Final evaluation of the 2017-2021 programme Working together for water, for a sustainable future'

Outcome 2 – Uganda: Improvement of models of integrated water resources management (IWRM) in two catchment areas and valorisation of best practices at national level



Content

1.	Sum	ımary	. 5
2.	Abb	reviations	. 8
3.	Intro	oduction	. 9
3	.1.	Objective of the evaluation	. 9
3	.2.	Brief description of the programme	. 9
3	.3.	Contextual factors that influenced the programme	11
4.	Dese	cription of the externally assisted self-evaluation	11
4	.1.	Evaluation team	12
4	.2.	Training	12
4	.3.	Field work	13
4	.4.	Restitution	14
4	.5.	Limitations of the evaluation	15
5.	Disc	ussion of the results of the programme	16
5	.1.	Discussion of the logical framework	16
5	.2.	Discussion of the risks	16
5	.3.	Key concepts	18
5	.4.	Discussion of the achievement of the targets of the indicators	19
		ult 1: The communities in 2 water catchments have improved access to water and sanitation vailability of improved and innovative operational public facilities	
		ult 2: Local governance of water resources is improved thanks to better planning methods better cooperation between the relevant actors and thanks to their enforced capacities	
	hots	ult 3: the planning and implementation of the land use activities by the households in the spots is sustainably improved and guided by community based IWRM plans at micro hment level	24
		ult 4: the experiences and lessons learned/ best practices are documented and used for ocacy at national level	26
	have	cific objective: improved models of the integrated water resources management (IWRM) e been implemented in two catchment areas and the best practices are valorised at nation I	
6.	The	programme induced changes	29
6	.1.	Water	29
	Did	we help people to gain access to water?	29
	How	/To what extent the community beneficiaries are aware of pay as you fetch model?	30
6	.2.	Governance	30
	ls co	mmunity based practice better for water resource management?	30
6	.3.	Capitalisation and advocacy	31
	Ном	v did we integrate advocacy in Natural Resource Management?	31

7. gen		lysis according to criteria of relevance, efficiency, effectiveness, impact and sustainability - nd participation	
7	.1.	Relevance	32
	Cha	nges in the context and how the programme responded to them	32
	Con	firmed relevance	33
7	.2.	Efficiency	34
	Con	sumption of the budget	34
	Deg	ree of implementation	36
	Res	pect of the activity planning	37
7	.3.	Effectiveness	37
		ult 1: The communities in 2 water catchments have improved access to water and sanitation vailability of improved and innovative operational public facilities	
		ult 2: Local governance of water resources is improved thanks to better planning methods better cooperation between the relevant actors and thanks to their enforced capacities	
	hots	ult 3: the planning and implementation of the land use activities by the households in the spots is sustainably improved and guided by community based IWRM plans at micro shment level	39
		ult 4: the experiences and lessons learned/ best practices are documented and used for ocacy at national level	39
	have	cific objective: improved models of the integrated water resources management (IWRM) e been implemented in two catchment areas and the best practices are valorised at nation I	
7	.4.	Impact	40
	Неа	Ith impact	40
	Ecoi	nomic impact	41
	Ecol	logical impact	42
	Soci	al impact	42
7	.5.	Sustainability	
	Fina	ncial	43
	Soci	al sustainability	45
	Envi	ironmental	45
	Insti	itutional	46
7	.6.	Gender	46
7	.7.	Participation	48
8.	Con	clusions and recommendations	50
8	.1.	General conclusion	50
8	.2.	Specific conclusions and recommendations	50
9.	Ann	ex 1: Evaluation team	
10.	Ann	ex 2: list of participants in the trainings	53
11.		ex 3: Evaluation questions	

12.	Annex 4 : evaluation matrix	55
13.	Annex 5: programme of the field work in Uganda	59
14.	Annex 6: overview of meetings and stakeholders and tools used	60
15.	Annex 7: participants in the meetings	61
16.	Annex 8 : reports of the meetings	62
18.	Annex 9: Overview of the sites visited	77
19.	Annex 10: presentation of the capitalisation 'Exploring digital water tapping'	78
20.	Annex 11: List of persons present at the restitution	79
21.	Annex 12 : Report of the restitution	80
23.	Annex 13: summary description of the results achieved in this programme	83
24.	Annex 14: logical framework	92
25.	Annex 15: Monitoring scenarios	96
26.	Annex 16: Concept of Micro Catchment Plan	. 108
27.	Annex 18: Landscape approach	. 112
28.	Annex 17: expenditures and budget at the time of report	. 113
29.	Annex 19: List of consulted documents	. 114

1. Summary

Introduction

The evaluation of the 2017-2021 programme in Uganda was carried out through an assisted selfevaluation by JESE, NRDI, Hewasa (Uganda) and Join For Water (Uganda, Benin and Belgium) and supported by the external consultancy Calipso-Ida. The fieldwork, analyses and preparation of the report took place between 11/10/2021 and 23/10/2021. The restitution in Uganda took place on 21/01/2022.

The purpose of the evaluation was to report on the results achieved and to assist Join For Water, its partners and other stakeholders in defining, improving and implementing future programmes. The self-evaluation format was chosen to increase the ownership of the analysis and results of the evaluation by the partner teams and Join For Water.

The programme in Uganda took place in the catchments of Mpanga river and Upper Lake Albert. It aimed to implement improved models of IWRM in these two catchments and valorise the practices at national level.

Main conclusions

Results

The results have been achieved to a great extent:

- <u>Result 1</u>: 16.092 people have access to drinking water through the construction of 6 mini-grids and 5.772 people have access to sanitation through the construction of 262 household latrines and of blocks of latrines in 7 schools.

- <u>Result 2:</u> 4 Waterboards were established (3 in Mpanga basin and 1 in Upper Lake Albert). These Waterboards are responsible for managing the smaller water points (boreholes). However, the operation and future of the water boards seem uncertain as national politics promotes drinking water pipes. All constructed drinking water pipes are functional and have been transferred to the Mid Western Umbrella of National Water, who are responsible for their management.

- <u>Result 3</u>: a methodology was developed and applied in 10 hotspots that allows action plans to be drawn up following a bottom-up approach and taking into account the needs of the different water users. In the hotspots different types of activities were implemented: drinking water, sanitation, tree planting, agroforestry, ... The partner organisations have the capacities to use this methodology in the future.

- <u>Result 4</u>: Join For Water took the lead in the working group on IWRM of UWASNET, that collaborated in the drawing of the annual policy brief for JSR and the thematic team, except in 2021 due to Covid. The programme elaborated 12 capitalisations, but these were mainly used at local level and less at national or international level.

Objective

The indicator with regards to the number of people with access to drinking water and sanitation has been achieved. Also the number of hotspots that benefited from restoration activities has been realised. Moreover, this approach was also shared with some other Belgian NGO's. Both VSF and IdP used this method in their interventions respectively in Kaabong and Kabarole, but we must admit that the valorisation of the experiences by other actors remains limited.

Relevance

In general, the programme is relevant to the needs of the population and the policy. The relevance was confirmed in the group discussions with the different actors during the evaluation mission and is reinforced by changes in the context such as Covid and climate change. However, the programme did not provide an adequate answer to sanitation for those who cannot afford a Flower Toilet and also for some of the population who are no longer allowed to develop activities along the Mpanga River.

Efficiency

The programme was implemented to a large extent as planned, in terms of activities, budget and schedule. The main challenges and points for improvement were: the national politics that dictated that the project should build water pipes instead of boreholes, which are more expensive; the Covid situation that prevented certain activities from being fully implemented; the increase in the price of materials; the lower implementation rate in Upper Lake Albert.

Effectiveness

The results were largely achieved, except for result 4 which was only partially achieved. A number of lessons and practices were capitalised on, but they were not sufficiently valorised at the national level. The specific objective was also partially achieved. Access to water and sanitation was improved but the link with the national level was not sufficiently elaborated.

Impact

Health

Several actors testify that there is a reduction in water-related diseases. The people of the landing sites also confirm that the construction of drinking water has eliminated the need to go into the lake for water, reducing the number of (fatal) casualties. People also witnessed that the establishment of kitchen gardens improved the nutrition in the households.

Economic

The programme has had a positive economic impact for many beneficiaries: less expenditure on drinking water, VLSA saving system, sale of vegetables from the kitchen gardens, fruit from the planted trees, higher catch for the fishermen in the landing sites... On the other hand, the programme could not always offer alternatives to people who lost their income after demarcation of the no-go zones along the Mpanga river.

Ecological

The ecological impact of the programme is difficult to measure, but there are clear indications such as the reduced cutting of trees due to the distribution of cooking stoves; the catch of fish is regulated; there is less sedimentation in the Mpanga river (less maintenance at the hydropower plant) thanks to the stopping of sand mining and better agricultural practices. Social

The programme has had a social impact, both on communities, individuals and partner organisations: <u>Communities:</u> community members feel that they are empowered and able to continue the interventions after the programme, they turn more easily to the local authorities, they are proud of their village.

Individuals: safety for girls and women when fetching water; increase of girl attendance since the presence of proper sanitation in schools; women are considered to have been outstanding in regard to leadership because they are seen to be less corrupt and hence transparent in their services. Partner organisations: because of the support on the programme and the long-term investment both financially as for capacity building, our partner organisations were able to grow.

Sustainability

Environmental

The programme had an important component on environmental conservation and restoration and some effects are already visible. On the other hand, harmonisation with the needs of the population is not always evident and this may menace the environmental sustainability.

Social

There is an appropriation of the interventions carried out by the programme by the population and local authorities and they are an incentive to develop initiatives themselves. This is evident in a number of initiatives developed by the local actors, as a result of the programme, but autonomously by them: recognition of the villages as ODF, recognition of Nyakeera as an official landing site. Also the 'pay as you fetch' principle for drinking water is well accepted.

Institutional

The programme entered the national policy and applied it to the field (e.g. drinking water supply). The programme also worked closely with the relevant stakeholders at the different levels with respect to their mandates. Positive signs of ownership by the districts and subcounties are the planning, the monitoring and coordination of actors done by these actors. On the other hand the programme still had a strong lead in the implementation, which reduced the appropriation of the programme by these actors.

Financial

The programme has developed a number of activities for financial sustainability, but there remain a number of risks. The programme does not have a clear view on these risks and is therefore not working on them, especially with regards to drinking water. Also, the upscaling of the Flower Toilets will depend on external subsidies, as the total price is too high for the beneficiaries.

Gender

The programme followed an approach to ensure gender and social inclusion. Emphasis on the participation and inclusion of the concerns of women in society was considered at all stages. This approach led clearly to changes in practical needs and strategic interests of women. On the other hand, the partners' and Join For Water crews are all male. More female staff would probably have been better to operationalise gender mainstreaming even further.

Participation

The different actors confirm that, thanks to the bottom-up participatory approach, the interventions respond to real problems and offer a solution that meets their needs. They also confirm that this participation has increased their understanding of water issues and that they have the capacity to carry out these activities themselves. But the implementation of the activities is still mainly steered by the partners and Join For Water. A more active role during implementation with more responsibility for the local authorities would increase their ownership.

Main recommendations

- Develop a landscape approach based on scaling up the experiences of the hotspot approach. This approach allows for a more systemic approach to water issues;

- Make a better needs analysis with regards to capacities of different actors and adapt the capacity building accordingly. Pay more attention to the financial sustainability in the capacity building;

- Improve the follow up of the management of the water systems by institutional actors (Mid West Umbrella and national water) in order to be able to assess the sustainability and if needed, adapt the strategy;

- Compare the different strategies of the partners with regards to protection of water resources and wellbeing of the people living on the natural resources around the Mpanga River (especially in the no-go zones) and come to a common strategy;

- Develop different type of latrines instead of only promoting the Flower toilets, in order to guarantee access to sanitation for everybody, also for those who cannot afford a Flower toilet. Also, give other options for latrine construction than only the ISBB bricks;

- Develop with more care the logical framework, especially the indicators. These indicators should be readily measurable and provide information about the expected changes. Develop with care scenario's for monitoring, define clear roles and responsibilities and improve the analysis of the collected data. Share this analysis with all stakeholders.

2. Abbreviations

Abbreviation/ acronym	Explanation
ATM	Automated Teller Machine
AWMZ	Albert Water Management Zone
CDO	Community Development Officer
СМР	Catchment Management Plan
DNRO	District Natural Resource Officer
DWO	District Water Officer
Ecosan	Ecological Sanitation
HEWASA	Health through Water and Sanitation
ISSB	Interlocking Stabilized Soil Block
IWRM	Integrated Water Resources Management
JESE	Joint Effort to Save the Environment
JSR	Joint Sector Review
LF	Logical Framework
MWE	Ministry of Water and Environment
MWUS	Mid-western Umbrella of water and Sanitation
MWUWS	Mid-Western Umbrella of Water and Sanitation Authority
NRDI	Natural Resources Defence Initiatives
PTA	Parents and Teachers Associations
SWSSB	Sub-county Water Supply Sustainability Board – Water Board
ТОС	Theory of change
ULA	Upper Lake Albert
UWASNET	Uganda Water and Sanitation NGO NETwork
VSLA	Village Savings and Loan Association
WUC	Water User Committee

3. Introduction

3.1. Objective of the evaluation

Join For Water implemented the programme 'Improvement of models of integrated water resources management (IWRM) in two catchment areas and valorisation of best practices at national level', in cooperation with the local partners JESE, NRDI and HEWASA, under the multi-year programme 2017-2021, co-financed by DGD. The programme was active in the Mpanga Catchment in Western Uganda and in the northern part of the Lake Albert Catchment.

In this programme, two evaluations were planned: a mid-term evaluation (carried out in 2019), and a final evaluation. The mid-term evaluation was a strategic/thematic evaluation on financial sustainability and universal access to safe drinking water and sanitation.

The purpose of this evaluation at the end of the fifth year of this programme is to be accountable to DGD, based on the OECD criteria (relevance, effectiveness, efficiency, sustainability and impact). Other evaluation questions are added to this. The evaluation will help Join For Water and partners in the definition and implementation of future interventions. Through this evaluation we also wanted to strengthen the evaluation capacities of Join For Water and our partners.

The evaluation was an externally assisted self-evaluation, conducted by Join For Water together with the partners (JESE, HEWASA and NRDI) and methodological support of external consultants. The cabinet Calipso.lda was recruited to assist this. The team of Calipso.lda consisted of Nico Bakker (head of the mission) and Raja Litwinoff.

3.2. Brief description of the programme

The outcome of the programme is: 'Improved models of the integrated water resources management (IWRM) have been implemented in two catchment areas and the best practices are valorised at national level'.

The identification of the programme was done in strong consultation with the partners, being the local NGO partners but also the local authorities. Other stakeholders, with whom the program worked are the Ministry of Water – Directorate of Water Resource Management, University of the Mountains of the Moon and UWASNET.

To achieve the objective, 4 results have been defined:

R1: The communities in 2 water catchments have improved access to water and sanitation by availability of improved and innovative operational public facilities;

R2: Local governance of water resources is improved thanks to better planning methods of and better cooperation between the relevant actors and thanks to their enforced capacities;

R3: The planning and implementation of the land use activities by the households in the hotspots are sustainably improved and guided by community based IWRM plans at micro catchment level;

R4: The experiences and lessons learned/ best practices are documented and used for advocacy at national level.

The first result focused on the immediate improvement of the drinking water and sanitation needs of the local communities. The second result paid attention to the management of these issues with the participation of all stakeholders. The third result worked on specific hotspots with specific water related problems, following a bottom-up planning. The last result aimed to use the lessons and experiences from the previous results to influence other actors in the water and sanitation sector.

The main activities were by result:

Result 1:

- Construction/extension of 6 mini-grids (Mpanga)

- Hygienic, energetic and economic improvements; on landing sites: public Ecosan, fish - handling infrastructures, anti-erosion measures, fuel savings smoking kilns (ULA, Mpanga)

- Construction of 262 Household Ecosans (ULA, Mpanga)

- Improving school facilities on 7 schools: public toilets, rainwater harvesting, hand washing, woodlot, waste handling, dish racks (ULA, Mpanga)

- Sensitisation on water management (including hygiene, sanitation) ecological protection and restoration

Result 2:

- Support of 4 Water User Associations into their transformation into Water Boards
- Support toward local authorities in planning and implementation of public infrastructure
- Support and guidance in innovative models for the management of mini-grids (water ATM)

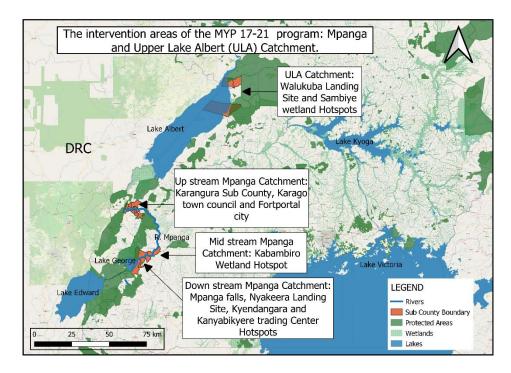
Result3:

- Catchment assessment of Lake Albert Catchment
- Awareness campaign for the local communities in Upper Lake Albert catchment (movie)
- Set up of micro catchment plans and standardizing the methodology
- Wetland protection (ULA, Mpanga)

Result 4:

- Participation in thematic meetings on IWRM (organized by the Ministry of Water and Environment) - and bring the conclusions to the Joint Sector review

- Organize and host UWASNET working group meetings (IWRM team lead)
- Document and disseminate experiences



The intervention area of the program is Mpanga catchment and Upper Lake Albert Catchment

The direct target group consisted of:

- the communities in the 10 hotspots where the programme worked through infrastructure and training;

- the schools (7) through improved infrastructure;

- the local authorities (districts and sub-counties) through management of the coordination of local drinking water supplies

- the 4 water user associations that were transformed into water boards

- the catchment organisations of Mpanga and Upper Lake Albert

- UWASNET through support by Join For Water in specific working groups (Join For Water team lead of IWRM thematic working group)

3.3. Contextual factors that influenced the programme

Since the start of the programme, there have been a number of contextual factors that have had a significant impact on the programme:

In 2019 Kamwenge district was divided into two districts: Kamwenge and the newly created Kitagwenda. Since Kitagwenda has a new local government, buy-in had to be created for program. The cooperation with this new local government took more time than originally anticipated.
Fort Portal is a very fast growing city. In 20 years, the population has grown by about 30% (today 60,800 - Uganda Bureau of Statistics). In 2020, Fort Portal was elevated from municipality to a tourism city status. This strong development results in more demand for building materials and more pressure on the Mpanga river where sand and stones are extracted. On the other hand, because of the city's status, the local government is showing more interest in protecting the environment.
In March 2020, Uganda was also hit by the Covid crisis and went into a complete lockdown for 4 months. As a result, the planning had to be revised. Covid also had a severe impact on the economic situation of the population, complicating their contribution in the programme. On the other hand, in the villages the promotion of hygiene measures was reinforced as a means of preventing the spread of the Covid virus.

-Due to the 2020 elections, the local politicians were almost unavailable for the programme, as they were campaigning to collect votes. This made it difficult to establish concrete cooperation with them. - New governmental policy to only build piped water systems and no boreholes for drinking water for people: mostly we constructed piped systems, grids and a few boreholes. As it became less relevant to construct boreholes, we switched to piped systems and created extra cattle throughs.

These and other factors are also treated under risk management.

4. Description of the externally assisted self-evaluation

Join For Water opted for an assisted self-evaluation with the active participation of Join For Water staff and partners. This methodology allowed us to look at our programme with a critical mind and learn lessons from it, and also to strengthen our capacities regarding the evaluation. The support of an external evaluator (Calipso.lda) guaranteed the quality of the evaluation process. The self-evaluation was also a peer evaluation, which took place at two levels: (a) peer-to-peer exchanges in the field (between waterboards, between users,...); (b) involvement of collaborators from other countries (Benin and Belgium). The reason for the involvement of colleagues from other countries, who were not directly involved in the implementation, were:

- they could assess the programme with a more neutral view.

- and experiences from different countries could easily be shared.

The evaluation consisted of three stages. First, a preparatory phase in which Join For Water participants and partners were trained by Calipso.lda through online sessions. Then, between 11/10/2021 and 23/10/2021, the fieldwork was carried out. Finally, the findings of the fieldwork

were also discussed and distributed in a final restitution with a group representing the stakeholders in the programme (20/01/2022). After the fieldwork, a first version of the report was drafted based on the results of the fieldwork and the analysis and then reworked with the comments and suggestions that came from the consultants and out of the restitution.

4.1. Evaluation team

The self-assessment team included members from the partner organisations JESE, NRDI and HEWASA and Join For Water (from Uganda, Belgium and Benin). This configuration aimed to create a team with different perspectives and to facilitate learning across the country and organisations. The composition of the evaluation team and the role of each team member can be found in the annex 1.



Photo left: Sagula; George; Amanyire; Joris; Lawrence; Yonah and Edgar Photo right: Jamwa; Cyprian; Benon and Amanyire

4.2. Training

During the online training, which lasted three days, the following topics were covered: - Day 1: introduction to the terms of reference, evaluation as a phase within the project cycle, OECD evaluation criteria, gender and participation;

- Day 2: project management tools: logical framework and theory of change, definition of key questions, focus on 4 topics (access to water, governance, IWRM and capitalisation/lobbying), evaluation matrix, inventory of evaluation tools;

- Day 3: challenges in data collection and analysis, peer to peer approach, structure of the report, availability of staff and others, elements for an action plan.



Training day 1 in Fort Portal

In annex 2 one can find the list of participants of the different training sessions. The people who participated in the training were not always the same as those who participated in the fieldwork, and vice versa.

In the terms of reference of this evaluation, 4 evaluation questions have been defined by the head quarter of Join For Water in concertation with the country representatives of Join For Water:

- Are the stakeholders we involved the relevant ones, or should more stakeholders be involved?

- Were the desired changes at stakeholder level well formulated and realistic?

- Did the programme contribute sufficiently to enable stakeholders to assume their responsibilities?

- Did the programme contribute sufficiently to strengthen the relationships/collaboration between the different actors?

During the training, 12 additional evaluation questions were formulated by the participants (partners and Join For Water) according to focus on access to water, IWMR, capitalization/ advocacy and governance. It was decided, based on relevance and feasibility, to retain 7 questions. The selection of these 7 questions was done by Dirk Glas and Johan Slimbrouck of Join For Water head quarter. These questions were linked to the evaluation criteria of the OECD. Each question was reformulated and broken down into more specific questions (also by Dirk Glas and Johan Slimbrouck). This selection was presented to the data collection team at the kick of meeting of the field work and approved. An overview of the 7 questions with the reformulation can be found in Annex 3 – Evaluation Questions.

