the enthusiasm of members to participate in future events. As discussed in the section on representation, it is therefore important to have organisational buy-in for the platform activities, and members have to ensure that someone else represents them in their absence.

Initially, all county IAPs undertook field days since they are an effective way to reach a large number of farmers and are generally popular among farmers as well as businesses. However, as the platforms matured, and the IAP facilitators and members improved their knowledge on the benefits of being part of the platform and what it can do to support their individual interests, the IAPs started organizing more targeted activities. These included focused B2B linkages and youth-in-agribusiness forums. A recent B2B forum set up by Uasin Gishu had over 30 private sector representatives, showing that the private sector has started to use the platform for creating linkages with other companies, instead of just looking at IAPs as an avenue for marketing their products to farmers.

4.7 Communication and documentation

An IAP is itself a mechanism to facilitate communication among stakeholders for supporting FLID. Through the platform activities, IAPs encouraged sharing of knowledge and experiences, negotiated deals with relevant stakeholders (especially around brokering market linkages for smallholder farmers), and exchanged opinions on SWS, providing feedback to companies about their products and services.

SWA provided training on communication planning and tools to the IAP facilitators during the initial set-up phase and had follow-up trainings on the same. All IAPs were encouraged to develop communication plans and provide continuous information to all IAP members through SMS, WhatsApp groups, radio, printed brochures, emails or newsletters.

In practice, the IAPs had a good outreach strategy, particularly in terms of sending out information to members on upcoming events, leading to good participation in the events. During meetings, experiences and relevant information was shared and communicated and minutes of the various meetings were recorded and shared. However, post events, there was limited follow-up (what was the outcome, what were next steps agreed) nor feedback collected from participants. This would need more attention. Feedback could support in creating more targeted future events, which was the case with the stakeholder consultation by NIAP. Moreover, it would have been encouraging for members to be informed about the outcomes from the various events – for example, what deals were brokered and how it benefited individual members, or how it supported FLID in the county.

Most IAP experiences, the innovations in irrigation practices at the county level piloted or the local partnerships that were formed during IAP events, were documented in reports from the IAP hosts to SWA. The NIAP set a good example by sharing workshop and activity reports to all participants and posted them on websites. The county IAPs did much less in terms of sharing reports and information more widely and this has probably also contributed to the feeling by members that communication between IAP hosts and members could be improved considerably. In future, post-event event documentation and communication would need more attention if alone to show the effectiveness of the IAPs, leading to increased member interest as well as supporting resource mobilisation from the members.

The limited feedback loops have also contributed to the challenge of assessing in detail the success of the IAPs. As outlined previously, in some cases, the platform facilitators could be encouraged to seek help from steering committee members and other members to take up the role of documentation and communication for every event. This helped to reduce the work load of the facilitators – the most commonly mentioned reason for not giving more attention to documentation.

4.8 Ownership of the platform

Many of the lessons mentioned in this chapter are related to a core issue: ownership of the platform and its functioning. Generally most IAP hosts show considerable ownership as evident a/o through their initiatives mentioned to craft the IAP and make it work in the local context, though some continue to rely on support from the SWA team in many ways. During the review of IAPs, it was found that there was weaker ownership of the platform and its objectives among other members, except perhaps among a few co-facilitators. Some platform members, as well as many of the farmers involved in interventions, were unaware of the intended nature of the platform, seeing the platform as another donor project

One of the ways to increase the sense of ownership among IAP members is to involve other members as much as possible in handling different IAP activities. Different events or meetings can be facilitated by members other than the IAP host, encouraging the members to learn more about FLID or SWS and understand the IAP approach, as well as reduce any power imbalances within the platforms. Having platforms meeting at the venue of different stakeholders instead of at hotels or just at the host organisation can also help to increase buy-in.

Some of the members interviewed for this publication felt that the term Irrigation Acceleration Platform was too complicated and too much a project term. At the outset of the project, it might have been good to involve platform members to ideate and create a name for the platform in the local language and also develop their own strategy on how to present the concept of the platform to all members, and especially farmers.

It is also clear that more time needs to be allocated towards creating a common understanding of the unique purpose of the IAP as well as a shared vision for what the IAP could achieve, to inculcate a sense of ownership for the platform among all members.

4.9 SWA support to IAPs

The SWA project helped set-up the IAPs by identifying local host organisations to facilitate the platforms, provide training to the facilitators and members, and deliver continuous monitoring and feedback. SWA also provided important financial support to undertake various IAP activities.

Due to the dependence of the IAP host on the financial resources of the project to facilitate IAP activities, any internal delays within SWA and/or SNV directly impacted the implementation of the activities – leading to frustration and loss of interest among stakeholders. Moreover, IAP members were not always in the know about the budgets available to the host, creating suspicion and mistrust about budget allocations.

For any project supporting MSPs, it is therefore critical to streamline the planning, budgeting and fund release process between the project and the platform members to ensure its smooth running. To prevent conflicts around financial resource allocation among the IAP members, it is important for the IAP host to be transparent about the budget allocations, and standardize any allowances to members at the outset of the platform formation.

4.10 Sustainability

Even though the issue of sustainability was put on the agenda of the IAPs right from first training sessions, most hosts only started to think seriously about best strategies in 2019. This shows that until the project closure is imminent, the reality does not sink in for platform members or at least does not get the priority attention it deserves.

Some IAPs experimented with generating more financial resources through raising funds from the private sector for activity-based funding or through writing proposals to donors. With others, delays in taking concrete actions towards sustainability has hampered the chances of the same.

IAPs sometimes feel that the SWA team could have done more in assisting in writing proposals and looking for support from other donors, although they may not be fully aware of SWA efforts regarding the latter. More regular updates to the IAPs from the side of the project in this would have been an encouragement for the IAPs and a motivation to increase their own efforts.

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Conclusion

For SWA, IAPs have been an important approach to foster collaboration among the various stakeholders involved in FLID in Kenya to upscale the use of SWS among smallholder farmers and improve on-farm water productivity. Although it has not always been easy to monitor and assess impact of the IAPs, or even to attribute certain developments in FLID in Kenya to the effort of the IAPs, it is still clear that the IAPs managed to trigger dialogue and interest among the various stakeholders on SWS and FLID in general.

The IAPs can be seen as a stepping stone for more structural collaboration to impact FLID in Kenya and other countries. As such, the experiences from supporting IAPs documented here could be used to further build and maintain multi-stakeholder partnerships to accelerate innovation and change in FLID as well as other developmental challenges.

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