These 7 specific questions are addressed in section 4 on programme-induced changes. The 4 questions of the terms of reference will be addressed in the synthesis report, which is drafted by the consultants.

4.3. Field work

During the training a preliminary programme of the field work was drawn by Join For Water and partners. Also, an evaluation matrix had been made, with mention of the kind of information that is needed, who should collect the information, where this information can be found and which tools to collect the data.

The team in the fieldwork was supported by the consultant N. Bakker, who participated in the field mission in Uganda. The fieldwork started with reviewing the evaluation matrix and further explaining the evaluation questions, data collection (annex 4 – Evaluation matrix) and validating the programme (annex 4 – Programme of the field work in Uganda). Each evaluation question was addressed in detail, and for each question, with the support of the consultant, N. Bakker, guidelines were set for the interviews with the different stakeholders so that the question would be clear to them. The stakeholders, who would participate in the different groups, were divided into 4 categories and it was determined which evaluation questions related to which categories of stakeholders.

During the mission different actors were met. Most of the meetings were facilitated by staff of the partners because very often these meetings were held in local language. Only meetings with the districts are with the Albert Management zone were facilitated by Join For Water Belgium or Uganda, because these meetings could be held in English. An overview of meetings, stakeholders and tools used can be found in annex 6. In annex 7 one finds the list of the participants of all these meetings. In annex 8 one finds the reports of these meetings.

The actors that were met form a good sample of the main actors with whom the programme cooperates. Out of 5 districts involved in the programme (Kabarole, Fort Portal city, Buliisa,

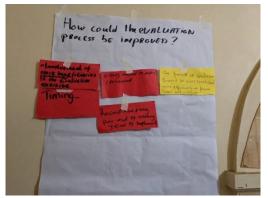
Kamwenge and Kitagwenda), 3 were met. Of the 12 sub counties involved in the programme (Karangura, Karago, Kichwamba, Kabambiro, Ntaara, Kanara, Kabambiro, Buliisa, Ngwedo, Fort Portal North and Central and Mahyoro), 9 were met. However, due to time constraints, some actors were not interviewed (such as Mountains of the Moon, UWASNET, Mid-Western Umbrella...).

In addition to the sessions with the stakeholders, a number of sites were visited (see annex 9 – Overview of the sites visited): These sites were selected because they give an overview of the different activities and areas, in which the different partners are working. The selection was made by the partners. However, due to time constraints, some sites were not visited (such as Kyendangara water extension, Kabambiro wetland restoration and Kanara water extension and Buliisa – Walukuba landing site and Kijaji wetland restoration). Especially, Buliisa was not considered as it is quite far away from the other interventions.

In contrast to the meetings with stakeholders, there was very little interaction with the users of these facilities. During the visits observations were made by the data collection team, but no guidelines for these observations had been developed by the consultant in the preparation.

At the end of the mission, with support from the consultant N. Bakker, the OECD criteria and the themes of gender and participation were analysed on the basis of the information obtained by Join For Water staff and partners during the mission, the information from the monitoring system of Join For Water and partners about the project and also on basis of the experience and knowledge of the staff from Join For Water and partners.





Photos of the discussions

Also a capitalisation experience was presented to staff members of the partners, colleagues of Join For Water in other countries (via Webex) and the two consultants of Calipso.lda. The presentation was about "Exploring digital water tapping". A summary of this presentation can be found in annex 10. The presentation dealt mainly with the process of capitalization and was followed by a discussion.

4.4. Restitution

On 20/01/2022, the restitution of the evaluation was organised in Fort Portal. The meeting was attended by different stakeholders from Ministry of Water and Environment, the Local Governments of Kabarole, Kamwenge, Kitagwenda districts as well as Fort portal city; local beneficiaries and Implementing partners JESE, NRDI, and HEWASA. The list of attendees can be found in annex 11. In the restitution the results, changes and OECD criteria based on the findings of the evaluation were presented. Afterwards, attendees were able to comment on the evaluation and make recommendations for improvements. The main recommendations from this restitution are:

Water and sanitation/IRWM(protection of water resources)

- Better sustainability plans for water infrastructures should be put in place

- Enforcement of ordinances to protect water resources
- Strengthening social marketing strategies for the sanitation and hygiene infrastructures

Area of intervention

- Other hotspots like Ntara need to be considered
- Revisiting of the areas that recently benefitted from IWRM interventions

Approach and methodology used

- Reduce co-funding scheme for sanitation and hygiene facilities to cover a wider area
- Strengthening the local structures for better sustainability processes/plans
- Do more on policy advocacy that promote a people led approaches
- Evaluation needs to be conducted on annual basis for better results

Stakeholder involvement

- -The government and local leaders need to support the work of the donors
- Enforcement of laws and ordinances by the Local Government

The report of the restitution can be found in annex 12.

4.5. Limitations of the evaluation

- The evaluation took place 3 months before the end of the program and for a period of two weeks (field visits, analysis). Consequently, not all data was available yet.

- Moreover, we might not underestimate the 'Hawthorne effect' in which individuals modify an aspect of their behaviour in response to their awareness of being observed. The fact of having 'white foreigners' to join the evaluation, only strengthens this effect. To tackle this, most meetings took place in local language in presence of people familiar with the program. Unfortunately, a possible side effect is loss of information during the translation process.

- The sample size of the communities was limited. Upper Lake Albert was not visited. Also a number of actors were not visited (UWASNET, Mountains of the Moon,).

- The data collection team was partially composed of people who are directly involved in the implementation of the programme. The information they gather from meetings and observations is often already known by them and makes them less curious to bring up less visible elements of the programme or the reasons for certain changes.

- The data that is used comes mainly from the participatory exercises and observations during the field work, from the monitoring system of the programme and from the staff's own knowledge about the programme, but much less from external sources such as records are documents from drinking water committees, districts etc. Very often, official data such as on health, access to water etc. are uncomplete, not very specific or not up to date. Also the information we gathered from the Water Boards is very limited.

- The communities organised themselves for the group discussions, with the risk that mainly those who benefited directly from the programme or had the time to do so would participate.

- Due to Covid restrictions, schools were closed. It was impossible to meet the school direction, teachers or pupils. The programme has an important component in schools, but we were only able to visit the infrastructure and not the managers of users of this infrastructure.

5. Discussion of the results of the programme

Annex 13 contains a summary description of the results achieved in this programme.

5.1. Discussion of the logical framework

(see annex 14 – Logical framework)

The structure of this framework is logical: within the first three results, a number of field interventions are carried out, which contribute to the improvement of the living conditions of the local population. But within these first three results, a number of experiences are also developed (such as the implementation of local IWRM in a number of hotspots) that can be valorised to influence policy at a higher level. In this way, the specific objective can be realised.

For both the specific objective and the results, a number of indicators were defined to try to capture the output. As the number of indicators is limited by DGD, it is not possible to capture all output and a selection had to be made. The indicators therefore cannot give a complete description but rather an indication of the changes. Most indicators are output indicators. The information provided by these indicators is interesting, but they do not always reflect the changes in the target group. For example, '*IR3.1 Progress rates of the development of the micro-catchment management plans and their implementation*' provides information on the number of hotspots where work is being done, but not on the concrete changes for the residents of these hotspots, although this is part of the micro catchment plan. The indicators are only partially actor-oriented, in contrast to the theory of change, but which was not used for the management and monitoring of the programme.

Most indicators are also very complex as they contain many criteria that need to be monitored. For example, indicator '*IR1.1 Number of additional people in the Upper Lake Albert and Mpanga catchment that have improved access to drinking water in rural areas by the use of innovative interventions*'. For the follow-up of this indicator, the different criteria of improved access need to be determined, but also what innovative interventions are. A scenario was developed for each indicator, in which the different elements of the indicator are clarified, as well as the way in which they should be monitored (see annex 15). The aim of these scenarios was to make the indicators more specific and more measurable. In practice, however, not all elements of the indicator are considered in the follow-up in the field and only the simplest criteria have been taken into account. So not all indicators in the logical framework are equally easy to measure.

Several sources of information were determined for the different indicators in the logical framework. In practice, for the monitoring mainly internal sources are used (such as reports by the partners). Often the data from these external sources are not up to date (e.g. concerning access to drinking water in a district), or the data come from the programme itself. On the other hand, not using these external sources does not allow for a number of more in-depth analyses, such as for example the financial balance by external service providers in the management of drinking water facilities (indicator IR2.2 Number of mini water grids in rural areas being managed by delegated private service providers) that shows financial sustainability of their business model.

5.2. Discussion of the risks

The following table summarises the risks identified in the formulation, the extent to which these risks were materialised, the impact on the programme and how these risks were managed. IN the project file more risks were mentioned but this table only gives the risks that really occurred.

Risks	Materialised	Impact on the programme	Management of the risk by the programme
Environmental extremes	Inundation of ULA and landing sides	 inaccessibility of the intervention area delay in implementation 40% of planted trees in ULA destroyed 	 extra activities in weekends to catch up budget reviews were done to restock the community tree nursery beds
Personal safety staff (road safety, hostility)	 laptops and motorcycle of NRDI was stolen 	- no major impact on the programme	 reporting tot police procurement of new motorcycle by partner plans to relocate to a new office building for safety
Institutional changes with partners (discontinuity, HRM)	5 female staff left and their replacement has been male staff	 facilitation of social activities carried out by men 	 the programme was not able to find new female staff
Conflicting approaches	Districts have different accountability and reporting approaches and a lot of bureaucracy in execution of funds and obtaining legal documentations.	- Affected the delivery of program outputs, in terms of community mobilisation, participation in community meetings and execution of funds.	 formation of a steering committee with representation of all key district and community beneficiary stakeholders who agreed on the approaches renewal of the MoUs with the respective districts

In addition to these risks identified in the formulation, a number of unforeseen risks also occurred:

Risks	Materialised	Impact on the programme	Management of the risk by the programme
Administrative reforms	Creation of a new district (Kitagwenda)	 Join For Water only partner for the new district lot of requests to support water extensions, school sanitation infrastructure and other livelihood programmes 	Review of budget and re- allocation for an extra 11.8km water extension for Kanyabikyere
	Fort Portal recognised as Tourism City	Increase of demand for Ecosan toilets and trees for greening	Re-allocation of partner NRDI to install more household Flower Toilets ¹ .

¹ A Flower Toilet is the type of Ecosan toilet that is built by the programme. This name was given in the social marketing campaign to give the toilet a positive image.

Risks	Materialised	Impact on the programme	Management of the risk by the programme
Unharmonized community facilitation/participation transport refund	Different transport refund rates given	This affected the attendance of meetings and support of project activities in some of the hotspots	 Consultations with NGOs to have standardized rates based on internal procedures. A standard rate was agreed upon partners.
Outbreak of Epidemic diseases	Outbreak of Ebola close to the intervention zone area (Eastern side of DRC)	- Affected the mode of working, networking, and movements within the region	 A sensitization and risk management training on Ebola by the Uganda Red Cross Purchase of a tool kit following the WHO Ebola risk management actions
	Outbreak of Covid in March 2019	 Lockdown for almost 4 months Schools closed during last 2 years Worsening economic situation of population 	 Planning adapted, work from office our home No more activities in schools Increasing subsidies for Ecosans

Conclusion:

Strong points: The ultimate impact of the various risks on the programme was limited and could be adequately mitigated by the programme.

Points for improvement: The fact that the initial gender balance is shifted could not be avoided. The lack of female field staff certainly has an impact when the programme works on gender-related and gender-sensitive themes.

5.3. Key concepts

Before discussing the degree of achievement of the results and the corresponding indicators, we will first give an overview of some key concepts used throughout the programme and their definitions and in line with the overall strategies of Join For Water.

<u>Access to water²:</u> Access to water means that all people in a defined area can have access to safe water, including the most vulnerable. Access to a service means that there are no (1) technical barriers (the infrastructure exists and the water arrives where it is needed, at an acceptable distance from all homes); (2) social (equitable without privileging); (3) physical: people with reduced mobility (disability, age, ...) can make use of the service; (4) financial (the price is such that even the most vulnerable families can afford to buy the minimum necessary); (5) institutional (communal policies facilitate access to the service for the vulnerable). Moreover, it is rather the implementation of appropriate strategies that allow - over time - to achieve this universal access. Finally, universal access does not always mean universal use as this is linked to one's own choice (e.g. not wanting to pay).

<u>Access to sanitation</u>: Join For Water intervenes at different links in the sanitation chain depending on the local context and the initiatives taken by other development actors. It does not cover the whole sanitation chain in the Uganda, but focuses only on access to sanitation facilities in households,

² This definition was also used in the mid-term evaluation

schools and landing sites. The same criteria as for drinking water also apply here: (1) technical: the infrastructure exists and is functional; (2) social: (equitable without privilege), (3) physical: accessible to all (4) financial: the cost of the sanitation is such that even the most vulnerable can afford sanitation infrastructure.

IWRM and the integrated vision: Integrated water resources management is often defined as "a process that promotes the coordinated development and management of water, land and related resources to maximise the resulting economic and social well-being in an equitable manner without compromising the sustainability of vital ecosystems". (Global Water Partnership). With IWRM, it is important to bear in mind that it does not present a set of clearly defined solutions. It is in fact a process that attempts to manage water from an integrated vision, adhering to several principles: (1) integration between sectors (e.g. health, infrastructure, environment, development), (2) integration of water uses (e.g. drinking water, sanitation, hygiene), (3) integration with the environment, and (4) integration with communities.

5.4. Discussion of the achievement of the targets of the indicators

Result 1: The communities in 2 water catchments have improved access to water and sanitation by availability of improved and innovative operational public facilities

IR1.1 Number of additional people in the Upper Lake Albert and Mpanga catchment that have improved access to drinking water in rural areas by the use of innovative interventions

Target value at the end of the programme	Achieved
+ 4.000 persons (due to 2 mini grids)	+16 098 persons (due to 6 mini grids)
+ 13.200 pers. (due to 11 manual boreholes)	+ 0 persons (due to boreholes)

The number of additional people is calculated as the sum of people benefitting through additional connections for facilities, private connections and kiosks. Access implies sufficient water to meet domestic needs (drinking water, food preparation, hygiene...) is reliably available close to home - functional and in line with national standards.³ During the baseline, the partners count the number of households in the community that will benefit from the infrastructure according to these standards. For most of our interventions, the baselines show that the time to fetch water and the distance are way smaller. Nevertheless, observations by the partners during field visits show that also people further away benefit from the improved availability but are not counted in the calculation.

By innovative interventions decentralised mini grids are meant. In a context where people draw water from surface water, unprotected springs or traditional wells, these mini-grids represent an innovation. Extra innovation is coming from the pilot use of water ATMs, which was very well received by the local population (group discussion in Nyakeera). Interviews and online data from the ATM (Susteq data which is accessible for Join For Water and partners) indicated the improved payment rate due to ATMs, better availability as water can be fetched 24/7 and lower waiting times as people did not depend on caretaker. Consequently, people can fetch now quality water (100 Ush for 20I) whereas in the past they bought it expensive; for a jerrycan of 20I they paid between 500Ush and 1000Uhs (Chairperson Nyakeera Landing site). In other cases they drank from rivers, lakes or unprotected wells. The water users also testified that, apart from a few technical problems that were quickly resolved, the supply of drinking water had been guaranteed every day since completion.

³ These state to have water within 30 minutes at a distance of less than 2km and 20l per person per day.

In general, the women take care of the water although the budget is coming from the men (before the project and now), but as the water is cheap, sometimes women also pay instead of asking the money to their husbands. Less tension and gender based violence is noticed about the women not pursuing her 'duty' since water is now ready available. One interview mentioned a potential shift in duty when using the water ATM but this needs to be investigated more thoroughly. This and other effects such as quality improvement and changes in time use by the availability of drinking water will be addressed during a PhD research in cooperation with the University of Ghent in the next program.

No boreholes have been built as the government has new policy to only build piped water systems and no boreholes, so the budget was shifted to piped water systems and cattle throughs. In general this is an improvement as quality can be easier guaranteed using piped systems.

It is not clear if the shift to piped systems led to less people served, as the budget for the boreholes was based on an average budget. In practice boreholes can be more expensive than budgeted, due to soil conditions but in general boreholes are cheaper per capita than piped systems.

Strong points:

- ATM in rural setting showing potential for upscaling

- improvement of the health situation

Points for improvement:

- knowledge by local people on effects of drinking water provision in rural communities (e.g. on health)

*IR1.2 Number of additional people in the Upper Lake Albert and the Mpanga catchment (in total 914.500 persons) that have access to sustainable sanitation at home and in their learning or working environment*⁴

Target value at the end of the programme	Achieved
+ 1.500 persons have access to sanitation at	+ 1 572 persons have access to sanitation at
home	home
+ 3.600 pupils (6 schools)	+ 4.200 pupils (7 schools)
+ 4.300 persons in 2 fishing communities	+ 0 persons in 2 fishing communities

The number of additional people is calculated as the sum of people benefitting through additional improved latrines, institutional (landing site, school) improved latrines/toilets with hand washing facility. This clean environment breaks the cycle of disease with a sanitation system that is economically viable, socially acceptable, and technically and institutionally appropriate, and it should also protect the environment and the natural resources such as the Ecosan technology.

262 household Ecosans have been constructed, for an average of 6 people per household. In reality, during their field visits, the partners observed that more people make even use of these qualitative facilities. During the visits to the villages, the Ecosans turned out to be well maintained and the tipy-taps for handwashing filled with water. People in the villages also testified that these latrines are a great improvement to their living conditions and that there is a demand for more latrines.

Access refers to beneficiaries using sanitation facilities of good standards (functional and in line with national standard) thus the number of people can but should not be larger than standard capacity of installed facilities. This government policy for amount of pupils per stance went down from 75 to 40

⁴ The indicator doesn't mean that pupils should have access to a latrine in school or in the household. We count all pupils that have access to a school latrine, whether they have a latrine at home or not.

during the program⁵. In this program, mainly public facilities for schools were installed: 7 school blocks with 8 stances. Using the original norm (75 pupils / stance), 4.200 children have access to school sanitation (according to the new norm this is 2.240). The number of pupils in the 7 schools is 5,269, which is higher than the number of students who have access to sanitation. If we use the old norm of 75 pupils/cabin, we see that in 4 of the 7 schools the norm is achieved, in the other three schools it is not. With the new standard, this is not the case in any school. (all numbers refer to pre-Covid as schools were closed during Covid).

All children got an extensive training in the use and maintenance of the Ecosan toilets under the supervision of teacher and hygiene committee, that were initiated by the programme. Because the schools have been already closed by Covid for two years, it was impossible to verify whether the latrines are being used correctly and whether this use of latrines is also having an impact in the households.

Normally the building of public latrines was also planned in the fishing villages and landing sites. Nevertheless, after our participatory bottom up approach the communities chose to shift this budget to other public infrastructure (fish cleaning, ovens, and household toilets).

The Ecosan technology has proven to be a viable and the interest increased during the program. Samples have shown great appreciation for this technology. As the demand went up also the own contribution was increased to scale up. Additionally, also cost of building materials went up. Unfortunately, some people were complaining about the price. This only worsened as Covid-19 made it economically harder for people. Initially, a latrine cost 2M Ush but went up to 2.5M Ush. The contribution varied between 0.5M and 1M Ush. The construction is facilitated with the use of ISSB blocks which are more climate friendly than baked bricks. The program aimed to turn ISSB production into a business. The blocks are made by a group of young people and a private entrepreneur, who have been trained on the production and the use of the blocks. They were also given the necessary equipment, such as a block press. However, it is unclear whether this will sustain without the program buying its stock. In theory, ISSB could be used for all kinds of constructions but as it is not cheaper people stick to their traditional methods. Furthermore, Ecosans provide by products that can be used as organic fertiliser. Many beneficiaries indicated increased farm revenues using the organic manure. This was confirmed by observations by the partner during the programme, where they saw that most of the people at Nyakeera landing site are using the manure and urine. Currently IDP is carrying out a study on the use of the manure and urine, which will give more quantitative data.

Other than latrines, the program also promoted implementing basic hygiene measures in households such as handwash facilities (tipy-taps), bath shelters, drying racks and rubbish pits. During the monitoring, it was found that each household took up these basic hygiene measures.

Strong points:

- number of Ecosans and school latrines constructed
- good use of latrines and other sanitation devices in the villages
- development of a qualitative Ecosan technology

Points for improvement:

- coverage of latrines not achieved in all schools

⁵ There is no difference in the norm between boys and girls stances (source: In the National micro planning handbook for water, sanitation and hygiene (WASH) in public primary and secondary schools in Uganda, 2019).

- cost of the Ecosans in relation to the financial possibilities of the households. Most of the latrines are with the families that are better off. The partners saw during the implementation phase that some families, who are poorer, also construct an Ecosan if they are convinced of the added value.
 - turning ISBB fabrication into a better business model

Result 2: Local governance of water resources is improved thanks to better planning methods of and better cooperation between the relevant actors and thanks to their enforced capacities

IR2.1 The number of newly installed Water boards in the 2 catchments that are reporting and proposing their priorities to influence decisions in financial planning

ards installed and operational (3 in
atchment and 1 in ULA)

The water board was a new structure in the water sector in the time of the formulation. It is an umbrella body that is overseeing the operations of all water user committees of all the water sources in the sub counties. The water boards oversee the simple waterpoints such as boreholes, but are not responsible for piped systems. Before being an official legal structure, Join For Water already installed Water User Associations which, due to advocacy became officially recognized as water boards. A number of criteria to appreciate the functioning of the water board are: composition of the water board, level of registration, existence of a constitution, proper record keeping...

During the focus-group the Water Boards of Nyabbani, Mahyoro and Kanara indicated that: -each waterboard has a complete structure (chairperson, secretary and treasurer, and number of members representing the individual drinking water committees)

- each waterboard is recognised by the subcounty leadership and district leadership

- a number of women sit on each waterboard (Nyabbani 5 women to 13 members, Mahyoro: 6 women to 16 members, Kanara 5 women to 13 members)

- they know their roles, the most important of which are:

- Sensitization of water users on proper maintenance of water points and on proper hygiene and sanitation both at household and public level.

- Overseeing the work of water user committees, through conflict resolution and resolving other underlying management challenges like resource mobilization.

- Record keeping of all water points (functional and the non-functional). (Nyabbani: in total has 98 water sources; 71 are functional while 27 are non-functional and 1 shallow well was constructed by Kitagwenda District Local Government; Mahyoro: in total 88 waterpoints of which 64are functional and 24 non-functional, Kanara: in total has 89 water points; 62 are functional, while 27 are non-functional)

- Repairing minor breakdowns of the waterpoints

- Reporting non-functional especially for bigger breakdowns that can't be managed by water boards.

All the waterboards have a an annual workplan in place and normally hold quarterly review meetings to reflect on their work, challenges and the way forward (the last year not every waterboard organised these quarterly review meetings due to Covid). Records of these meetings are available and were shown during the focus group. To their saying, they manage to do minor repairs, which is confirmed by the partners on basis of their follow up visits. The waterboard of Kanara rehabilitated 3 water points with minor repairs: Buhumurro borehole, Bendantunguuka Shallow well, Katalyeba

shallow well. While they rehabilitated 1 shallow well in Nyansorro with major repairs which they consider like construction of the waterpoint.

According to the waterboards, the main challenges they face are:

- Difficulty in collecting contributions from water users (2000 Ush/month and household) although this is much cheaper per litre than the price of the water at the pipes systems, and misuse of the money at water committee level,.

- Many of the water points at village level are not registered with the water boards which becomes difficult for those points to be helped in case of any challenge. The registration is in their interest but the different water points have to pay annual subscription fee of 20,000Ush and deposit 20% of the total sales on the account for repairs and maintenance of the waterpoints. Nevertheless, the waterboards have the task to convince the waterpoints to register.

Wells are now being replaced by piped water, which becomes the responsibility of the Mid-Western umbrella. In the short term this has an impact on the financial means for the water boards to function but they also need less money for maintenance. In the very long term, the Water Boards may disappear but it will still be a very long time before everybody has water from a piped system.
logistical and operational problems (e.g. for transportation)

According to the water boards, They still have a need for further framing of the programme and want to exchange further with other water boards.

Strong points:

- creation of 4 new waterboards according to the Ugandan policy.

- The waterboards know their responsibilities and are functioning.
- They succeed in doing minor repairs and even building new water points.

Points for improvement:

- the members of the water boards are not paid. This can put a strain on their engagement in the long run.

- The functioning of the waterboards depends on the number of water committees that are connected. Not all water committees in the sub-counties are connected, and a number of water points are being transformed into drinking water pipes. This negatively affects the working resources of the water boards.

- It is not clear what their mandate is in relation to the water committees in case of fraud, for example.

- There is still a demand from the water boards for further guidance, for example on financial management.

IR2.2 Number of mini water grids in rural areas being managed by delegated private service providers that show financial sustainability of their business model

Target value at the end of the programme	Achieved
2 mini grids are operational and minimum 1 is	6 mini grids installed and functional
capable to run at least break even	

A mini grid is a decentralised piped water network. As the programme is enrolled in the plans of districts and sub-counties, it was decided to do some extensions to existing networks. These are also considered mini grids here (more information on the mini grids can be found in annex 13).

Break-even is achieved when the service providers receive sufficient revenues from user fees and government transfers to cover the costs of operations and maintenance as well as finance rehabilitation and new investments.

The two mini grids in Ntara are private under a water committee. The three mini grids in Mayhoro are managed by the Mid-Western Umbrella. The Mid-Western Umbrella is a public water utility company operating and managing various piped water supply systems in Mid-Western region of Uganda. One mini grid in Kanara sub county Kitagwenda is managed by National Water. The mini-grids were transferred to these structures upon completion and the programme didn't follow up on the financial management, so it is impossible to say if these mini grids achieved break even. All systems do provide sufficient water of good quality and can therefore be described as functional at this moment.

The drinking water pipes are therefore not managed by a delegated private service provider, but for the installation of the ATMs, cooperation was established with Susteq, which in turn is a private service provider. The cooperation with Susteq was decided upon together with the Mid Western Umbrella after a public tender. The management of the ATMs is outsourced to local entrepreneurs, who were trained by Susteq- Water Forever. The employees of the mid-Western Umbrella also followed this training.

The ATM systems are still very recent, so that today it is not yet clear how it will evolve financially in the long run. The ATMs were installed as a pilot and further follow-up is required. The provisional figures show that after the refresher training, the sale of tokens rose sharply and that this is an indication that the local entrepreneurs now see water more as a business. (source: public stand pipe and ATM report 2021).

Strong points

- management of larger infrastructures (mini grids) by legally recognised managers. The first experiences with Mid-Western Umbrella show that they have the capabilities for operation and maintenance

- ATM looks promising

Points for improvement

- further follow-up needed for ATM
- limited knowledge on the financial management by Mid-Western Umbrella and National Water

Result 3: the planning and implementation of the land use activities by the households in the hotspots is sustainably improved and guided by community based IWRM plans at micro catchment level

IR3.1 Progress rates of the development of the micro-catchment management plans and their implementation (selected micro catchments were shown to be hotspots in the catchment management plan)

Target value at the end of the programme	Achieved
The standardized method was used for the	The method was used and plan was developed
setup of micro catchment plans in 6 hotspots	for 10 hotspots instead of 6

A micro catchment management plans is a plan of action for water resources in the catchment to provide for its protection, use, development, conservation, management, and regulation of water resources in the catchment within a hotspot or region/area with significant levels of degradation.

A hotspot is an area with significant levels of degradation related to water. These hotspots can be very diverse (gorge, wetland, landing site) and each have their own specific problems.

During the programme, Join For Water and the partners jointly developed a methodology for drafting a micro-catchment plan, based among other things on field experiences (see Annex 16). The micro catchment planning process was drawn from the principles and concepts described in the National Guidelines for Catchment Management and Planning 2014. The difference however was the focus on stakeholder engagement, bottom up planning, a rights based approach to ensure gender and social inclusion and capacity building. Via several workshops and participatory mapping sessions, micro-catchment plans were developed, mapped and digitised for all of the 10 hotspots. All of the hotspots are now mapped and the partner staff is skilled to keep them up to date.

The group discussion in the landing site of Nyakeera showed that this methodology leads to interventions that meet the needs of different groups within these hotspots. People in other meetings also testified that they now have a better understanding of the issues and what they can do about them.

Strong points:

- methodology developed and applied that allows for action plans to be drawn up following a bottom-up approach and taking into account the needs of the different water users.

- methodology documented and used by partners
- use of digital tools, allowing visualisation and monitoring of the implementation of these plans

Points for improvement:

- The methodology was developed during the programme. As a result, planning in the first sites did not fully follow this methodology.

IR3.2 Degree in which women are involved during the set-up of micro catchment plan

Target value at the end of the programme	Achieved
The approved and documented method assures	44% of women participation and representation
at least 30 % of the represented stakeholders	both in committees and during micro
are women.	catchment management processes (10 micro
	catchments)

The number of women represented in the committee was aimed to be at least 1/3 to also take their rights and interests into account. The specific positions are occupied by women are vice chairperson, treasurer and secretary.

Other than that, also during other sessions a threshold of 1/3 was set as a minimum for women participation. (activity reports partners) Areas of women participation included; tree planting, participation in bee keeping enterprises, demarcation of boundaries and compliance to marked off areas, and engaging in environmentally friendly land use (good agronomic) practices especially in farming.

During the discussions in different communities it was mentioned that women empowerment to take up leadership roles significantly inspired their decision making at household, community, and other places.

Strong points

- Percentage of women participation in committees and other activities
- Effect on the position of women in decision taking in general

Result 4: the experiences and lessons learned/ best practices are documented and used for advocacy at national level

IR4.1 Degree in which Protos is giving a dynamic to the working group on IWRM, CC and environment

Target value at the end of the programme	Achieved
The working group meets 3 times/year, makes the annual policy brief for JSR and the thematic team; publication of 3 cases in Sector performance report	On average 3 meetings per year, policy brief for JSR and thematic theme postponed to early 2022 (Covid – Kampala attacks).

The working group is the UWASNET thematic group on IWRM and Climate Change for which workshops are organised. As the IWRM working group team lead, Join For Water has quite some influence on decision making and puts some topics on the agenda ourselves like for example the use of (micro) catchments plans. Amongst others, Join For Water strengthened the mandate of the catchment management committee. Moreover, we Join For Water convinced the parliamentary committee of natural resources to join on our meetings and share our recommendations whereafter they decided to visit our interventions. As a result, illegal sandmining activities were addressed and now controlled by the subcounties (although some illegal activities are still going on and still need solution).

Furthermore, Join For Water inspired the UWASNET members and the management to use our way of monitoring. Before everything was done on paper but with the aid of our Junior Expert in Monitoring, Evaluation & digitalisation, KoboToolbox was used for the yearly data collection amongst the members. This resulted in less errors and a more efficient follow up (e.g. mistakes in filling surveys on paper, difficulties in transferring the data, data not readable etc so less need to correct).

Until 2020, meetings took place 3 times per year with some additional workshops on the side as well as thematic meetings. In 2020 there was only one yearly meeting and several online events. In 2021, the first annual general meeting took place publicly (22/2) and afterwards (preparatory) meetings were conducted again online. The Annual WASH CSO Forum took place semi virtual (4/8).

Strong points

- taking the lead as within an umbrella organisation to promote IWRM and a participatory bottom up planning approach

- direct contact and visible results on advocacy (such strengthening the mandate of the catchment management committee., addressing illegal activities)

- structural improvement of data collection

Points for improvement

- limited action and progress during Covid period
- past dynamic has to be restarted again

IR4.2 The number of documented and visual products of the innovations that can be spread to inspire other actors and for influencing policy

Target value at the end of the programme	Achieved
5 cases of IWRM on a hotspot are clearly	12 products on innovations
documented in a format that can be spread	

The programme developed 12 products on various themes, based on field experiences. A description of these documents can be found in annex 13. These documents are not specifically about cases in hotspots but are often rather thematic (for example Ecosan technology). During the evaluation mission in Uganda the capitalisation 'exploring digital water tapping' was presented to the partners and other Join For Water staff in other countries and the process of capitalisation was analysed (see annex 10). This analysis resulted in a number of points, which also apply to the other products:

Strong points

- Documenting the experience is an enriching experience for those who participate in it because it requires an analysis of their own work.

- There is a clear interest in (most of) these products, given the reactions to them or their application by other actors (VSF took over Ecosan technology and micro catchment planning). Combining these documents with practical training increases replication by other actors.

Points for improvement

- a number of documents are made for one-time use but are little valorised afterwards. Most of them can be distributed further, but sometimes need a little adaptation.

- the documents are little known by the other Join For Water countries, although they are interesting in terms of content.

- the documents are often developed because certain opportunities arise. It is logical that opportunities are taken advantage of, but if themes, target groups, etc. were determined at the start of the programme, dissemination and valorisation would be enhanced.

Specific objective: improved models of the integrated water resources management (IWRM) have been implemented in two catchment areas and the best practices are valorised at national level

IO1. Progress rate of sustainable access to drinking water due to new innovative water systems in rural areas and a better management.

Target value at the end of the programme	Achieved	
77 % have access to drinking water and 90% of new	77% have access to drinking water and 87% of new	
water infrastructure is sustainably managed	water infrastructure is sustainably managed	

The 77% score is based on the numbers of the baseline survey and on the numbers of additional people having access to drinking water (see result 1). According to the 'Annual district water dev`t and sanitation conditional grants reports 2015/16' and the 'Water and environment sector performance report 2015 – MWE', 686.269 people had access to drinking water in 2016 (75%) in the intervention region. Through the project, 16.098 people have access to drinking water, or an increase of 2%.

The 87% score is based on the results of a survey in the end on year 2021 and subjected to - the criterions reliability of the water service, availability drinking water, sufficiency of the water service, and within 30-60 minutes reach'. Only the facilities with >= 85% score were qualified 'meeting the satisfaction test'.

- and on the certification and functionality of the management structures.

IO.2 Number of hotspots with IWRM issues (wetlands, forests, river banks, fishing sites) that have benefited restoration activities according to the Catchment Management Plans (CMP).

Target value at the end of the programme	Achieved
--	----------

6 hotspots in Mpanga	8 Hot spots in Mpanga catchment and 2 Hot spots	
2 in Upper Lake Albert	in Upper lake Albert.	

For the landing site of Nyakeera and Kyendangara, they are now officially recognised as landing which was not the case before. Moreover, they are declared open defecation free due to our program which is an official government certificate in Uganda. Significant beautification and livelihood was seen in the landing sites due to intervention such as tree planting, waste bins, fish cleaning and selling infrastructure, cattle throughs,...



Nyakeera landing site before and after

Wetlands are clearly demarcated with live markers and show to recover quickly from the degradation by rewilding and natural growth.



Karambiro wetland before and after demarcation with tree live markers

The protected riverbanks show clearly haltered degradation and erosion due to the river bank protection. Nevertheless, illegal mining activities still proceed upstream river Mpanga. In other hotspots such as Mpanga falls, it is confirmed both by villagers and photos that the ecosystem recovered and degradation diminished.



Mpanga river Fort Portal before and after IO 3: Number of hotspots in Uganda where other actors implement IWRM activities inspired by the bottom up approach of Join For Water

 Target value at the end of the programme
 Achieved

 + 6 hotspots where activities on IWRM issues are +6 hot spot areas
 +6 hot spot areas

 implemented by other actors
 +6 hot spot areas

We inspired one of our new partners for this program, NRDI, to use the same approach. Consequently, in other projects funded by the African Development Bank, the same method was used in the Semliki catchment. As a matter of fact, Join For Water appreciating their work, decided to continue the work in this catchment for the new program.

Moreover, this approach was also shared with some other Belgian NGO's. Both VSF and IdP used this method in their interventions respectively in Kaabong and Kabarole

6. The programme induced changes

In this chapter, we address the specific questions raised during the training. Three of these questions are dealt with in other chapters and will not be discussed here. It concerns:

- How can water users committees be sustained? (see chapter 7.5 Sustainability)

- Assess the results on IWRM in regard to gender - practical needs and strategic interests? (see chapter 7.6 Gender).

- To what extent has the government been involved in the programme? (see chapter 7.7. Participation)

6.1. Water

Did we help people to gain access to water?

- To which extent do people think that the access to drinking water has improved? (accessibility, availability, quality and management)

- How did the program contribute to the access (accessibility, availability, quality and management) and what can improved in future in actions?

According to community representatives in the discussion groups, access to drinking water has improved compared to the past:

- quality: water used to be taken from surface water (e.g. Lake George), from unprotected wells or with a private person where there was no quality control. Kitagwenda district also testifies that there are no cases of river blindness in recent years.

- availability: water users greatly appreciate that water kiosks are open daily at known hours. The ATM is open 24 hours a day.

- accessibility: the distance to the water point has not always changed (the place where people used to fetch water is the same distance as the new water point), but in the case where people used to pay for water, the price is now reduced.

- management: the 'pay as you fetch' model increases trust in management. There have been some technical problems in Nyakeera during start-up but they were quickly resolved. The water users at the ATM do complain that when there is maintenance on the system, they are not informed, and money goes out of their token without them getting water.

A number of changes as a result of the project still remain unclear: is more water used now, who pays, who has the biggest advantages now. A study has been started with the university UGent to look into these questions.

How/To what extent the community beneficiaries are aware of pay as you fetch model?

- How do people appreciate the 'pay as you fetch model'? (service level versus water cost?) - What is the effect of this model on their drinking water consumption?

According to the water boards of Kanara, Mahyoro and Nyabbani, one of their main obstacles in water management is the payment of drinking water service by water users. The water points under their mandate are individual water points such as pumps that do not have a water meter. The water users theoretically pay a monthly lump sum, but often they do not pay or pay irregularly. The Ugandan government therefore promotes the pay as you fetch model, where water users pay directly for the water they tap.

In the focus group in Nyakeera, where this model has been realised through a water kiosk and an ATM on the water line, the users said they are in favour of this system because it benefits the sustainability of the drinking water supply. The main advantage they see is that with the ATM they have 24h/7 access to drinking water and this at an affordable price (100 Ush/20 I)). The water users also have great confidence in this system, because the tokens cannot be used for fraudulent purposes. Despite this enthusiasm, there is still confusion among water users about the price. A number of them think that the contents of a jerry can cost 100 Ush, but in reality it is 20 litres. So, if you come with a larger jerry can, you cannot fill it to the full for 100 Ush.

It is not clear from the interviews whether this fetch-as-you-pay model has an impact on water consumption. Since the consumption at the ATM is monitored and available through a digital dashboard, the consumption can be determined, but since there are no figures on the consumption before the installation of the ATM, no comparison can be made. The ATM performance report 2021-202 shows a strong fluctuation between the different months and no clear trend with regard to the consumption can be identified on the basis of this data.

6.2. Governance

Is community based practice better for water resource management?

- how do communities participate in local water resource management?

- To which extent does this community participation have a positive effect on water resource management? And for whom?

Community members have participated in the management of water resources via the River Mpanga Conservation Committee through the following ways:

- At village level members of the community have formed several groups for conserving water resources.

- Training and sensitization of other community members to conserve the buffer zone

- Tree planting to conserve the environment and help in addressing underlying restoration challenges.

- Promoting and practicing good agronomic practices

Through the River Mpanga conservation committee community members get a chance to participate in enforcement, sensitization meetings which are headed by the GISO at the subcounty and the DNRO at the district. In these sessions committed members help in reporting serious natural resource abusers and be dealt with according by the relevant authorities. The community's testimony through participating in water resource management, they started advocating for the rights of these natural resources and increased protection of small water sources which feed the bigger ones.

6.3. Capitalisation and advocacy

How did we integrate advocacy in Natural Resource Management?

- What did the programme do on advocacy to improve IWRM? And how?
- What was the effect of this advocacy for whom and at which level (= changes thanks to advocacy)?

Advocacy was done at two levels: national and local.

National:

The program built on the advocacy that was done in the previous programme, when Join For Water advocated for an IWRM approach at the Ministry of Water and Environment as well within UWASNET. Presenting cases of IWRM models, pilot projects and the results made the ministry become interested in this approach and Join For Water became team lead of the IWRM working group within UWASNET. As a result, the MWE uses IWRM as a methodology within the different catchments and other NGO in the water sector were inspired to adopt IWRM.

In this programme Join for Water in collaboration with the Directorate of Water Resources Management (DWRM) of the Ministry of Water and Environment (MWE) through a Memorandum of Understanding worked together through Albert Water Management Zone (AWMZ) and continues in Mpanga Catchment on different project activities, under Integrated Water Resources Management Framework to increase the resilience of the local communities. Moreover, the partners and Join For Water convinced the parliamentary committee of natural resources to join on our meetings and share our recommendations whereafter they decided to visit our interventions. As a result, the local authorities address the problem of illegal sandmining activities.

Through the collaboration between the directorate there has been gazetting of unserved villages (Kanara villages for water extension) and legal recognition of illegal landing sites (Nyakeera landing site). Join For Water has since funded the activities of the zone in raising awareness for protection of riverbanks and ecosystem protection within the catchments. There have been annual joint restoration campaigns organised by MWE during the world water week an activity that has attracted many more National and international NGOs, private sector, and other institutions of learning to conserve and protect the water resources within Mpanga catchment.

Local:

The programme has strengthened communities in advocacy, mainly through showing their rights through sensitization meetings. Members of the community declare

- that the community members know and fully understand their rights as regard to the management of water resources.

- that they have linked to high level like MWE, DNRO, CAO, DCDO, DWO, DHO etc and this has increased their chances of interaction with the mentioned offices on various issues like environmental conservation, restoration, agriculture, policies and laws governing various water resources.

Examples of advocacy are:

- the communities advocated with the local authorities to summon the water resource abusers

- the communities advocated with the local authorities for increased environmental protection through planting of more trees, condemn the continuous extinction of critically tree species like the cycads and also encourage livelihood activities that contribute to environmental conservation and restoration of the ecosystem e.g. beekeeping, ecotourism.

The communities confirm that the programme increased the community's capacity in lobbying with local authorities for income generating activities like beekeeping, fruit growing, lobby for clean and safe water for drinking, good health, education, sanitation.

7. Analysis according to criteria of relevance, efficiency, effectiveness, impact and sustainability + gender and participation

7.1. Relevance

As long as people don't have sustainable access to water and sanitation, these projects remain useful to attain SDG 6 by 2030. According to the Joint Monitoring Program 2020, still 21 million people in Uganda are living without basic access to safe drinking water and 30 million doesn't have access to a sanitary toilet. In Kabarole district 58% of the population has access to improved water services and 14% to a conventional or ventilated improved pit latrine (2018)⁶. In Kamwenge 61% of the population has access to drinking water and 28% to latrines with faecal sludge safely managed (2019)⁷.

Moreover, the depletion of natural resources demands for an integrated approach which we attain via IWRM. Wetland coverage in Uganda has declined from 15.6% in 1994 to 8.9% in 2020⁸ and a study investigating local perceptions on wetland degradation found that 60% of the local people perceived wetlands in their proximity to have undergone high degradation within the last 10 years, and to have declined in quantity and quality of vegetation, soil fertility and water levels⁹.

The relevance of the programme was demonstrated in the technical and financial file. In the course of the programme, a number of changes in the context have taken place that underpin the relevance:

Changes in the context and how the programme responded to them

The *Covid situation* underlines the need for clean water and hygiene. Good practices such as hand washing but also the need for hand washing infrastructure, soap etc. are necessary to prevent the spread of the Covid virus.

The Covid situation has worsened the economic situation of Ugandans. As a result, for many families it is not easy to finance the construction of a latrine by themselves, especially when, due to geological conditions, only an Ecosan latrine is the only quality solution as the groundwater level is too high. So

⁶ Kaborale district Master Plan for Universal Access to Wash Services - 2018

⁷ Kamwenge district Wash Masterplan 2020-2030

⁸ Ministry of water and environment (Uganda). Water and Environment: Sector Performance Report 2019-2020.; 2020. doi:10.1080/02508068008685878

⁹ Turyahabwe N, Tumusiime DM, Kakuru W, Barasa B. Wetland Use/Cover Changes and Local Perceptions in Uganda. Sustain Agric Res. 2013;2(4):95. doi:10.5539/sar.v2n4p95

it remains necessary to subsidise household sanitation. (*Nyakeera: people says that Ecosan toilet is still expensive*)

The population in the intervention region confirms that *rainfall patterns* have changed significantly in recent years. The rains are less predictable, are often heavier and result in more erosion and flooding. Longer periods of drought are also more frequent. Measures that store water, allow it to infiltrate, and that prevent erosion are necessary, as is a more water-efficient agriculture (e.g. drip irrigation, mulching, etc.). (*meetings with people from the different villages*)

The programme works very closely with local authorities because they have important responsibilities in water management. Uganda has experienced administrative reforms during the course of the programme, with certain districts being split up. For example, the new Kitagwenda district was created from the division of Kamwenge district. Since this was a young district with little experience, it was necessary to provide it with adequate support (*confirmed by the district of Kitagwenda*)

Fort Portal became a city instead of a municipality and announced to become a green city. The planting of trees in Fort Portal, which already started before these changes, is further in line with this political decision. This also opened up the possibility of working on waste management and engaging in dialogue with the local authorities in Fort Portal.

The national policy states that if you cut down one tree, you must plant three. This resulted in a higher demand for trees, which were also supplied by the programme. (*confirmed by MWE-AWMZ and sub-counties*)

The Ugandan government's new water policy stipulates that only drinking water pipes can be laid and that no drilling or wells can be made. Within the programme, the decision had already been taken not to invest in drillings anymore, but only in (extensions of) drinking water pipes. A drinking trough for the cattle was connected to the boreholes that had already been made. (*meeting in Nyakeera*)

The programme had also foreseen a water system in ULA, but during the course of the programme it was decided to shift this budget. This decision was taken to avoid overlap with other programs/actors:

- the planned construction of the drinking water pipeline within the programme is now done by the Mid-Western Umbrella

- the World Bank also works in the same zone within the fishing communities, with similar activities.

- the funds provided for these actions were reallocated.

The policy on sanitation in schools now stipulates that in addition to latrines and handwashing facilities, an incinerator must be provided. The program adapted accordingly which also increased the price (*source: field visit to school in Kazingo*).

There was an increased demand/interest for household and school sanitation. This made it more relevant to work also in other sub-counties than originally planned (from 2 sub-counties to 5 sub-counties) (demand for household and school sanitation confirmed in village meetings, with sub-counties and districts)

Confirmed relevance

During the meetings with the different actors (communities, local leaders) the relevance of the actions was confirmed; Examples are

- the positive appreciation of the people in Nyakeera about the beautification of the landing side, the drinking water provision, the Flower Toilets which according to them respond to a real need in this village. There is still a demand for Flower Latrines.

- in the meetings in Karangura and Kitagwenda, the local authorities mentioned the degradation of the river banks of Mpanga and welcomed the interventions on the protection. They actively collaborated in this protection and installed mechanisms of follow-up and regulation.

- the waterboards witnessed that there is now a change in mentality. According to them, people accept the pay as you fetch model (although there is still a problem of paying at the water points) and more people clean their utensils before taking water.

- The MWE-AWMZ confirmed that this and previous programmes were of great importance in putting the IWRM policy into practice in Uganda, using this programme as a good example.

The relevance of the interventions is also demonstrated by the initiatives taken autonomously by the local actors, inspired by the programme such as the landing site (Nyakeera) that became an officially declared legal landing site after the interventions of the programme;

Although the relevance of the protection of the banks of the Mpanga River and the wetlands is confirmed by several actors (e.g. sub-county of Karangura, district of Kitagwenda), the conflicts that arise from this protection show that it is not a top priority for everyone. One of the reasons for this is that the programme does not always offer suitable alternatives.

Conclusion

Strong points:

- the programme took into account the changes in the context and adapted accordingly

- the relevance of the interventions is confirmed by several stakeholders.

Points for improvement:

- Protection of water resources is not for everybody a priority, leading to conflicts

7.2. Efficiency

Consumption of the budget

The expenditure table is based on the format agreed between DGD and the sector. It is limited to a number of key headings. There is also no budgetary follow-up by result. This choice is the logical consequence of the desire of the whole sector to increase administrative simplification by limiting the number of levels of financial monitoring. This also limits the analyses that can be made on the basis of this table. The figures are partial and provisional at the time of the evaluation report: not all data are already integrated and corrections are possible after the control and consolidation process.

The total of the overall operational expenditures for the program was 1.720.122 EUR (at the time of the evaluation) or an expenditure rate of 76%. These operational expenditures cover not only the activities and means of the partners, but also the support of Join For Water to the programme (capacity building, action research, support to monitoring by the partners.) (see annex 17: expenditures and budget at the time of report)

To make a better analysis we present the estimate made in September 2021. The expenditure would eventually amount to €1,963,993 or 86% at the end of the programme

Item	Budget	Estimate
Investment	792.539	740.672
Functioning costs	537.571	348.279

Item	Budget	Estimate
Staff costs	947.535	875.040
Total operational cost	2.277.591	1.963.993

Explanation of the spending:

Investment

- Boreholes are cheaper than piped water, which means that more money was spent for drinking water provision than foreseen.

- The costs for HH Ecosan and School Ecosans are much higher than budgeted.

- There was a general increase in material price compared to 2016 and the Covid crisis only strengthened this trend.

- The envisaged price unit did not guarantee a quality construction which the new model does. In addition, there was modification of the household flower ecological sanitation toilet to meet the new demands regarding the policy on latrine construction that were not originally planned.

- We had planned that community beneficiaries contribute 50% of the total cost, this idea was not ideal due to the low-income levels of the households in most of the catchment areas. The Covid crisis only worsened the economic situation of most people.

Infrastructure	Envisaged unit price	Real unit price
HH Ecosan	250.0€	735€
School Ecosan	9.000€	17.463€

On the other hand, some investments were not made: extension of the ramp pump, construction of an irrigation system. This infrastructure will be built in other projects. This leads to an underexpenditure on this budget item.

Functioning costs

- Exchanges, advocacy exercises and some training were foreseen the last two years but difficult to organize during Covid times.

- There was a budget foreseen for a digital monitoring system, but this was not needed because Kobo Toolbox is for free.

Staff costs

- The expenditures for local staff for the partners are mostly according to the budget. Only for JESE we underspent. Thanks to additional projects of JESE, the cost of field staff could be split.

Organisation	Budget	Spent
JESE	278.858€	236.156€
NRDI	44.047 €	45.345€
HEWASA	68.012€	69.275€
Total	390.917 €	350.776€

- For NRDI there was an extra technician was hired to guarantee better quality of construction which was also the case.

- There is also an underspending for Join For Water staff, although all the staff that was planned has been recruited. The main reason is that this budget is based on a unit price for an expat, but depending on the expat's experience, among other things, the actual amount may be lower.

<u>Conclusion:</u> Strong points: - adaptation of drinking water provision according to national policy within the budget with limited effect on the number of beneficiaries (16.098 versus 17.200 planned). The level of service of a piped water system is higher than of borehole.

- strive for quality within available budget (Ecosan latrines)

- look for solutions at a lower cost (Kobo)

- sharing of offices in Kampala and Fort Portal with other NGO's (Trias and IdP) to lower functioning costs

Points for improvement / challenges

- Possible price increases were not taken into account when drawing up the budget.

- The financial possibilities of beneficiaries (household latrines) were overestimated.

- Due to Covid the programme has not been able to provide all planned training. These trainings are not ad hoc activities but part of a broader approach. This means that the efficiency of the entire social support is lower than if these activities could have taken place.

Household installationSanitation250262105%Schools infrastructurewith sanitation67117%Landing sites with public2150%Resid lan decid build latrinesLanding sites with real water harvesting2150%Resid lan decid build latrine mar orSchools with rain water harvesting67117%Cattle throughs02Extension hydraulic ram pump (Ntaara)100%This is anothe anotheMini-irrigation100%This is anotheSchools (Ntaara)10167%-Trees planted Acres restored158,746228,706144%-Area demarcated11 km²11 km²100%1	anation
Extra mini grids (or extensions)05 for 15450 peoplewater accord nation and loManually drilled boreholesFor 13200 people00 % nation and loHousehold installationsanitation250262105%Schools with sanitation infrastructure671117%Landing sites with public latrines2150%Resid lan decid build latrinesSchools with rain water harvesting67117%mar reside peopleCattle throughs02-1Kharaa)100%This is anotheMini-irrigation100%This is anotheSchools with IWRM measures610167%Trees planted158,746228,706144%4Acres restored180225125%4	
Manually drilled boreholesFor 13200 people0 00 % nation and loHousehold installationsanitation 250262105%Schools infrastructure67117%Landing sites with public2150%Resid lan decid build latrinesSchools with rain water harvesting67117%Cattle throughs02Extension hydraulic ram pump Infrastructure100%This is anothe anotheSchools with ruin water harvesting100%This is anotheCattle throughs02Extension hydraulic ram pump Infrastructure100%This is anotheSchools with IWRM Infrastructure55100%This is anotheTrees planted158,746228,706144%4Acres restored180225125%4	to piped
Manually drilled boreholesFor 13200 people0 % nation and loHousehold installationsanitation250262105%Schools infrastructure67117%Landing sites with public latrines2150%Resid lan decir build latrinesSchools with rain water harvesting Cattle throughs67117%Cattle throughs02Extension hydraulic ram pump (Ntaara)100%This is anothe anotheMini-irrigation100%This is anotheSchools water harvesting610167%-Trees planted158,746228,706144%-Acres restored11 km²11 km²100%-	er systems,
Initial of the bold of the	U
Household installationSanitation250262105%Schools infrastructurewith sanitation67117%Landing sites with public2150%Resid lan decid build latrinesLanding sites with real water harvesting Cattle throughs2150%Resid lan decid build latrine mar orSchools with rain water harvesting Cattle throughs02Extension hydraulic ram pump (Ntaara)100%This is anothe anotheSchools with Imini-irrigation100%This is anotheSchools with Imini-irrigation100%This is anotheSchools with IWRM infrastructure55100%1Trees planted Acres restored158,746228,706144%4Acres restored Area demarcated11 km²11 km²100%1	' '
installationImage: second	local plans
Schools with sanitation infrastructure67117%Landing sites with public latrines2150%Resid lan decid build latrineSchools water harvesting67117%117%Cattle throughs02-1Cattle throughs02-1Kinara)100%This is anotheSchools with rain water harvesting100%This is anotheCattle throughs02-1Extension hydraulic ram pump infrastructure100%This is anotheSchools with IWRM infrastructure10167%1Hotspots with IWRM measures610167%1Trees planted Acres restored180225125%4Area demarcated11 km²11 km²100%1	
infrastructureImage: Construction of the second	
latrinesIanlatrinesIanlatrinesIanlatrinesIanlatrinesIanbuildIatrinemarprSchoolswith rainwater harvesting0Cattle throughs0Cattle throughs0Image: Cattle throughs0Image: Cattle throughs0Cattle throughs0Image: Cattle throughs0Cattle throughs0Image: Cattle throughs1Image: Cat	
Image: second	idents of the
Schoolswith rain 067117% 117%Schoolswith rain water harvesting67117%Cattle throughs02Extension hydraulic ram pump (Ntaara)100%This is anothedMini-irrigation100%This is anothedSchoolswithIWRM offrastructure55100%Hotspots with IWRM measures610167%1Trees planted158,746228,706144%4Acres restored180225125%4Area demarcated11 km²11 km²100%1	anding site
Image: Schools with rain water harvesting67117%Cattle throughs02-Cattle throughs02-Extension hydraulic ram pump100%(Ntaara)100%This is another	cided not to
Schoolswith rain water harvesting67117% nmar prCattle throughs02-Extension hydraulic ram pump (Ntaara)100%This is another anotherMini-irrigation100%This is anotherSchoolswithIWRM55100%SchoolswithIWRM55100%Infrastructure610167%1Trees planted158,746228,706144%4Acres restored180225125%4Area demarcated11 km²11 km²100%1	ld the public
Image: second	ne because of
Schoolswith rain water harvesting67117%Cattle throughs02-Extension hydraulic ram pump100%This is anothed(Ntaara)100%This is anothedMini-irrigation100%This is anothedSchoolswithIWRM55100%SchoolswithIWRM55100%Infrastructure610167%100%Trees planted158,746228,706144%4Acres restored180225125%4Area demarcated11 km²11 km²100%1	anagement
water harvestingImage: constraint of the second	problems
Cattle throughs02-Image: Cattle throughsExtension hydraulic ram pump (Ntaara)100%This is anothedMini-irrigation100%This is anothedSchoolswithIWRM55100%SchoolswithIWRM55100%Infrastructure610167%Image: Catter of the second sec	
Extension hydraulic ram pump100%This is anothedMini-irrigation100%This is anothedSchoolswithIWRM55100%SchoolswithIWRM55100%Infrastructure610167%167%Hotspots with IWRM measures610167%167%Trees planted158,746228,706144%148%Acres restored180225125%100%	
(Ntaara)Image: Constraint of the second	is shifted to
Mini-irrigation100%This is anothedSchoolswithIWRM55100%10infrastructure610167%10Hotspots with IWRM measures610167%10Trees planted158,746228,706144%Acres restored180225125%1Area demarcated11 km²11 km²100%1	her project
SchoolswithIWRM55100%infrastructure510167%10Hotspots with IWRM measures610167%10WRMTrees planted158,746228,706144%Acres restored180225125%10Area demarcated11 km²11 km²100%10	is shifted to
Schools with IWRM55100%infrastructure510167%Hotspots with IWRM measures610167%IWRMTrees planted158,746228,706144%Acres restored180225125%Area demarcated11 km²11 km²100%	her project
Hotspots with IWRM measures 6 10 167% IWRM Trees planted 158,746 228,706 144% Acres restored 180 225 125% Area demarcated 11 km² 11 km² 100%	
IWRM Trees planted 158,746 228,706 144% Acres restored 180 225 125% Area demarcated 11 km² 11 km² 100%	
Trees planted 158,746 228,706 144% Acres restored 180 225 125% Area demarcated 11 km² 11 km² 100%	
Acres restored 180 225 125% Area demarcated 11 km² 11 km² 100%	
Area demarcated 11 km ² 11 km ² 100%	
IWRM events supported 4 4 100%	
Governance	

Degree of implementation

Waterboards installed	4	4	100%	
-----------------------	---	---	------	--

<u>Conclusion</u>

Strong points

- Most of the planned foreseen outputs were realised on the different themes (access to drinking water and sanitation, IWRM, governance)

- Furthermore, the programme was able to realize more than foreseen (e.g. cattle throughs, school latrines with incinerators).

Points for improvement/ challenges

- A number of outputs were not realised (extension ram pump, mini-irrigation scheme), although the budget was available.

- Most outputs have been realised in Mpanga basin and fewer in ULA. The development of the programme in ULA was less straightforward than originally thought and JESE, which was responsible for the section in ULA, was unable to implement the programme with the same intensity as in Mpanga for logistical reasons (such as distance) and human resources management (a big staff personnel turnover going on at JESE).

Respect of the activity planning

Strong points:

In general the planning was respected. Because of the Covid-19, there was a delay in construction. This was mainly due to governmental measures limiting works and displacements. Moreover, there was a delay construction materials due to global supply chain (cement,...). Nevertheless, and despite all these difficulties, the infrastructure works never remained at a standstill for long and the planned infrastructure indicators were largely achieved.

Points for improvement/ challenges:

The extension of the ram pump and the mini-irrigation scheme were not built because in the last year a lot of activities had to be caught up so that there was little capacity for implementation of this infrastructure.

In addition, the Covid situation of the last two years has also made it difficult to train, network and support local actors (including international exchanges). However, the Covid situation had a greater impact on the achievement of social indicators (gender, management, capacity development) given the difficulty of meeting the actors involved. The accumulated backlog will not be made up before the end of the program and the planned budget will not be exhausted.

7.3. Effectiveness

Result 1: The communities in 2 water catchments have improved access to water and sanitation by availability of improved and innovative operational public facilities

Level of achievement/ strong points

- In all communities there has been an *improvement in access to drinking water and sanitation* through the construction of new water systems (mini-grids) and Ecosan units.

- The quality of this infrastructure is good on completion and the infrastructure is operational.

- The *innovation* of the public facilities lies in the introduction of technology that was not previously available locally (mini-grids, ram pump, Ecosan) but was already available elsewhere. The evaluation found that this infrastructure, despite being innovative locally, is highly appreciated and used by the local population.

- There is a significant *improvement* in quality of construction for both household and institutional Ecosan toilets.

- The *innovative* pilot project using water ATMs shows promising results as both accessibility and transparency seem to increase.

Points for improvement:

- The field visits did not reveal that certain groups in the communities were excluded from access to drinking water. However, due to the price of Ecosan technology, not everyone can afford to buy a Flower Toilet and *general access to sanitation* in the villages cannot be guaranteed.

- The infrastructure was *operational* on delivery but not all the financial and management conditions were always met for it to be permanently operational in the future.

We can conclude that this result has been achieved to a large extent in the short term. The effects, especially for sanitation, are not the same for everyone in the communities.

Result 2: Local governance of water resources is improved thanks to better planning methods of and better cooperation between the relevant actors and thanks to their enforced capacities

Level of achievement/ strong points:

- From the discussions in the communities, with the sub-counties and with the districts, it appears that these actors *cooperate* closely together in identification, formulation and implementation. The programme followed a bottom-up approach in which the *plans* of the local community, via the sub-counties, were eventually included in the annual plans of the districts.(e.g. The micro catchment plan for Kyendangara was included in the plan of Mahyoro town council). A number of cases indicate that communities approach the local authorities (e.g. about environmental violations, recognition of their village as an ODF or as a legal landing site), whereby the initiative comes from the villages. -Both sub-counties and local governments acknowledge that the programme has strengthened their *capacities* around IWRM, thanks to the application of two complementary approaches: hands-on, where the local actors on the ground were supported by the programme (e.g. planning in the districts through the annual planning and follow-up in the quarterly meetings between NGOs and local governments), and by formal training (e.g. on forest management).

- The *local management of water resources* has improved as a result of this programme and they different actors take up their responsibilities better. An example is Karangura where the subcounty started negotiating with people who develop illegal activities in the no-go zone,. All districts and subcounties have issued by-laws concerning the protection and use of water resources

Points for improvement:

- The programme had not made a baseline of the actors' *capacities*, nor was there a formal follow-up of the capacity building. Rather, capacity building followed a general scheme for all actors and was not very specific to each actor. Some actors, like the waterboards, still claim further capacity building.

- The districts indicate that they take care of the monitoring and follow-up in the villages and schools, but the restitution shows that this is still insufficient. This monitoring and follow-up is discussed during the quarterly meetings.

We can conclude that this result has been achieved to a large extent, although there is still a need for further capacity building.

Result 3: the planning and implementation of the land use activities by the households in the hotspots is sustainably improved and guided by community based IWRM plans at micro catchment level

Level of achievement/ strong points:

- In the programme, several activities were defined and carried out in 10 *hotspots* using a *participatory planning and implementation approach* (see Annex 11: summary description of the results achieved in this programme). These activities are very diverse but all relate to the use of water and soil (e.g. tree planting, demarcation of no-go zones, agroforestry...). Some have an indirect effect on the *water and soil protection* (e.g. wood stoves).

- Both the communities and the local authorities confirm that they strongly participated in the drawing up of the local micro catchment plans, for which the programme has developed a methodology (see Annex 14).

The discussion groups showed that community members were strengthened in their awareness and knowledge of the water and soil related problems and that the interventions were determined in consultation with the local actors.

- There is a great interest in the activities in these hotspots by both the population and the local authorities. Both also testify that **the effects of these interventions are already noticeable** (less erosion, restoration of the environment, increase of the flow in Mpanga (increase of the production of the hydropower plant)) and local initiatives have been taken to protect these hotspots (e.g. establishment of the Mpanga conservation committee to raise awareness and monitor, formulate bye-laws and enforcement for the sub counties of Kanara and Ntaara to the protect the Mpanga falls).

Points for improvement :

On the other hand, the programme put its own focus on the interventions and they formed the framework within which the interventions were defined. This is evidenced by the fact that similar activities were carried out in the various sites. This is also shown by the limited number of alternative activities that were proposed to the persons who now have activities in the no-go zone. A number of persons continue to carry out illegal activities in these areas.

We can conclude that this result has been achieved to a large extent, but a larger variety of activities would have led to a greater effectiveness.

Result 4: the experiences and lessons learned/ best practices are documented and used for advocacy at national level

Level of achievement/ strong points

- 12 experiences from the programme were *capitalised and disseminated* (see Annex 11: summary description of the results achieved in this programme). These capitalisations concern themes on which expertise has been built up within the programme (e.g. digital water tapping, Ecosan technology, micro catchment mapping) and which are interesting for other actors in the sector to adopt.

Points for improvement :

However, the use of these capitalisations is often local. Only a limited number of capitalisations address the *national or international level*. Most of the documents rather aim at informing, training other actors than really at advocating certain changes at the national level in terms of policy.

We can conclude that the achievement of this result is only partial, especially when it comes to advocacy at national level.

Specific objective: improved models of the integrated water resources management (IWRM) have been implemented in two catchment areas and the best practices are valorised at national level

Strong points:

The programme did implement a number of *improved models of integrated water resources* management in the intervention area. The improvement consists of two elements:

- the improvement compared to the previous situation, as a result of which people now have access to drinking water and better sanitation, according to the norms on drinking water and sanitation; water resources and soil are better protected;

- The approach of implementing IWRM locally through bottom-up planning. The national policy promotes IWRM but looks for methods to implement it locally. The way Join For Water and partners bring IWRM locally into practice, is highly appreciated by the local actors (communities leaders, community members and local governments) and the higher authorities, in particular the MWE-AWMZ.

Points for improvement:

- The programme focussed mainly on Mpanga catchment and less on Upper Lake Albert. So the models have mainly been implemented in one catchment area.

- the second part of the specific objective consists of *valorising the good practices on a national level*. The idea to work in certain hot spots was guided by the hypothesis that by giving the good example and capitalising our experience, we would inspire other actors and the government to follow this approach. In a way this worked out as our methodology was applied in other hotspots than the one in this programme. Nevertheless, we must remain humble as this was addressed by our current partners, JESE & NRDI, via other funding. Only one other NGO, VSF, took the same approach in to address the situation in another zone. For now, the practices are not valorised at a higher level on the short term.

We can conclude that the specific objective is partially achieved, certainly because less attention was paid to Upper Lake Albert and the valorisation of the good practices at national level.

7.4. Impact

Health impact

According to discussions with communities, there has been a reduction in the number of waterborne diseases. According to Nyakeera's Village Health Teams, there has been a 70% reduction in waterborne diseases. In Mayhoro a decrease in bilharzia and typhoid cases was observed as people have access to clean water instead of using water from the lake. Others mentioned less intoxication of mercury as they got water from rivers where gold mining activities take place.

The people of the landing sites also confirm that the construction of drinking water for both people and livestock has eliminated the need to go into the lake for water, thus also reducing the number of (fatal) casualties among both people and livestock. (population of the landing sites is 1050 people)

In the group discussion with representatives of the people of Kanaara, Ntaara and Nyabbani, it was stated that that the program has also helped in addressing the issue of nutrition through the support of households on establishment of small kitchen gardens. In total 11 kitchen gardens¹⁰ have been constructed for 200 families (1200 people) in the whole intervention area.

¹⁰ a kitchen garden is a small garden in which vegetables for use in the kitchen are cultivated

Economic impact

Within the programme, there was no quantitative monitoring of the economic impact of the interventions. The description of economic impact is therefore based on the testimonies of the various stakeholders.

- reduced expenditure on drinking water: in Nyakeera the price used to be Ugx 2000/20 litres, now it is 100 Ugx/20 litres (*source: ATM/ caretaker*)

- Installing savings systems¹¹: In Kanaara, Ntaara and Nyabbani, all conservation groups have a savings and loan system VLSA. More women continue to join VSLAs because they consider as being so vital in solving their daily financial constraints (source: meeting with community members). - Selling the surplus from the kitchen gardens: the community representatives from Kanaara, Ntaara and Nyabbani indicate that the production of the kitchen gardens is primarily for auto-consumption, but that the surplus is sold. There are 11 demo kitchen gardens established serving 200 households. - increase in livestock production: in the landing sites, cattle throughs enable cattle to avoid lakes, crocodiles and steep descends. According to some, the easier access to water, less stress and less distance made the meat better which increased the demand for meat (Nyakeera). When the programme started in 2017 they were 350 cattle with only 7 members and by 2020 in November during the handover the number had increased to 550 heads of cattle with 12 members. By September 2021 the number had increased 650 heads of cattle with members increased to 17. - increase and diversification of agricultural production (fruits, vegetables) thanks to sensitization and the use of the products of Ecosans (groups discussion in Nyakeera) and tree planting (Kanaara, Ntaara and Nyabbani). In total 262 Ecosan latrines were built, which means that about 262 families have the possibility to use these products. About 240 families benefited from the tree planting, providing wood, sometimes fruit, stabilisation of soil; and 146 from the promotion of beehives and production of honey (for own consumption but also for selling). Per beehive the average annual production is 22kgs and 215 hives have been colonised with bees. 1kg of honey is sold at 18,000ugx (about 4,5 €) or about 396.000 Ush or 100 € per beehive (which is about the double of the average monthly income in this region). The production cost is very low, so the annual income is very close to 100 € per beehive.

- increased income for fishers in the landing sites; Nyakeera management committee confirms that fishing has increased and so has income for fishers. There are 20 boats and about 60 people work on this boats. This increase is due to better equipment (boats, nets). The recognition of Nyakeera as an official landing site regulates the size of the boats. Thanks to the bigger boats, the fishers can go further in the lake and catch more fish. Better landing site management is probably the biggest contribution for the restoration of the fish availability as now less pollution is present, fishing structured and the breeding area conserved.

- additional income generating activities in the landing sites (Nyakeera, Kayinja and Mahyoro) such as increasing fish sales, party venue hire, services to visitors...

The demarcation of the buffer zone along the Mpanga river, could also have a negative impact. The programme did suggest alternative activities (such as bee-keeping) to the people who developed activities within this zone, but due to a holt on sand mining and stone quarrying activities in Karangura along the Mpanga river, there is a reduction in income for the households that live from these activities. Also illegal agriculture is haltered close to the river side and wetlands, which also impacts

¹¹ Village saving and loan association in villages bring together women on specific sitting days to discuss family issues with their fellow women but also an opportunity to solve their financial problems. VSLA s are recognised in the micro finance and bank intuitions operations and each VSLA has to have a constitution and register with bank or microfinance bank for safety deposits

already vulnerable people. For mid-stream Mpanga in Kabambiro wetland there are 100 people affected and of which 60 people have so far been supported with beehives and tree planting. For downstream Mpanga river in Mpanga falls there are 115 people affected however, 4 people are still resistant to comply to the law and are still doing illegal cultivation within the 100m buffer zone. On the same note there are 575 people affected upstream in Karangura sub county.

Ecological impact

The quantification of this impact is out the possibilities of the programme (ecological impact often only noticeable in the long term and complicated to measure adequately).

The distribution of 200 energy saving stoves for cooking, has reduced the need for wood for cooking, having (*source: groups discussions in Nyakeera I*). This has a positive effect on tree cutting and thus on the protection of the natural resources. (Nyakeera , Karubuguma II, Karere, etc).

The regeneration of the natural cover, the construction of anti-erosion measures, the stopping of sand extraction and stone mining , the promotion of good agricultural practices have a positive effect on the quality and quantity of the water resources (surface and groundwater). Proof of this is that there is less maintenance for the hydropower plan due to less erosion and sediment. Both in Kitagwenda as in Karangura, the local authorities say that they see less sediment in Mpanga river.

The recognition of Nyakeera as an official landing site has had the effect that fishermen now use legally accepted nets and fish outside the breeding zones, resulting in less small fish being caught. This is therefore positive for the biodiversity in Lake George. On the other hand, the fishermen now have bigger boats, which allows them to go further out on the lake and bring in a bigger catch (*sources: Nyakeera landing site management committee*). The effect of this on the biodiversity in the lake is not clear.

Social impact

The programme has had a social impact, both on communities, individuals and partner organisations: **On the community level:**

- In several interviews, community members mentioned that they felt empowered by the programme and were able to continue the interventions after the programme.

- Several communities now confirm that they turn more easily to the local authorities (e.g.

concerning environmental problems). This is often done by committees formed in the communities that participate in consultations with the local authorities (for example, the River Mpanga conservation committee community). Karangura community members testify that relations with the authorities (subcounty, district) have improved and that they can contact them in case of problems. - In Nyakeera, it was confirmed that as a result of the interventions, the residents can now be proud of their surroundings and can also receive visitors. The social status of the landing site has improved significantly, especially now that the landing site is also officially recognised.

On an individual level:

- the program has helped in improving the sanitation and hygiene standards of schools where Ecosans have been constructed and this has helped the girl child to study in a well conducive environment without fear of any challenge related to poor hygiene and sanitation. During the time of the evaluation, the schools were closed but the head teacher confirmed an increase of girl attendance since the presence of proper sanitation.

- In terms of leadership, women are considered to have been outstanding in regard to leadership because they are seen to be less corrupt and hence transparent in their services (source: community members from Kanaara, Ntaara and Nyabbani).

- The communities also report that because the drinking water points are closer to the houses, the safety of the girls fetching water has improved, especially in the later hours.

(a more exhaustive analysis of the impact on women can be found in the chapter on gender).

The promotion of Flower toilets doesn't address the poorer people in the communities. It is also not clear what the impact is on those who carry out illegal activities along the river banks, and often belong to the poorer category. There is no real pro-poor strategy within the programme, which risks excluding some people from the benefits.

On partner organisation level:

It is clear that because of the support on the programme and the long term investment both financially as for capacity building that our partner organisations became more established and were able to grow. They were supported organisationally resulting in better accounting, reporting, monitoring & evaluation, budget follow up and project management. Moreover, knowledge about IWRM, natural resources and WASH topics was expanded resulting in organisations that are now a reference within this thematic and are asked for other projects (eg. GIZ financed an organisational diagnostic of NRDI; NRDI was able to tap in to other projects for the ministry and African development bank)

7.5. Sustainability

Financial

Water boards and districts

The water boards are in charge of managing the boreholes and wells in rural areas. In principle, each family pays 2,000 Ush/month for drinking water at a borehole or well, but the waterboards indicate that this is often a problem. A survey at 239 waterpoints carried out by the partners in 2021 showed that only 62% of the water users pays their monthly fee. The average contribution according to this survey was 500 Ush/month and family, which is way below the contribution mentioned by the waterboards. As this was not enough to compensate the expenses (maintenance, caretaker, ...) the contribution was increased first to 1000 Ush and afterwards 2000 Ush.

Those boreholes and wells are managed by a local water committee that itself uses 40% for maintenance (for the caretaker) and transfers 60% to the waterboards. This money is used by the waterboards for the smaller repairs and their functioning (caretaker, transport, stationary). According to testimonies from the waterboards, they manage to secure these smaller repairs. For the larger repairs, they have to turn to the district. Both the waterboards and the districts confirm that they insure these larger repairs, but often the waterboards are not informed of this, which is a weakness in the coordination.

The waterboards were formed through the project around financial management, but there is still a demand for guidance in this area. Each waterboard has saving schemes VLSA and a positive balance. In these VLSA schemes, the water users under the wat user committees, participate. For example Kanara water board:

year	Opening balance (Ush)	Total expenditure (Ush)	Balance (Ush)
2017/2018	240.000	1.085.000	1.050.000
2018/2019	1.050.000	935.000	825.000
2019/2020	825.000	780.000	1.050.000
2020/2021	1.050.000	860.000	630.000

2021/2022 050.000	2021/2022	630.000	-	-
-------------------	-----------	---------	---	---

The money is placed on a bank account. Two water boards succeeded in constructing new water points using their own resources (Kanara 2 water point, Mahyoro 1 water point)¹². On the other hand, 88 waterpoints are not functional and are not rehabilitated. The water boards indicate reasons for this such as bad quality of water, but the explanation is not always very clear.

The districts are responsible for the larger repairs and for the technical supervision, but they have no budgets for investments. They depend on external organisations, such as NGOs, for this.

Gravity flow schemes

The gravity flow schemes are managed by the Mid-Western Umbrella and the project has not operated on financial management with this institution. The financial modalities are imposed by this institution. There is no committee for these drinking water schemes, only a local caretaker who manages the local water point. The water users pay per volume (100 Ush/20 litre). The caretaker is paid per unit. For the Mid-western Umbrella a unit equals 40 jerricans, for the caretaker a unit equals 50 jerrycans. This means that if the caretaker sells 50 jerrycans, the mid-western umbrella will only charge 40. The difference is for the caretaker, who ensures the maintenance of the water point. All repairs are at the expense of the Mid-Western Umbrella.

The programme thus follows the national guidelines, but has no insight into whether this method of management is sustainable or not and therefore cannot make any necessary adjustments.

Landing sites

A lot of money goes into the landing sides through fishing. The management committee of Nyakeera collects 200.000 Ush from the fishermen every day (about 50 Euro). (20 boats at 10.000 Ush per day and per boat). The amount the fishermen pay was negotiated and recently increased from 5.000 Ush/day to 10.000 Ush/day because the catches increased. 30% of this money is used for maintenance and repairs. District receives 2.000.000 per year (this money is paid once a year) and the fishermen gets 1.000.000 per year as well. The rest goes to the landing site committee. Since all the infrastructure is quite recent, no repairs have been done so far. Only minor maintenance works such as cutting the grass have been paid for. The committee of Nyakeera does not have a bank account and keeps a cash book. Given the relatively large sums collected, a more transparent financial management, whereby the money is placed in a bank account, is appropriate. This would also be safer than keeping the money at home. The management committee declares that it will take the necessary steps to achieve this.

On the other hand, the field visit in Kayinja landing site, where the previous programme worked, showed that the maintenance of the infrastructure is very limited and small repairs are not always carried out, although the committee on that landing site certainly has the means.

Ecosans

The programme has made a strong commitment to promoting Ecosans through a social marketing approach. The current model (Flower toilet) costs a total of 2.800,000 Ush. To promote these Ecosans, they were subsidised. At the launch, interested parties had to pay Ush 500.000. Afterwards, this amount was increased to 700.000 Ush. The idea was to increase this to 1.000.000 Ush but this turned out to be too high for the population. This means that 3/4th of the total cost is subsidised, which is considerable. The demand for this type of toilet is high. In Kayinja, 70% of the families have a Flower toilet and there is still a demand for it.

There are three problems with this technology:

¹² Water boards can still construct boreholes, NGO's and bigger organisations have to build piped water systems

- The further spread of these Flower toilets is only possible if a third party subsidises it, and today it is not clear who could do this.

-There remains a certain layer of the population that is unable to pay 700.000 Ush. The programme tried to address this by making the payments in instalments, but it is not certain that this will make Ecosans accessible to everyone. The Flower toilets are certainly an answer to sustainable sanitation, but not to access for all.

- The programme did not manage to create a viable business model for private companies promoting and constructing the latrines

<u>Conclusion</u>: the programme has developed a number of activities for financial sustainability, but there remain a number of risks that the programme does not have a clear view of and is therefore not working on.

Social sustainability

The programme has tried to involve all actors (local people, local authorities) strongly and give them an active decisive role in planning, execution, monitoring and exploitation. There is also a great appropriation by these actors of what has been done. This is evident in a number of initiatives developed by the local actors, as a result of the programme, but autonomously by them: recognition of the villages as ODF (true), recognition of Nyakeera as an official landing site. There is also a an important demand for Flower Toilets and trees (e.g. in 2020 JESE received a list of 56 households from Bukurungu Town Council that requested a Flower Toilet). From the group discussions in Nyakeera and Kitagwenda, it appears that the local population, and certainly the women, accept the 'pay as you fetch' principle because of the advantages it offers. Local authorities also settle certain social problems without input from the programme (encroachment in Kitagwenda). Several people have left their lands in the no-go zone without any compensation. On the other hand, in some places this has led to conflicts upwards of the no-go zones and there are still violations (Karangura).

<u>Conclusion</u>: There is an appropriation of the interventions carried out by the programme by the population and local authorities and they are an incentive to develop initiatives themselves. The protection of ecosystems is still sometimes a source of conflict, especially when no alternatives are offered that meet the needs of the population. On the other hand, the alternatives offered do not always meet the needs of the population carrying out activities along the river banks.

Environmental

The programme had an important component on environmental conservation and restoration, and followed three axes. (i) The various interviews and group discussion showed that the population has a better understanding of the need and motivation to protect their environment. Proof of this is amongst others that there is a high demand for indigenous species for trees (there are 15 indigenous species) but also that in the villages Kibwa in Karangura, Kerere and Karubuguma in Ntaara there are scouts who report environmental problems to the local authorities (ii) Close collaboration with each district and sub-county on environmental policy (e.g. training of local authorities). This led, among other things, to the issuing of bye-laws around no-go zones around Mpanga river (both upstream and downstream). A third axis is the planning and implementation of local measures that contribute to environmental sustainability. The measures and impact of this has been described in the chapter on ecological impact.

Many of the effects are only visible in the longer term, but both people and local authorities testify that natural vegetation is coming back, sedimentation in the Mpanga River is reducing...

A challenge, however, remains compensating the population for the loss of income from the protected areas. The programme also has two different strategies on this issue: (i) full respect of the

law (JESE) and (ii) a more negotiating position (NRDI) and there appears to have been little exchange between these two organisations on this issue.

<u>Conclusion</u>: the programme's interventions certainly contribute significantly to ecological sustainability, but harmonisation with the needs of the local population is not always evident. On the other hand, experience shows that if alternatives are offered to the population that meet their needs and provide added value, ecological protection is possible.

Institutional

The programme follows the national policy and adapts to it (e.g. tree planting, construction of drinking water pipes instead of drilling). The programme also actively supports the roll-out of the national policy on IWRM by supporting the MWE-AWMZ. In order for the partners to work in line with the national policy, guiding documents were developed (e.g. on conservation).

The programme also works closely with the relevant stakeholders at the different levels with respect to their mandates (mentioned in all discussions with districts, sub-counties, villages). These actors are responsible for planning activities, monitoring, reporting, etc., which should guarantee ownership. The programme provided training for districts and sub-counties, such as on digital mapping and forest management.

The programme follows a bottom-up approach, where proposals from the villages are translated into the planning of sub-counties, and then into the planning of districts. This is the official procedure.

The ownership of the programme is demonstrated by the fact that the districts and sub-counties autonomously monitor the actions, mobilise and coordinate the different actors working on WASH and develop a master plan for drinking water and sanitation. The districts and sub-counties also issue bye-laws. These are the responsibilities of these authorities but in practice they don't always take up these responsibilities. In this programme they did.

The districts and sub-counties are also heavily involved in raising awareness among the population and in mediating conflicts (for example, around the no-go zone along the Mpanga river in both Kitagwenda and Karangura). The fact remains, however, that the districts and sub-counties depend very much on external actors for the implementation of their plans, and that they are little involved in the execution of infrastructure works, except for monitoring.

The programme also works closely with the MWE-AWMZ and supports a number of activities substantively and financially (quarterly meetings, water and environment week). Because Danida withdrew from supporting the MWE-AWMZ in 2019, the organisation of these activities depends heavily on the input of Join For Water and partners. However, it is a fact that in Uganda many institutional actors rely heavily on external funding for their functioning.

<u>Conclusion</u>: the programme certainly followed a strategy that contributes to ownership institutional sustainability, but in a context where many institutional actors are still relatively weak, this institutional sustainability cannot be ensured by a single programme. The fact that Join For Water and its partners still have the lead in many activities (e.g. construction) doesn't contribute to the strengthening of the ownership by local authorities.

7.6. Gender

During the group discussion in the different communities, the specific changes for women as a result of the programme's interventions were discussed. These were then categorised into practical needs and strategic interests by the authors of this report. During the sessions in the village this categorisation was not used. Practical needs are the needs that are related to the current roles performed by men and women. Strategic interests are the interests related to improving the condition of the most disadvantaged. Examples of practical needs are reduced workload, improved income, improved health, improved safety. Examples of strategic needs are improved financial autonomy, increased role in decision making at home, in the community, in the institutions, improved learning.

Practical needs Strategic interests reduced workload: improved financial autonomy: - reduced distance for fetching drinking water - women saving groups have improved reduced work of firewood collection by among themselves enabled synergies distribution of improved stoves and learning from each other and to address construction of wood lots issues affecting them reduced expenditures / improved income: improved learning: - income from selling products from kitchen - at school level, the Ecosan construction has garden, from services in the landing site led to increased enrolment and retention of - access to financial means thanks to women girls in schools due to the provision of saving groups washrooms, incinerator, and water tanks -- the men appreciate the participation of women in the program because the skills and knowledge gained in the program contribute to their family incomes / family building improved safety: increased role in decision making / position - more safe in terms of security posed by at home: long distances walked to fetch water, - women participation in decision making at collecting firewood, sanitation household levels increased, a case in point is the demanding for Ecosan toilets at household levels for improved hygiene - participatory planning and approach enlightened the men to support their wives freely in the program e.g. while the woman go to attend their meetings, men stayed back at home - women have gained autonomy to conduct individual economic activities without the need to consult their husbands, let alone being harassed by their husbands when they register some sales Less gender based violence: women are not "punished" anymore for taking too long to get water or being called "lazy" for not getting water from a source far away improved health increased role in decision in the community - reduced risks to infections because of the and in the institutions: - change in leadership roles, women have new Ecosan technology, water extensions taken up key positions such as chairpersons, secretaries, treasurers in various

The following table shows the practical needs and strategic interests to which the programme responded, based on the group discussions in the different communities:

Practical needs	Strategic interests
	committees. In most committees, at least one third are women - women have gained confidence in expressing and addressing issues that affected them as women at all level

Strong points:

The programme followed an approach to ensure gender and social inclusion (see also micro catchment planning process). Emphasis on the participation and inclusion of the concerns of women in society was considered at all stages including; stakeholder identification, problem analysis, resource mapping, planning, implementation and monitoring. That this approach had positive results is shown in the table above.

Points for improvement:

On the other hand, the partners' and Join For Water crews are all male. At the beginning of the programme, JESE had some female staff in the field, but they left early for personal reasons. More female staff would probably have been better to operationalise gender mainstreaming even further.

7.7. Participation

We can distinguish 6 lev	els of participation:
Scale of participation	Explanation
5.Co-management	Influence and responsibility for key project decisions.
4.Co-decision	it was possible to position and decide on operational programme options in the different phases (identification, design and implementation) of the project
3.Coproduction	Participation in meetings where decisions were influenced / Participation in the implementation and/or monitoring of activities.
2.Concertation	Consulted, participation in the implementation of certain activities / contribution with labour or material with benefits in return
1.Consultation	participation without knowing whether the consultation has an influence on the decisions
0. Passivity	information receiver

The following table has been filled in by the Join For Water on basis of the experience in the programme and the interviews with the different actors during the field mission. Identification and formulation here refer to the different interventions within the programme (drinking water, sanitation, etc.) and not to the identification or formulation of the entire programme.

			Phase	
Actor	Identification	Formulation	Implementation	Monitoring
Join For Water	5	5	5	5
Partners JESE, NRDI HEWASA	, 4	4	5	5
Local authorities	4	4	3	3
CSO / CBO	3	3	3	3
Community leaders	3	2	3	4
Beneficiaries (men)	2	2	3	2
Beneficiaries (women)	2	2	3	2

The overall management of the programme was done by Join For Water who is ultimately responsible to DGD. Identification and formulation were done together with the partners and local authorities (districts – local council 5, sub-counties – local council 3 and villages – local council 1). Community members were consulted by these local authorities and the partners, but the final decision rested with the local authorities, partners and Join For Water.

For implementation partners also were responsible for some key decisions such as proposed budget shifts and (human) resource management. Monitoring was also done by the partners under their responsibility. Local authorities on the other hand participated in meetings and were facilitated to give capacity building and sensitization on for example bee keeping, CLTS approach, river bank protection, etc.

Several CSO's such as IRC, Water For People, Worldvision, etc. were consulted on the annual steering committee to align planning or synergies. This has effects on identification and formulation. Moreover, implementation and monitoring are influenced through their feedback on our activities and data collection.

Apart from CSO's, also community leaders (both men and women) are also involved in identification and implementation. As they are always onsite, they have a key role in monitoring as well, especially on a qualitative base. Furthermore, they represent beneficiaries (both men and women) which are consulted as well but do not participate on regular basis. This includes participation in the implementation of certain activities, contribution with labour or material and spot checks on the progress of the program. Special attention goes to the participation of women to ensure a gender balance.

Partners have co-decided in the formulation of the programme, but are fully responsible for the implementation and the monitoring of their activities. The role of Join For Water is to support them, but with respect to their role and responsibility in the programme.

Strong points:

- the different actors confirm that, thanks to the bottom-up participatory approach, the interventions respond to real problems and offer a solution that meets their needs (e.g. drinking trough for cattle, improvement of landing sites, drinking water).

- All actors confirm that this participation has increased their understanding of water issues and that they have the capacity to carry out these activities themselves (e.g. tree planting).

Points for improvement

- The restitution showed that there is still insufficient follow-up by the local authorities during the implementation and afterwards.

- The implementation of the activities is mainly steered by the partners and Join For Water. The local authorities become owners after handover. This appears from the interviews with the local authorities, in which they confirm that they have a rather supporting role (for example in sensitisation) during implementation, but that they also have the possibility to influence the implementation. A more active role during implementation with more responsibility would increase their ownership.

8. Conclusions and recommendations

8.1. General conclusion

This program made an important contribution to make SDG 6 in the intervention area happen by 2030. Not only did it provide access to drinking water and sanitation, it also worked on the other targets of SDG6: improving the water quality of river Mpanga, increasing water efficiency in agriculture (better agricultural practices and infiltration), implementation of local integrated water resources management, protection and restoration of water-related ecosystems, and capacity building of, and supporting and strengthening of, the participation of local communities.

8.2. Specific conclusions and recommendations

The programme addressed hot spot areas which were restored with IWRM activities. Nevertheless, the initiatives remained local and the full potential of inspiring other actors was not completely reached.

Recommendation: A landscape approach would be more recommended than a hotspot approach (see annex 18). One of the principles of this approach is starting from the pilot intervention at local scale, in the next phase upscaling to other parts of the catchment. The current programme did not succeed in scaling up the experiences and more attention should be paid to this. Addressing hot spots would also be the first step using a landscape approach. Consequently, the programme is recommended to continue its work in the current zone and expand the action radius. Instead of influencing other organisations indirectly, it can aim to collaborate directly and have a joint programme with other actors. In line with these recommendations, a strategy could be developed for capitalisation on a higher level, with clear objectives, messages and target groups.

The programme worked on the strengthening of the capacities of local authorities, which resulted in a better management of the water resources in the area. But there is still a risk with regard of the sustainability of the interventions (especially the financial sustainability).

Recommendation: The programme should make a better analysis of the capacity building needs of the local authorities and water boards, and adapt the capacity building accordingly. It should also strengthen the implication of local authorities and water boards during alle phases of the programme, especially during implementation and post-implementation.

The mini-grids are handed over after completion to the Mid-Western Umbrella or National Water. The programme assumes that this guarantees the sustainability of the management but in fact, little is known about their management and thus the sustainability.

<u>Recommendation</u>: the programme should strengthen relations with, and follow up of, Umbrella and National Water in order to be able to assess the sustainability and if needed, adapt the strategy.

For the no-go zones specifically, there are two different strategies (JESE and NRDI) and it is not clear which of the two strategies is the most adequate to ensure both the protection of the water resources and the wellbeing of the people living near the Mpanga River. In both zones, there are still cases of people using these no-go zones illegally.

<u>Recommendation</u>: A comparison of these strategies with all actors involved would allow us to draw lessons and develop a common strategy. Alternatively, people formerly present in these no-go zones could be invited to discuss activities or options that offer an alternative income for them.

With regards to sanitation, the efforts were mainly focused on Flower Toilets and the development of this value chain / business model. The quality significantly improved and through social marketing the toilets became a very popular and demanded sanitation solution. Nevertheless, it still depends on funding and even with contribution not available for everyone.

Recommendation: It could be an idea to develop different types of latrines or give trainings to let people choose according to their financial and technical resources. Same goes for the use of climate friendly ISSB bricks. Now Ecosans were by default constructed with ISSBs but other options according to the preferences and means of people could be considered. Moreover, this value chain could be improved to not restrict their use to Ecosans.

Even though our monitoring system significantly improved using digital data collection via KoboToolbox it does not take into account yet all elements of the indicators. **Recommendation:** Indicators should be carefully defined. Scenario's for monitoring taking into account all aspects should be worked out better and tools for data collection should be developed. Additionally, extra training sessions and regular reviews together with a clear definition of roles and responsibilities could allow for a smoother monitoring. Analysis should be improved and the findings should be shared with all stakeholders, as proposed during the restitution.

Annexes

9. Annex 1: Evaluation team

organisation	who	Role		
JESE	Tusiime Lawrence	Practical organisation of the field work		
	Sabula Festo	Co-facilitation of the group interviews		
		Commenting and giving input for the report		
	Mutegeki Cyprian	Practical organisation of the field work		
	Kwezi Richard	Co-facilitation of the group interviews		
	Byaruhanga Benon			
	Jamwa John Pauls			
HEWASA	Yona Binagaijo	Co-facilitation of the group interviews Practical organisation of the field work		
	Tumwebaze Gracious	Co-facilitation of the group interviews		
NRDI	Muganzi Edgar	Co-facilitation of the group interviews		
	wiugalizi Lugai	Practical organisation of the field work		
		Commenting and giving input for the report		
	Amanyire Chris	Co-facilitation of the group interviews		
	Mutegeki Collins	Practical organisation of the field work		
Join For	Joris Backaert	Principle contact for consultants and HQ		
Water		Co-facilitation of the evaluation training		
Uganda		Practical organisation of the evaluation training		
Join For	George Bwambale	Principle contact for partners and stakeholders		
Water		Co-facilitation of the group interviews		
Uganda		Practical organisation of the field work		
		Co-writing of the evaluation report		
Join For	Ewald Van den Auwelant	Practical organisation of the field work		
Water		Team members who provide specific (technical,		
Uganda		financial) expertise and make observations during		
		fieldwork.		
		Co-writing of the evaluation report		
Join For	Francis Guyon	Team member to make observations from a different		
Water Benin		perspective.		
		Sharing of experiences between Uganda and Benin		
Join For	Dirk Glas	Team member to make observations from a different		
Water		perspective. Keep an overview of all aspects for the		
Belgium		report Final drafting of the report		
		Final drafting of the report		

		function		day 1	day 2	day 2
name	organisation	function	gender	day 1	day 2	day 3
Tusiime	JESE		male	Х	X	Х
Lawrence						
Sagula Festo	JESE		male	x	x	Х
Yona	HEWASA		male	x	x	Х
Binagaijo						
Muganzi	NRDI		male	х	х	Х
Edgar						
Amanyre	NRDI		male	x	x	Х
Chris						
Joris Backaert	Join For	Country	male	х	х	
	Water	representative				
	(Uganda)					
George	Join For		male	x	x	Х
Bwambale	Water					
	(Uganda)					
Dirk Glas	Join For	Thematic	male	x	x	Х
	Water	advisor				
	(Belgium)					
Johan	Join For	Thematic	male	х	х	Х
Slimbrouck	Water	advisor				
	(Belgium)					
Nico Bakker	Calipso. Ida	Consultant	male	х	х	Х
	(Portugal)					
Raja Litwinoff	Calipso. Ida	Consultant	female	х	х	Х
	(Portugal)					

10. Annex 2: list of participants in the trainings

11. Annex 3: Evaluation questions

N °	Focus	Original question	Adapted questions	OECD-criterion
1	Capitalisation and advocacy	How did we integrate advocacy in Natural Resource Management?	 What did the programme do on advocacy to improve IWRM? And how? What was the effect of this advocacy for whom and at which level? 	Effectiveness Efficiency
2	Capitalisation and advocacy	To what extent has the government been involved in the program?	 Which governmental actors have been involved to which extent in which faze of the program? What was the effect of this involvement on the achievements of the results and objective of the programme? 	Relevance Sustainability
3	Access to water	How can water users' committees be sustained	- How did the program contribute to the sustainability of the water user committees?	Effectiveness Impact
4	Access to water	How/To what extent the community beneficiaries are aware of pay as you fetch model?	 How do people appreciate the 'pay as you fetch model'? (service level versus water cost?) What is the effect of this model on their drinking water consumption? 	Effectiveness sustainability
5	IWRM	Assess the results on IWRM in regard to gender – practical needs and strategic interests?	 Which gender-practical needs and strategic interests related to IWRM have been addressed? How do women and men appreciate the results in regard to this gender-practical needs and strategic interests? 	Gender, Sustainability Impact
6	Governance	Is community-based practice better for water resource management?	 How do communities participate in local water resource management? To which extent does this community participation have a positive effect on water resource management? And for whom? 	Effectiveness, sustainability Impact
7	Governance	How can water user committees be sustained?	 How do communities participate in local water resource management? To which extent does this community participation have a positive effect on water resource management? And for whom? 	Sustainability

12. Annex 4 : evaluation matrix

focus	original questions Uganda	adapted formulation		what do we need to know to answer this question ? What information do we want to collect?	what data collection tools shall we use	where to find the information
capitalisation and advocacy	1. How did we integrate advocacy in Natural Resource Management? (lessons learned exercise)	What did the programme do on advocacy to improve IWRM? And how? What was the effect of this advocacy for whom and at which level (= changes thanks to advocacy)?		 overview of advocacy activities related to IWRM effect of the advocacy activities (eg. policies, by- laws) 	 - analysis of internal report - analysis of official documents, by-laws - structured interview / discussion with local government and partners 	DWO, DNRO, DFO, DEO, DCDO, Sub county leadership
capitalisation and advocacy	2. To what extent has government been involved in the program?	Which governmental actors have been involved to which extent in which phase of the program? What was the effect of this involvement on the achievements of the results and objective of the programme?	National/Lower Local - District/Sub county/Lcs?: levels of engagement e.g advocacy, review, monitoring, planning etc. Opinion towards the program - support/ownership and sustainability at all levels	 list of actors per fase degree of implication effect on results and objectives 	 elaborate timeline with partners(making list) interview governmental actors focus group discussion with communities 	LCV, CAO,DWO, DNRO,DEO, DHO,DCDO, MWUWS,Sub county leadership, Town council leadership, MWE - AWMZ,

focus	original questions Uganda	adapted formulation		what do we need to know to answer this question ? What information do we want to collect?	what data collection tools shall we use	where to find the information
access to water	3. Did we help people to gain access to water?	To which extent do people think that the access to drinking water has improved? (accessibility, availability, quality and management) How did the program contribute to the access (accessibility, availability, quality and management)and what can improved in future in actions?		 overview of achievement of access to drinking water (reports) opinion of water users 	 analysis of reports check data with governmental sources peer review between communities focus group with district officers, community representatives on preliminary findings 	DWO, DCDO, TOWN CLERKS, MWUWS. Selected water User Groups, PSPs & ATMs Attendants and DNRO
access to water	4. How/To what extent the community beneficiaries are aware of pay as you fetch model?	How do people appreciate the 'pay as you fetch model'? (service level versus water cost?) What is the effect of this model on their drinking water consumption?	Access to water?, who pays for water?	-data on water consumption and price - opinion of water users	 interview with water manager analysis of data focus group with water users peer to peer exchange between ATM water users 	MWUWS, PSPs and ATMs attendants, sampled groups of Water Users amongst beneficiaries
IWRM	5. Assess the results on IWRM in regard to gender – practical needs and strategic interests?	Which gender-practical needs and strategic interests related to IWRM have been addressed? How do women and men appreciate the results in regard to this gender-practical needs and strategic interests?	Which practical needs and strategic interests have been addressed by the programme (water, firewood, health - sanitation), increased control of resources, roles in communities, allocation, finance. Women participation in groups (VSLA), clts,	 overview of gender- practical needs and strategic interests opinion of local communities (women and men) 	 analysis of reports discussion with partners and other NGO's interview with local leaders separate focus groups with women and men 	Groups of men and Women separate, CDO, water user committees, pupils

focus	original questions Uganda	adapted formulation		what do we need to know to answer this question ? What information do we want to collect?	what data collection tools shall we use	where to find the information
			What changes can be seen gender roles - women can do, decision making, position in leadership.			
governance	6. Is community based practice better for water resource management?	how do communities participate in local water resource management? To which extent does this community participation have impacted on water resource management? And for whom?	How do/have communities participated in the management of water resources like wetland restoration, surface and underground water etc, What is your level of participation (activity, enforcement, policy formulation) - at household, village, sub county and district? What is the outcome of your participation? What has changed? How can this be sustained? hinderances?	 overview of activities of local communities in water resource management (what, who, how) data on results of community activities opinion of different actors on participation and effect 	 analysis of reports (internal and governmental data) field visit and observation interview with local government / leaders focus group with local communities 	DWO,D/CDO, SAS,GISO,Parish chiefs,LCs, NRO, MWUs,Water Users/beneficiaries, Resource committees/ H/M schools, Partners,

focus	original questions Uganda	adapted formulation		what do we need to know to answer this question ? What information do we want to collect?	what data collection tools shall we use	where to find the information
governance	7. How can water user committees be sustained?	How did the program contribute to the sustainability of the Water boards? To which extent the Water boards are sustainable?	Who are you?, Water board structure, functions? Composition and registration? Transformation process, assessment reports - challenges, monitoring visits and participation in planning	 - data on different aspects of sustainability (financial, organisational, technical) - activities of the program on supporting water boards - appreciation of the partners on the sustainability of the Water boards - appreciation of the Water boards on the support by the program - community on service delivery 	 - analysis on data of the Water Boards (annual reports of the water Board?) - overview of activities and results of the support with partners - discussion with Local government - peer to peer between partners - peer to peer between Water boards - interview with water boards/community 	DWO, MWUWS, Sampled Water User Committees and Water boards, DCDO, T/C-CDO

13. Annex 5: programme of the field work in Uganda

DATE	PLACE	ACTIVITY
11/10	Kampala	- Travel to Uganda
12/10	Kampala – Fort Portal	 Dirk, Nico, Francis Passing by at the office of Protos - Join For Water KLA, and meet Amy, Esther, Mary and later travel to Fort Portal
13/10	Kamwenge	 Overview documents, sources, and preparation peer reviews between water boards/committees WUC/Boards of Kanara, Nyabbani, Mahyoro
14/10	Kamwenge/Kitagwenda	Meeting wit district and subcounties Visit Mpanga falls
15/10	Kamwenge/Kitagwenda	Meeting with community members in Nyakeera Visit Nyakeera Meeting with community members Kyendangara Visit Kayinja
16/10	Fort Portal – IDP/JFW Office	analysis results of documents (sources), field visits/exchanges and peer reviews/
18/10	Fort Portal - Karangura	Meeting with Town Council Fort Portal, with MWE Meeting with Kaborale district and Subcounties Visit Karangura
19/10	Fort Portal – JESE Office	analysis results of documents (sources), field visits/exchanges and peer reviews
20/10	Fort Portal – JESE Office	analysis results of documents (sources), field visits/exchanges and peer reviews Forum
21/10	Fort Portal or KLA	Travel to Kampala
		With Nico analysis results of documents (sources), field visits/exchanges and peer reviews
22/10		Travel back to Europe

Place and date	Stakeholder	ТооІ
Kamwenge (hotel) (13/10)	Water and Sanitation boards for Kanara, Nyabbani and Mahyoro	Focus group in local language Restitution at the end of the meeting
Kitagwenda district (14/10)	 officers of the district representatives of the sub-counties for Kanara, Nyabbani, Ntaara and Mahyooro representatives of the villages in these sub- counties 	3 different meetings; groups discussion. Meeting with the district officers in English, the others in local language. General restitution for all participants at the end of the meeting
Nyakeera landing site (15/10)	 community leaders, community-based organisations, Village health teams, village people 	Focus groups in local language with two different groups: women and men. At the end of the meeting a restitution was organised
Kyendangara (15/10)	Water users and water user committee and Mid-Western Umbrella representative	Groups discussion in local language.
Fort Portal (18/10)	Albert Water Management Zone	Semi- structured interview
Fort Portal (18/10)	City Council	Semi-structured interviews
Karangura (18/10)	 officers of the district representatives of the sub-counties Karangura and Kichwamba Sub county Village health teams School head teachers Local contractors and masons Security personnel representatives of community leaders and representatives of local organisations 	3 different meetings; groups discussion. Meeting with the district officers in English, the others in local language. General restitution for all participants at the end of the meeting

14. Annex 6: overview of meetings and stakeholders and tools used

15. Annex 7: participants in the meetings

vity litator		Designation			Activ	ity MYPH PROJECT i	Designation		
NAN	ИE	DESIGNATION	CONTACT	SIGNATURE		NAME	DESIGNATION	CONTACT	SIGNATURE
Kari	URU JOHN USABO GERTRUDE MOTILY MUNARWE SIMEW21 CHARLES	Local Muson Contractor CLIENT FORENT OFFICER KABAROLE DLG BRUEFICIARY	0787835710 075035655 0713634787 0782570237	thatusaka	1. 2 3 4	Coco co	ADKID-MODIZADO	0742-357099	S
Tuk Twe ERIS	ainve Hamer sige christine	Wand togent VH-T Karanger STAKEHOLDER FARHAGURA	0185736943 078063142 078284644	Normessige	5 6 7 8	Mirebiski aperiorio byerubanga Benon Mugam Eelgar Amangin Ohnis Colline Mutacki	P.O JESE P.O JESE TL-MAN DOLLI NRDI	07798491497 57798491457 6778398749 6778398749 078330794 07935729789	et a
KAI BE MUL KIRU KAL	HUZO ELVANDA HUZO ELVANDA HUDO danel HUDO danel HUDEZI SAM YATHA EDISON MULIZ Malya	(De Finance LOM DIVIS NR LIKARAGI NR LIKARAGI SEPPIDENT Clip LCILIENE VIII Configure VIII Configure	6782-633492 6706947543 976399576 6777318292 677318292	Marter Saund Mac Saund Mac	9 10 11 12 13 14 14 14 15	Munipire Jocus Dr. Gund Berly S. RUDKE - Jubar Mpuga James MARAHUMA JULIUS	Bacyana grou JESE brom Group NI-Anne ATC Chief For DWO Chief Connecture For DWO	6782 (29)3 070205867 070205867 0701025867 070102585 07010288 07788005 07788005	a Anna 24 Sta
	<u>.</u>								

NO	NAME	DESIGNATION	CONTACT	SIGNATURE
	KUZA WINFRED	PARISH CHIEF	0712355804	12-112-
1.	ANKONDA BRENDAH		0714151196 3	
2	KAJUMBA MAUREEN	JAJ - KARANKWRA	0111643545	AMA
3	Kyalimpa Lawrence		0778124656	Kyoz
4	Mwesige Thomas	Head teacher Kazingo SSA	0774166221	Hurigo_
5	TUMUSABE HABERT	(local masion) Contractor	528982 (412	Hái
6	MBAMBU EVE	Drammer	0760274293	Atton.
7	BALINU ARAMMANIAN:	VIC	0782116658	Balakar,
8	BIJER KEMIGISA	MEMBER	-	Biz-
9	KANNOE WEL	н	0779067383	the
10	BIRMA CERLAN	DH1	0782470219	P CS
11	Nico BALLIER	Consultant	+35193 226632	Muo
12	Diel las	JFU	049737669	XC
13	Francis Guy on	IFW	+2255797551	SB
14	Sugala Ferto	JECK	07826.3991-	Hailo
14	ELALD VAN	JEW	1	G

16. Annex 8 : reports of the meetings

Nyabbani water board (13/10)

Structure and composition

- > Nyabbani subcounty waterboard is comprised of 9 members, 4 female and 5 males.
- Has an executive comprised of the chairperson, vice chairperson, secretary, treasurer, mobiliser including the SAS(Secretary), Health Inspector, CDO and parish chief as x-officials.

Transformation

Before becoming a waterboard, members started mobilizing themselves at village levels as water user committees comprised of 07 members headed by the chairperson, secretary and treasurer and these three are selected to represent these committees at subcounty level to make water user associations (WUAs) in 2015

In 2019 JESE trained and sensitized them to become a water board and which they welcomed. **Roles of the water board**

- Sensitization of water users on proper maintenance of water points by clearing the bush around the water points, use of clean utensils while collecting water, tree planting.
- Sensitizing local communities on proper hygiene and sanitation both at household and public level.
- Training and sensitization of water user associations to form VSLAs for resource mobilization and financial sustainability.
- There are also playing a vital role in overseeing the work of WUAs and water user committees, through conflict resolution and resolving other underlying management challenges like resource mobilization.
- Reporting non-functional especially for bigger breakdowns that can't be managed by water boards.
- Record keeping of all water points all the functional and the non-functional, they have a work plan in place and normally hold quarterly review meetings to reflect on their works, challenges and find a way forward.
- > Have a number of broken waterpoints (05) since the beginning of this year.

Challenges facing waterboards

- Limited resources for repair of broken water points.
- Most of the water points at village level are not registered with WUAs and water boards which becomes difficult for those points to be helped in case of any challenge.
- > Mindset change of the local communities towards resource management is still lacking.

Sustainability plan

Promised to continuously work with district and subcounty technical teams

Kanara water board (13/10)

Who are they

Kanara Water Supply and Sanitation Board.

Main Activities.

- Keep water points.
- Keep natural resources, like swamps, wet lands.
- Save money for repairs
- Plant trees along water points.
- Water source committee mobilization.
- Training on hygiene and sanitation

Roles

- Monitoring on sanitation.
- Every quarter they meet and give reports.
- Conduct awareness and remain each other on the roles of water board.

Documents available.

- Constitution, and the board is registered at sub county transiting from water user committee to water Board and fully registered on 2020.
- Approved Annual plan.

Governance structure and leadership

- They are 15 in total 5, women and 10 men.
- Committee in place comprising the following representative,
- Sub county chief, Secretary, Health officer, secretary for works and other members from water user committee.

Achievements

- > 89 water points constructed 62 functional and 27 non-functional.
- 2 saving Bank Accounts from Post Bank.
- Constructed 2 shallow well using their own saving.
- Rehabilitating of water points and repairs.
- Tree planting along water points.
- Proposal writing.
- Lobby water scheme.
- Well-equipped office.

Challenges

- COVID 19 affected their saving.
- > Community have a filling / attitude that water is for free.
- Poor communication from the District and Board.
- Limited transport going in the communities.
- At times repairs and beyond their mandate.
- Some water points gets dry during dry season.
- Land ownership.
- Lack of identification.

Sustainability

- Subscription fees.
- C/county 3% of budget.
- Management committee in place.

Community members Kanaara, Ntaara and Nyabbani

QN.6; How do/have communities participated in the management of water resources like wetland restoration, surface and underground water etc, What is your level of participation (activity, enforcement, policy formulation) - at household, village, sub county and district? What is the outcome of your participation? What has changed? How can this be sustained? hinderances? Through **PROTOS-JESE** and their formed group River Mpanga Conservation Committee, community members have participated in the management of water resources through the following ways;

- Training and sensitization of other community members to conserve the buffer zone (the 100 meters no go zone), for instance 111 community members adjacent to river Mpanga, through the sensitizations 95 freely vacated the buffer zone.
- Tree planting and these are mostly limited to environmental friendly tree species that help to conserve the environment and help in addressing underlying restoration challenges.
- Through practicing good agronomic practices like establishment of soil and water conservation structures that play an important role in curbing the rate of runoff which is in turn deposited into the rivers, other good agronomic practices included agroforestry, reduced bush burning.
- Furthermore at village level members of the community have formed several groups are aimed at conserving water resources.
- Then through the program the community have been supported in livelihood activities that are aimed at conserving the environment for example beekeeping.
- -

Level of Participation

- Through the River Mpanga conservation committee community members get a chance to participate in enforcement, sensitization meetings which are headed by the GISO at the subcounty and the DNRO at the district, in these sessions committed members help in reporting serious natural resource abusers and be dealt with according by the relevant authorities.
- -

Outcome of the participation, what has changed?

- Community's participation in water resource management has opened their minds in advocating for the rights of these natural resources and increased protection of small water sources which feed the bigger ones.
- ✓ There has also been regeneration of previous endangered species like the cycads, iron wood especially with in the buffer zone thanks to the sensitizations.
- ✓ Their participation in water resource management has also impacted much on the natural wild life like baboons that used to the buffer zone but due to the increased pressure vegetation by slash and burn for cultivation, grazing.
- ✓ There has also been increased electricity generation at Mpanga Hydro power due to reduced silting of the river which previous occurred due clearing of vegetation and cultivation along the buffer zone.
- _

- Sustainability plan

- Due to the trainings, engagements and sensitizations, the have had the community members feel empowered and determined to continue doing their works without any hesitation because they now know that conserving the environment is everybody's responsibility but not limited to the development partners. This has been attributed to the various conservation groups which have formed freely by the community members and commit to continue sensitizing members on the issues of natural resources management whenever the meet weekly or monthly.
- Hinderances
- They are still concerns of untouchables who continue the abuse water resources like those cultivating up to the river banks, grazing, burning charcoal
- Limited resources to carry some operations like enforcement, community engagements/sensitizations.
- _

- Qn.5; Which practical needs and strategic interests have been addressed by the programme (water, firewood, health sanitation), increased control of resources, roles in communities, allocation, finance. Women participation in groups (VSLA), clts, What changes can be seen gender roles women can do, decision making, position in leadership.
- The following are gender practical needs and strategic needs which have been addressed by the programme;
 - Women and men have been helped in addressing sanitation and hygiene challenges due to construction of clean Ecosan toilets in some households.
 - Still on sanitation the program has helped in improving the sanitation and hygiene standards of some schools where Ecosans have been constructed and this has helped the girl child to study a well conducive environment without fear of any challenge related to poor hygiene and sanitation.
 - Women are also able to use less firewood while due to the construction of energy saving stoves in various homesteads.
 - In some places women has been helped by reducing the distances covered in fetching water for domestic use due to water extensions nearer to their homes.
 - The program has also helped in addressing the issue of nutrition through the support of households on establishment of small kitchen gardens which can be consumed at household level and the surplus sold to fetch some income for the household.
 - Men and women have also been supported with environmental friendly income generating activities like beekeeping, tree planting and fruit growing (mangoes and oranges).
 - -

- Women participation

- Women involvement in resource allocation, decision making and leadership is still wanting as women are still considered inferior.
- Women and the girlchild still face a lot of hardships in executing most of the house cores like collecting firewood, fetching water, collecting and preparing food.
- In terms of leadership, women have been so outstanding in regard to leadership because they are seen to be less corrupt and hence transparent in their services.
- More women continue to join VSLAs because consider as being so vital in solving their daily financial constraints. And go on to take leadership positions in these VSLAs as chairpersons, vice chairpersons, treasurer, secretaries etc.
- QN.1; What did the programme do on advocay to improve IWRM? And how?
- What was the effect of this advocacy for whom and at which level (= changes thanks to advocacy)?
- _

What did the programme do on advocay to improve IWRM? And how?

- Through community sensitization meetings, members of the community have been linked to high level like MWE, DNRO, CAO, DCDO, DWO, DHO etc and this has increased their chances of interaction with the mentioned offices on various issues like environmental conservation, restoration, agriculture, policies and laws governing various water resources.
- The program has also the community members know and fully understand their rights as regard to the management of water resources.
- As community they have also reported some of the water resource abuser to high level authorities and have been summoned.

- The program has also helped the community through their awareness sessions to advocate for increased environmental protection through planting of more trees, condemn the continuous extinction of critically tree species like the cycads and also encourage livelihood activities that contribute to environmental conservation and restoration of the ecosystem e.g Beekeeping, ecotourism.
- .
- What was the effect of this advocacy for whom and at which level (= changes thanks to advocacy)?
- The advocacy increased the community's capacity in lobbying for income generating ventures like beekeeping, fruit growing, lobby for clean and safe water for drinking, good health, Education, Sanitation.
- Through advocacy community members were able to form groups aimed at conserving smaller water points, rivers, wetlands, swamps. And 06 groups have so far been formed and these include;
 - i. Kereere Mpanga conservation group (Kanaara)- 20 members, 06 female and 14 males.
 - ii. Nyakabungo Mpanga Conservation Group- 42 members, 14 females, 28 males
 - Kalere Tulinde Ebyobuhangwa Group (Ntaara)- 25 members, 11 female and 14 males
 - iv. Karubuguma II Youth Beekeeping group (Ntaara)- 28 members, 12 females and 18 males.
 - v. Buhumuriro Mpanga Conservation group- 34 members, 14 females and 20 males.
 - Wi. Mpanga Landowners and Cycad protection Association- 20 members, 07 females and 13 males
 - NOTE; All the above groups were formed due to community's love for environment protection and conservation and fully registered at subcounty level with registration certificates.
 - All groups have an element of VSLA which help to gather them together for common goal.

Kitagwenda District Authorities (14/10)

Process/Steps of involvement.

- a) Participatory needs assessment with community at grass root levels (Bottom up approach)
 - Community along Mpanga river raised concern of some HHs encroaching the river, and plans of intervention began.
 - Community was commitment to sustain and protect River Mpanga when they formulated of By-laws.
 - The Byelaws were then approved by S/County, and also by the district.
 - The district through DNRO have started implementing the byelaws which were enacted by the community.
- b) Collaboration with partners esp. Jese, HEWASA, and JFW in analyzing, planning, implementation, monitoring and evaluation of programme activities.
- c) Joint participation in annual budget conference; budget shared with partners, partner's budget incorporated within the district budget.

- d) Joint district coordination meetings that held quarterly on WASH to track progress of all activities implemented by partners but also government departments (education, health, environment, water, sanitation etc)
- e) MOU are always signed amongst implementing partners as an indicator of team work but as a commitment towards sustainability of infrastructures.
- f) Formation of different community management committees at village, parish and sub-county levels for proper to check and balance the O &M of infrastructures eg CLTS, Water, Environment committees in Nyakera, Nyakachwamba, Kayinja etc.
- g) Project handover plans are always jointly done with partners and attended by almost all district departments.
- h) During handover of project sustainability and risk managements plans are always drawn and shared.

Advocacy.

- **a)** This has been done through;
 - Community mobilization,
 - sensitization/community policing,
 - community also are encouraged to participate in government programs that includes partner programs eg. Planting of trees, bee keeping in Ntara S/county, construction of environment friendly latrines – eco-sans, use of safe water, reducing contamination of lake and river water by using safely managed latrines, and water troughs for their animals esp. in Nyakera and Nyakachwamba.
- b) Effective flow of information at different administrative units is also a form advocacy.

Sustainability plans of completed infrastructures.

- The water point systems were handed over to MUWWS for proper management and always supervised by the DWO & District Engineer.
- Established committees at different community levels monitors the O & M of infrastructures where minor repairs are always done, whereas major repairs are left for the district.
- During council or district WASH Coordination meetings are sustainability plans are always reviewed according to the condition of an infrastructure needed to be rehabilitated.
- Quality work done by implementing partners also makes sustainability of infrastructures easy an example is Nyakanchwamba Pump that for 6years now has not registered any serious depreciation.
- Follow ups are always conducted to identify such infrastructures depreciation issues and joint planning held to fix problems if any.
- Byelaws enacted by community themselves and implemented by government departments is a serious sustainability plan on handed over infrastructures.
- > HPMAs were also established and supported by the district water office to ensure sustainability of water systems within the district.

Key challenges

- Some are areas esp. Ntara-Kinchwamba Town Council, Kinyamugara villages, etc have no access to safe water.
- IWRM should expand the scope of its operation areas to cover some parts of kiruhura, all Nyabani villages

- Due to COVID-19 and low standards of living almost 80% of the HHs have no managed to have private taps
- Eco-sans latrines are doing better but an increase on confounding made it hard for low income HHs to have safely managed latrines.
- Inadequate transport logistics also a serious problem and monitoring of the projects /programs have not yielded expected results.
- Honey products from the expected volumes to be harvested from the installed bee hives along the Mpanga river also seen as a challenge since there no ready honey market.

Recommendations.

- Need for transport logistics.
- Safe water extensions to other water lacking areas.
- Expansion of IWRM operation areas to cover all areas of Nyabani and also kiruhura
- Searching for market where to sale honey and honey products
- Cycads protection should also be seen at a wider spectrum of attracting tourist so as to boost the economy.
- Reduction on eco-san confounding to allow even the low income earners to construct latrines.

Sub county /Town council teams –Kitagwenda district (14/10)

Area: Capitalisation and Advocacy Questions;

1-To what extent has government been involved in the IWRM program?

The involvement by local government at the sub county level in the IWRM program at different levels of planning, reviewing, and monitoring include;-

- Formation of natural resource conservation committees i.e River Mpanga Conservation committee
- Demarcation of buffer zones (100 metres) for example at river mpanga and Rushango swamp at kabambiiro
- Formulation and enforcement of by-laws
- Sensitisation of local communities against encroachment
- Encouraging locals to embrace alternative livelihood programs given by development partner e.g fruit trees, bee hives for income diversification
- Provision of space to construction of water offices and reservoirs by the sub counties eg Bukurungu TC
- Co-funding with development partners to construct water kiosks i.e Bukurungu TC and Amaizi Marungi, a water and sanitation agency
- Championing the signing of MOU between JESE and the Kitagwenda district. The first MOU signed was with Kamwenge that was split to form Kitagwenda district
- -

2-How have the advocacy activities (policies, by-laws, etc) been effective or what changes have been registered as a result of the advocacy activities related IWRM?

- Reduction on the number of encroachers from 111 to 6 along the Mpanga river catchment
- Embracement of alternative livelihood programs by the local people
- Planting of indigenous trees provided by the established nursery beds in Mpanga catchment to support restocking of degraded spots
- Regeneration of mpanga Gorge natural vegetation as a result of controlled unsustainable human practices e.g bush burning

 Increased involvement / participation of local communities as well as local leaders and ownership of the program

Monitoring and follow up of planned activities with major focus on established by-laws

Nyakeera – men group (15/10)

- 1. To what extent has the government been involved in the programme?
 - The local leaders got involved in the IWRM program from initiation through planning, review, and monitoring in the following ways.
 - The main actors involved were the LCI, councilors, LCIII, landing site management committee, LCII, VHT's in the following ways.
 - -
 - Mobilization and sensitization
 - Participatory planning
 - Co-funding of hygiene and sanitation facilities with the development partner.
 - Marketing of sanitation facilities i.e. Eco-san toilets to the local communities.
 - Formulation of by-laws and enforcement.
 - Provision of space/land for construction of cattle troughs, water pipelines.
 - Attending meeting and discussing issues related to the program.
- 2. What changes have been registered since the initiation of the program?
- _
- > Hygiene and sanitation improved i.e. Nyakeera was declared ODF.
- > The landing site structures improved i.e. fencing and slab constructed.
- > Eco-san toilets have been constructed.
- > Nyakeera landing site was gazette in 2021, March.
- Increased state of ownership of the program activities.
- -

3. What sustainability plans are in place to manage the program in the near future?

- -
- > Establishment of management committees of the landing site.
- > The Town council 1 has taken over the management and supervision of the landing site.
- > Formation of CLT's committees to oversee the hygiene and sanitation.
- _

4. To which extent do the people think that quality availability, accessibility of water has improved their lives?

-

- Reduction in the prevalence of water related diseases.
- > The quality of water has improved for domestic use e.g. drinking.
- Water is more accessible to the people i.e. people have water in the compounds. Safer for girls to fetch water especially at night or late hours. Less burden on women – time, significancy in price, amount of water used on daily basis,
- > Hygiene and sanitation at water points has improved.
- 5. To what extent do the community beneficiaries aware of the "Pay as you fetch" model?
 - > People pay for the water services because it is accessible, clean and safe.
 - People are aware of how the system operates and appreciate.

- Less burden for men on payment for water, women can pay for water but still have savings than previously accessing the service with old filtration system 500ugx – 100ugx per 20lrs of jerrycan
- 6. What can be done in future to improve accessibility, availability, quality of water?
 - Extend water to hot spot areas and neighboring areas public tap stands (Nyakeera A, B, C).
 - Constructing more cattle troughs. In addition to existing troughs
 - > Making water connection and water fees affordable.
 - -

7. How do people appreciate the "Pay as you fetch model"

- It limits water wastage
- It is affordable price per unit cost, from 500ugx to 100ugx
- It reduces time wasting at the water point.
- ▶ Good avenue for prepaid service 5000ugx, in terms of crisis can still access water

- <u>C</u>HALLENGES

- Private Water extension is expensive to the locals.
- > The system is distorted by network failures. Was solved
- When there is cleaning of the reservoir tanks, system is compromised and water users' lose money without getting service – Notification from Umbrella

Nyakeera women focus group discussion (15/10)

Government involvement in the MYP Programme.

- Community demand for an intervention in construction of Safe water; environment friendly/Safely managed latrines, and a need to promote Nyakera Fishing Village into a Landing Site.
- Formally the district of Kamwenge through DWO, and department of Fisheries participated in carrying out a needs assessment activity in Nyakera and later requested for support from Protos and its partners that was early 2016.
- Inception meetings jointly attended by all stakeholders.
- Reports are always shared from the L.Cl to LCII Councilors, to Sub-county sector committees then to the district and in cooperated within the district reports.
- Work plans are jointly shared at all levels of administrative units.
- Community mobilization, awareness/demand creation sensitization/campaign was jointly carried out by implementing partners together with L.C. I, L.C.II, L.C.III, VHT's Parish Chief, S/county Chief and other government Authorities.
- Monitoring and follow ups of programme activities was always carried out either jointly or by responsible head of departments e.g DWO, Assistant DHO-Sanitation and Environment Health, District Fisheries Officer, DNRO etc, to track programme progress and for reporting purposes.
- Enforcements especially against indiscipline/non-compliant individuals always done by parish chief and S/County authorities for smooth project implementation and sustainability e.g those who become non-compliant towards sanitation improvement.

How MYP Programme intervened in Gender Needs.

- Safe water extension reduced GBV which was caused by; high waterborne diseases insurgency in most homes, lack of clean water for drinking.
- Energy saving stoves ended the problem of firewood shortages since the technology requires little firewood.
- Eco-san latrine technologies reduced open defecation and brought good sanity in most homes.

- Time for doing other basic activities in homes was availed.
- Vegetable growing did not only provide diet but it's a source of income in some HHs esp. on the side of women, a woman testified to be earning 5000shs daily from eggplants.
- Women learned how to take care of their families, how to work and participate in VISLA groups hence better living standards
- BCC approach also was ideal in most families where men adjusted and shared responsibilities with their women (before it was women's duty to even construct latrines, drying racks, bathing shelters, etc but now men after having been sensitized they contribute big towards sanitation improvement in homes.
- Use of tippy taps for hand washing was not known in the village but fortunately by the time corona virus erupted Nyakera people new how to wash hands and most homes had tippy taps now it's a habit for most individuals to wash hands during critical times.
- Availability of food- most homes due reduced medical bills they can now save, others have invested in fish business, in turn families can afford to buy food.

Understanding the pay as you fetch strategy.

- Water users are contented with the strategy as one way of sustaining the water system
- Use of token is appreciated because it has taught water users to use water responsibly.
- ATM is the best water point one have access to water 24hrs/7days.
- No cheating of water users when tokens are used.
- ATM have value for many, 100shs for a full jerican of water.
- No Misunderstandings in water business when using water tokens.

How was advocacy used in the Programme

- Women's voices can now be heard when advocating for sanitation promotion, clean environment and conserving of natural resources.
- Women's rights awareness creation/campaigns helped women to share some responsibilities in homes.
- Enrollment of both girls and boys increased at Nyakera Pri. School as result of advocacy.
- Advocating for a clean Nyakera trading center resulted to formulation of a monthly work plan to clean Nyakera Town at least once in a week, now Nyakera is one of the landing site along lake George with cleanest compound.

Others actors that participated and plays a vital role in the Nyakera community.

- Baylor College of Medicine
- Medicines Frontier
- Midwestern Umbrella of Water and Sanitation (MWUWS)

Achievements.

- Facing of the landing site that led to Nyakera Fishing Village to be promoted to a landing Site.
- Business of Laying interlocking blocks for Latrine construction created employment opportunities for the Youth.
- Eco-san construction ended the problem of sinking latrines, OPD
- BCC- approaches resulted to sharing of gender roles on sanitation, and other home responsibilities.
- Growing of vegetables (Egg plants, dodo, cabbages, onions, etc improved home diet and incomes

- Water for production was ideal in; reducing cattle movement in Nyakera Trading Centre, Lake Water contamination, death of cattle to crocodiles in the lake etc this increased the number of cattle and volumes of milk.
- Safe water was also helpful in the following; reduced waterborne diseases esp. bilharzia, intestinal warms, severe cough, asthma, typhoid etc, reduced domestic violence in most homes. Now there is peace and saving habits improved.
- Energy saving stoves construction project also reducing cutting of many trees for charcoal, and restored environment conservation within Nyakera and other villages where trees would be cut in big numbers for charcoal.
- Tree planting esp. environment friendly or climate friendly tree species have seen restoration of green vegetation in most areas of Nyakera this in long run will reduce soil erosion and landslides.
- The construction of fish cleaning and marketing slab structures have resulted to quality fish, that attracts market and high prices hence improving living standards.

Sustainability plans.

- Existence of management committees esp. the landing site committees, CLTs Committees, cattle trough management committee.
- Safe water is being management by MWUWS.
- Water is being paid for an assurance that it will be sustained.
- Existence of government authorities in the O&M plans and existence of predicted risk handling mechanisms also assures the community that the infrastructures will safely be managed for years and years.
- The participants also revealed that they were in serious need for the provided services and they see no reason why they shouldn't take care for the infrastructures.

Challenges.

- Cost sharing on eco-san construction is high at 1,000,000shs
- High Private taps connection fees
- Some areas still lacking safe water.

Recommendations

- Eco-san costing sharing should be reduced to 500,000shs.
- Safe water be extended to other areas stressed by water.
- Availing promotion to every HHs willing to have Private Tap.

Community Members Karangura (18/10)

Community members included LC1 chairpersons, representatives of drama groups, stone quarry groups and other program beneficiaries.

What did the program do on advocacy to improve IWRM and how?

Through sensitization meetings and continuous community engagement the program helped the members to empower them and advocate from their leaders, other development partners and the community at large and they include;

Good agronomic practices aimed at protecting Mpanga from silting, degradation through the training of landowners on establishment of soil and water conservation structures like trenches

- Through drama groups they advocated for increased protection of the river, protection of other water resource like wetlands, swamps and planting of more trees that are friendly to the environment.
- Lobbying for other alternative sources of livelihood like brick making, bee keeping from other partners like UWA
- -
- Advocate for improved hygiene and sanitation both at hh level and school especially during this Covid.
- -

Which governmental actors have been involved to which extent in which phase of the program?

- The government actors involved included mainly the LC1 Chairpersons and these were so key in the mobilization of community members to take part in the sensitization meetings, planting of trees.
- Supported the program in site selection for the establishment of a tree nursery bed.
- > Helped in identification of landowners adjacent to the river for sensitization.
- > During enforcement helped in convincing the landlords during such interventions.
- Bye-law formulation together with the subcounty technical team
- Formulation of groups like the drama groups that help to spread the message of water resource management.
- > At planning local leaders have been involved especially when planning for a new program.
- > During monitoring and follow-up of the interventions, local leaders have been involved.

Effects of this involvement on the achievements.

- Promoted good relations of community with the technical teams at different levels i.e subcounty, district, other implementing and this has helped them in a way that they know who to report to incase of any challenge.
- ✓ Landowners who previously owned land in the buffer zone voluntarily accepted to vacate.
- ✓ There has been natural regeneration of the ecosystem due to the IWRM interventions, reduced dumping of waste.
- ✓ There has been an improve on the agronomic practices hence reduced silting of the river.
- Also, an improvement on sanitation and hygiene, water for drinking both at household and school and this has increased school enrollments especially for girls who have issues when it comes to poor sanitation especially at school.
- ✓ There has increased accessibility of trees because the nurseries are situated near the communities.

Which gender-practical needs and strategic interests related to IWRM have been adressed?

They included;

Hygiene and sanitation both at household and school

Improved nutrition both at household and school

Firewood

Eco-tourism from the planted trees that attract beautiful birds for tourist.

Climate modification due to the fact trees through the vapor they produce play a vital in the formation of rainfall.

Women participation

Women have been so much involved in the implemented of the program, women head VSLA groups, drama groups, playing a vital role in catering for the household needs like food, water, firewood **Challenges**

Cost of Ecosan still high Trees stocked in the nursery not enough More need to support the sand miners and those previously in stone quarrying groups that freely vacated the river banks with alternative sources of livelihoods like beekeeping, fruit growing, vegetable production and other green jobs.

Sustainability plan

Through their technical and subcounty technical teams promised to continue supporting these interventions because they are so key in as far as water resource management is concerned.

MWE- AWMZ FORT PORTAL (18/10)

Introduction/ Background

As MWE it was rolled out in the Rwenzori region in 2011 and as a ministry they had a soft landing in the region because PROTOS together with its implementing partners already set pace. With PROTOS developing the Mpanga Catchment Management Plan (CMP) in 2015 and MWE guided in its build-up but most of the works were done by PROTOS. As a ministry they have aided in the development of a number of CMPs for several rivers like River Mpanga, Nyamwamba, Semuliki etc and there planning is equated at 60% for all the zones. This financial they plan the develop CMPs for River Kafu and Nyamugasani.

Also stated that Albert is still unplanned but going to be panned for after a thorough diagnosis of the issues concerning the community.

All implementing partners are free to implement their interventions in given catchment as long as they guided by the Catchment Management Committees after they have fully presented their CMPs. **MWE collaboration with PROTOS**

Funding of the catchment management committee meetings that are held on quarterly basis to discuss issues related to water resource management, environmental protection and conservation and other environmental related aspects.

Engagements in the Uganda water and environment week usually in March aimed at creating awareness amongst the public on water resource management, environmental protection and conservation and PROTOS has been so key for instance this year the Uganda water and environment week was held and PROTOS took lead in organizing schools to take part in school debates on issues related to environmental conservation and the debates were conducted both in English and local language for all stakeholders to interpret.

Distribution of indigenous tree seedlings to the local communities and over 100,000 tree seedlings have been planted and the previous follow-up visits by the ministry with in the zone, 75% of the planted trees have survived.

Regular monitoring visits by the ministry in different intervention areas were PROTOS and its partners work like Nursery beds, degraded hotspots, water and sanitation facilities established in different areas.

Appreciation

Commended PROTOS and its partners for its continuous involvements with the ministry as away of updating some of the interventions.

Appreciate PROTOS work towards improving people's livelihoods by providing alternative source of livelihoods like beekeeping, tree planting, fruit growing that the ministry has failed to provide. There has been a gradual shift of mindset among local communities towards water resource

management, environmental protection, thanks to PROTOS implementing partners for the tireless sensitization of the community on the dangers resulting from environmental abuse.

Appreciated the program for its bottom-up planning that gives the beneficiaries an opportunity to suggest interventions of their choice.

That for the 6 years River Mpanga was badly off in terms of silting, buffer zone encroachment but due to the IWRM interventions put in place there has been regeneration of the natural ecosystem, reduced deposition of eroded soils into the river, reduced damping of waste into the river. **Needs**

More need to sensitize the community targeting mindset change, dangers resulting from environmental abuse

Stocking of more trees in the nursery beds to cater for the overwhelming demand arising from the community.

Challenges

There is an issue of limited resources to aid in the development of CMPs, conducting awareness and sensitization sessions, conduct quarterly reviews this is their funding from government is limited.

Karangura subcounty (18/10)

Area: Capitalisation and Advocacy

Questions;

1-To what extent has government been involved in the IWRM program?

The involvement by local government at the sub county level in the IWRM program at different levels from inception, planning, reviewing, and monitoring include;-

- Analysis of needs assessment conducted by developed by the sub county
- Mobilisation and sensitisation of the community to embrace the program against encroachment
- Signing of a Memorandum of Understanding with the development partner
- Providing technical and political support to the implementing partners
- Monitoring and follow up of the program activities to ascertain the quality of the workmanship and quality materials
- Conducted health week to spot check the hygiene and sanitation status of the villages under program intervention
- Formation of natural resource conservation committees
- Formulation of by-laws which are before the solicitor general for legal guidance having been passed by council in April,2020
- Sensitisation of local communities against encroachment
- Coordination of different partners implementing different programs within the subcounty e.g. HEWASA, IDP, NRDI to avoid duplication of services
- Linking the community with UWA for alternative livelihood programs that would reduce land degradation along upper R. Mpanga.

2-How have the advocacy activities (policies, by-laws, etc.) been effective or what changes have been registered as a result of the advocacy activities related IWRM?

- Reduction on the rate of encroachment and contamination of River Mpanga due to stone quarrying, and sand mining
- Planting of indigenous trees provided by the established nursery beds in Upper Mpanga catchment to support restocking of degraded spots
- Regeneration of natural vegetation as a result of controlled unsustainable human practices e.g. stone quarrying and sand mining
- Increased involvement / participation of local communities as well as local leaders as a sign as of ownership of the program
- Improved sanitation and hygiene as result of ECOSAN toilets, conducting toilet world day, health week
- Improved livelihoods and income as a result of the provision of alternative livelihood activities e.g. poultry, kitchen gardening
- -

- Challenges

Low income levels of most members community and therefore not able to afford the Ecosan toilets

• Non fulfilment of the promise for alternative livelihood activities by some implementing partners

- Sustainability plans

- The sub county technical team will continue with follow up and monitoring of the program activities
- Enforcement of established bylaws, ordinances and policies
- Involvement of development partners in budget and planning processes

18. Annex 9: Overview of the sites visited

Site and date	Activities in this site
Mpanga falls (14/10)	Protection of cycads, reforestation, demarcation of the no-go zone, erosion control, drinking water production, drip irrigation, tree nursery.
Nyakeera landing site (15/10)	Integrated approach: Ecosan latrines, drinking water (ATM water point), cattle trough, ISBB production, anti-erosion protection, fish slabs
Kayinja landing site (15/10)	Similar to Nyakeera landing site, but we worked here in the previous programme and not in the current. To see the sustainability of our interventions
Fort Portal – river Mpanga (18/10)	Tree nursery; sensitization campaigns
Karangura (18/10)	Household Ecosan, school latrines, wood logs in school, river protection

19. Annex 10: presentation of the capitalisation 'Exploring digital water tapping'

Summary

- Improved access: smaller lines & self service
- Data ownership: client monitoring & detection of water line via dashboard
- Digital payments: people have more trust, money cannot be used for other things
- Inclusion: possibility to have different prices for vulnerable households
- Low power usage using solar panel, possible operation without mobile network
- Challenges with tokens access, lost, network when is off

- Intention: Support Government structures (regional Umbrellas) to professionalize management of rural-urban water systems using water ATMs:

- Increase payment ratio
- Assure transparency
- Generate client-based information for focused promotion and follow up

Who chose this experience for the capitalization and how (criteria)?

By Join For Water team – Uganda, we did not use any explicit criteria, Current national policy to go for piped water systems and stop drilling shallow wells/boreholes and pay as you fetch payment model Programme developed interesting experience in line with these policies that can be scaled-up.

Description of the capitalization process:

- After the installation of the Water ATM the service provider shared the dashboard (Online monitoring),

- Monitoring and follow up visits in the field,
- Information sharing from HEWASA (Partner) on usage, consumption,
- Analysis on fees payments, consumption daily, weekly and monthly by Join For Water,
- Made ppt on the world water week Stockholm and CSO forum in Uganda.

Process of sharing and dissemination:

World water week – Stockholm on August 25th 2020 – Online session with ppt and debates on intelligent water management and 111 participated attended with Mid Western Umbrella 11th CSO – Civil Society Organizations Forum under UWASNET – Uganda Water and Sanitation Network in Uganda October 6th 2021, – Online session with ppt and debate questions, with International and national organizations, Ministry of Water and Environment, Ministry of Health, Members of parliament, about 60 attendees

Use of capitalization in advocacy

- Objective is to integrate prepaid water management systems in the water policy,

- What we see is the willingness of the government institutions to manage the pilot Kiosks (Kampala, Kyaka refugee settlement and Kitagwenda),

- Upscale is possible if integrated in the new water policy

- Been contacted by GOAL Uganda on the ATM system installation – usage, functionality, customer satisfaction.

Final appreciation

Capitalization raised interest by other Implementing partners like Water For People, MWE, etc Online session can reach a wider audience, however, only those that have access to internet.

20. Annex 11: List of persons present at the restitution



21. Annex 12 : Report of the restitution

EVALUATION RESTITUTION/FEEDBACK MEETING HELD ON 20TH JANUARY, 2022 AT IGOGORA COUNTRY RESORT.

<u>AGENDA</u>.

- 1. ARRIVAL AT IGOGORA COUNTRY RESORT
- 2. WELCOMING WORD/PRESENTATION OF THE AGENDA
- 3. PROJECT PROGRESS/EVALUATION FINDINGS
- 4. REACTIONS/WAYFORWARD
- 5. DEPARTURE
- -

INTRODUCTION:

The invited participants from different areas where the IWRM projects were implemented and Final Evaluation conducted in October –November 2021 arrived and registered as early 9:00 am at the designated meeting venue.

The meeting began a briefing from the Program manager, JFW, Mr. Bwambale George.

The meeting was attended by different stakeholders from Ministry of Water and Environment, the Local Governments of Kabarole, Kamwenge, Kitagwenda districts as well as Fort portal city; local beneficiaries and Implementing partners JESE, NRDI, and Hewasa.

He called for self-introduction by the members present in the house and also the online team from Belgium.

WELCOMING REMARKS.

The RDC Kitagwenda district in his opening remarks welcomed the attendees to the meeting. He thanked Protos/ JFW for providing a helping hand to the benefitting communities. The RDC was quick to mention that Kitagwenda was the main beneficiary in his own opinion and suggested that is why they made majority in the meeting.

He further asked the Local leaders to mobilise and sensitise the communities living adjacent to the Mpanga River into preserving and protecting it for future generation as well as lead campaigns to end its destruction and degeneration.

PROJECT PROGRESS/EVALUATION FINDINGS

The Project Manager JFW, led the members in the house through the extent of benefits the project achieved in 2017-2021 in the different areas of intervention. This was compiled during the Final evaluation exercise conducted in October-November 2021 with the support from different stakeholders, thus; the implementing partners, Local Governments, MWE, JFW Team from Belgium, and Calypso Consultancy firm. This was based on the improved models of IWRM implemented in upper Lake Albert and Mpanga catchment under different result areas.

Result 1- Communities in the two water catchments improved access to water and sanitation by availability of improved and innovative operational public facilities.

The key achievements registered include;

+16098 people have access to water

+6841 people have access to sanitation using household or school Ecosan

Kanara, Nyakeera, Kyendagara, Kitonzi, mukalere, Kayinja, Kanyabikyere have all benefited from minigrid water extension

Result 2-Local Governance of water resources is improved thanks to better planning methods and cooperation between different the relevant actors and thanks to their enforced capacities. The key achievements in this section included; Establishment of 4 SWSSBs/ water boards in Kanara, Nyabbani, Mahyoro, and Buliisa with short term and long term benefits of people taking up the

management of their water points to reduce laps in breakdown, formation of VSLAs at water points among others.

Result 3-Planning & implementatt5 ion of land use activities by households in the hotspots is sustainably improved and guided by community based IWRM plans at micro-catchment level. The key achievements in this area included;

-10 hotspots with improved land use

-10 community based micro catchment plans.

-5 tree nurseries were developed both in the ULA and Mpanga Gorge

The key IWRM activities conducted were tree planting, sanitation and hygiene, agroforestry, soil conservation, apiary, energy saving measures, demarcations

Result 4-The experiences and lessons learned /best practices are documented and used for advocacy at Nation al level. Under this result area, 12 documents were developed and shared through videos, by-laws, and documentaries and meetings at national level by IWRM Team led by UWASNET.

• The key Evaluation questions that were asked and the outcomes.

1. What was the effect of the involvement of government actors?

-<u>MWE/DWRM</u>:-Alignment of national policy; Gazetting of unserved villages; legal recognition of landing sites

-AWMZ:- Upscale the intervention in hotspots; Joint restoration campaigns at the hotspots

-District;-selection of contracts, monitoring, ownership, enable projects, attract new funding

<u>-Sub County;</u>-Mobilisation, planning of activities, provision of land for installation of infrastructure, monitoring, cresting local contractorship, training that improved agriculture, and hygienic practices

2. To what extent do people think that the access to drinking water has improved due to the IWRM program?

There has improvement in; Accessibility in terms of reduced distance, Availability where water is seen to readily available via the ATMs and caretakers, Quality has improved with reduced risks to contamination , Management which is trusted , and prices that are affordable by the locals

3. How do people appreciate the "pay as you fetch model"?

It was pointed out that this model has blessed with, Accessibility due to shorter queues, 24/7 service and self service; Transparency due to trust, and money going straight to the provider.

The key challenge faced by the model was found to be network failure.

The PM continued to lead the house on the challenges that were found out during the IWRM Program implementation, these included.

The effect of COVID 19 on mobility of resources,

Low community co-funding,

Land ownership problems at the river banks and water points,

Gender inequality in staff recruitment

Questionable criteria on selection of community beneficiaries.

Besides, he continued to guide the House to a discussion on what could have been done differently and can inform decision in the next program and the inputs of the house under each provision were:

Water and sanitation/IRWM(protection of water resources)

- -Better sustainability plans for water infrastructures should be put in place
- -Enforcement of ordinances to protect that water resources

- -strengthening social marketing strategies for the sanitation and hygiene infrastructures
- -

Area of intervention

- -Other hotspots like Ntara need to be considered
- -revisiting of the areas that recently benefitted
- -

> Approach and methodology used

- Reduce co-funding scheme for sanitation and hygiene facilities to cover a wider area
- Strengthening the local structures for better sustainability processes/plans
- Do more on policy advocacy that promote a people led approaches
- Evaluation needs to be conducted on annual basis for better results

Stakeholder involvement

- -the government and local leaders need to support the work of the donors
- Enforcement of laws and ordinances by the Local Government

Remarks from MWE representative

The MWE representative is very interested in the activities of JFW because they support them in service delivery.

He continued to say that on their calendar as a MWE regional office in Fort portal, there will be water week that begins on 16th of March and later crowned with "Save River Mpanga marathon" to be held on 20th March. He promised to share the concept for this drive with all stakeholders for this drive and called on them to join in the struggle as a way to save River Mpanga from extinction

Closing remarks

The Deputy RDC Kamwenge, in her closing remarks applauded JFW for acting as a true forth arm of the government in supporting government in conserving the environment and more specifically River Mpanga.

She continued to challenge the local leaders to continue supporting civil society that are pro people like JFW by preaching the gospel of conservation as a collaborative effort, this is the only way all people can conserve and benefit from what nature provides.

She also requested JFW to return to Kamwenge in the new program.

She closed the meeting by pledging to support JFW in their activities whenever called upon as the office of RDC.

On the other hand, the online team thanked JFW office, Fort portal for organising the Evaluation restitution meeting and the attendees for such wonderful contributions.

The meeting closed at exactly 12:30 PM.

23. Annex 13: summary description of the results achieved in this programme

<u>Result 1: The communities in 2 water catchments have improved access to water and</u> <u>sanitation by availability of improved and innovative operational public facilities</u>

The programme built 6 mini-grids:								
name	type	Subcounty	Length	#tapstands	ATM/kios k	#water users	Management	
Nyakeera	GFS	Bukurungo	6 km	2	1	1 015	Umbrella	
Kyendangara	GFS	Mahyoro	9 km	6	1	5 189	Umbrella	
Kanyabikere	GFS	Mahyoro	11,8 km	8	1	5 328	Umbrella	
Kanara	GFS	Kitagwenda	6 km	7	0	3 918	National Water	
Mpanga Falls	Ram pump	Ntaara	-	1	0	216	Water committee	
Kyotamusana	Solar Pump	Ntaara	-	1	0	432	Water committee	

Drinking water







Kyendangra water public tap stand

Nyakeera Ls water Atm

Nyakeera Ls cattle trough

On the water systems of Nyakeera and Kyendangara water ATM's have been by Susteq-Water Forever Uganda. 20 people were trained by the Susteq team, to manage this system.

The ram pump, which was installed at Mpanga Falls in recent years and initially provided drinking water for the cattle, has been fitted with a treatment plant so that it now also provides drinking water.



Household sanitation

A total of 262 Ecosan latrines were built (162 by NRDI and 100 by JESE).

School sanitation

School sanitary facilities in 7 schools were built by private contractors recruited through open tendering.

School	River Basin	District	Sub-county	#stances	# pupils	# access (75)	# access (40)
Nyakachwamba	Mpanga	Kitagwenda	Ntaara	8	767	600	320
Rugarama	Mpanga	Kamwenge	Kabambiro	8	892	600	320
Nyakeera	Mpanga	Kitagwenda	Bukurungo	8	468	600	320
Walukuba	ULA	Buliisa	Butiaba	8	1503	600	320
Kijangi	ULA	Buliisa	Buliisa	8	489	600	320
Kazingo	Mpanga	Kabarole	Karangura	8	600	600	320
Buhara	Mpanga	Kabarole	Kichwamba	8	500	600	320

Each public sanitation infrastructure consists of 4 stances and a urinal for boys with hand washing facility and of 4 stances and wash room for girls with hand washing facility. The latrines are Ecosan latrines and the end products are used in school gardens. The latrines are fitted with a ramp so that they are accessible to disabled pupils. A rainwater tank with a capacity of 10 000 litres has also been installed in each school.



Annual sanitation plans are developed with the school Administration, SMC, and PTA in all schools mentioned above. This made the surrounding communities more responsive in terms of behavioural change to issues of sanitation and hygiene standards. The pupils were trained and acquired skills on sanitation and hygiene best practices that would contribute to the whole school's improved sanitation and hygiene standard with the pupils taking the lead.

Hygiene in the villages

The 04 villages of Iharagatwa, Nyakeera A, Nyakeera B, and Karubuguma were declared ODF (Open defecation free) on October 2021, in the Mpanga Catchment. Meanwhile there was a notable increase in latrine coverage and usage leading to reduction in Open defecation in all catchments (Mpanga & ULA catchments).

Sanitation in the fishing villages

In Nyakeera landing site, 1 existing public Ecosan toilet (with 1 stance and an urinal) was renovated. and an additional public stance for women was constructed. Because of the challenges that poses the operation and the maintenance of public sanitation infrastructure, compared to household sanitation, it was decided to stop with public toilets and focus on marketing household toilets. After a participatory bottom up approach the communities chose to shift this budget to other public infrastructure (fish cleaning, ovens, and household toilets).



Result 2: Local governance of water resources is improved thanks to better planning methods of and better cooperation between the relevant actors and thanks to their enforced capacities

Water boards

The 3 Water User Associations that were established in the previous programme (Nyabbani, Kanara and Mahyoro sub-counties) were supported into their transformation into SWSSBs (Water Boards). The members of the water user associations were trained in managing water points, and the project provided them with the necessary equipment. The Water Boards were legally recognised and a MoU was signed with the sub county authorities for collaboration.

A fourth water board was established in ULA, in Buliisa sub county and a MoU was signed between the with the sub county.

Management mini grids

3 mini grids that have been constructed by the program, are managed by the Mid-Western Umbrella. The Mid-Western Umbrella is a public water utility company operating and managing various piped water supply systems in Mid-Western region of Uganda. The drinking water pipes are therefore not managed by a delegated private service provider, but for the installation of the ATMs, cooperation was established with Susteq, which in turn is a private service provider. The cooperation with Susteq was decided upon after a public tender. The management of the ATMs is outsourced to local entrepreneurs, who were trained by Susteq- Water Forever. The employees of the Western Umbrella also followed this training.

In addition, 1 of the mini grids is managed by National Water and Sewerage Corporation; The National Water and Sewerage Corporation (NWSC) is a water supply and sanitation company in Uganda. It is wholly owned by the government of Uganda.

The last 2 mini extensions are managed under the community water user committees who manage, operate, and maintain the system. The committee with the local leadership (Sub County) work together to ensure the system is operational and water users pay a fee weekly or monthly for operation and maintenance.

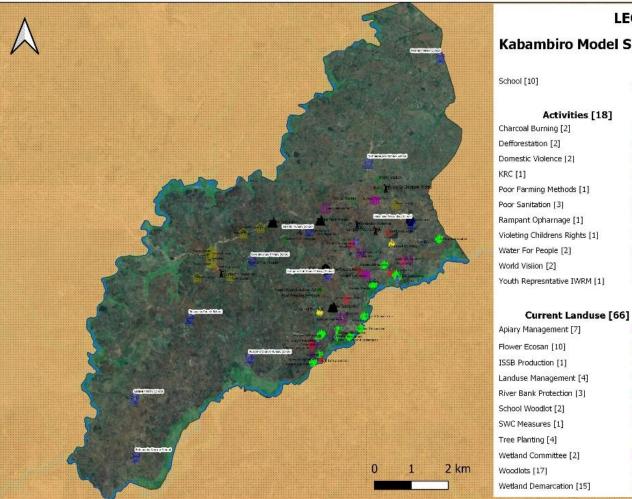
<u>Result 3: the planning and implementation of the land use activities by the households in</u> <u>the hotspots is sustainably improved and guided by community based IWRM plans at</u> <u>micro catchment level</u>

The programme worked 10 hotspots. The hotspots were identified in the micro catchment plan by the MWE. Some were referred by local leadership through the partners.

Hotspot	District	Subcounty	Catchment	Type of hotspot	CMP ¹³	Digital map
Mpanga Falls	Kitagwenda	Kanara, Ntaara	Mpanga	river bank / ecosystem	Yes	Yes
Rushango	Kamwenge	Kabambir O	Mpanga	wetland	Yes	Yes
Nyakeera	Kamwenge	Bukurung O	Mpanga	landing site / fishing	Yes	Yes
Kyendangara	Kitagwenda	Mahyoro	Mpanga	landing site / fishing	Yes	Yes
Kanyabikere	Kitagwenda	Mahyoro	Mpanga	landing site / fishing	Yes	Yes
Karago center	Kabarole	Karago	Mpanga	river bank	Yes	Yes
Nyakitokoli	Kabarole	Karangura	Mpanga	river bank	Yes	Yes
Fort Portal Center	Kabarole	Fort Portal Town	Mpanga	river bank	Yes	yes
Nsambiye	Buliisa	Buliisa	ULA	wetland	No	Yes
Walukuba	Buliisa	Butiaba	ULA	landing site / fishing	No	Yes

¹³ The Catchment Management Plan (CMP) is made by the Catchment Management Organisation and consists of a sample size of different stakeholders within the catchment. For the different interventions and hotspots maps were developed participatory and digitized afterwards. For the methodology on micro catchment planning see annex 10.

KABAMBIRO MICRO CATCHMENT PLAN



LEGEND

2

-

-

 $\boldsymbol{\tilde{k}}^{n}_{i}$

rin.

楼

. 12

X¹ 俞

1thn

Én

-

*

ψ

×

.

4

.....

<u>éł</u>

-

Join Por Water

River

Wetla Protec

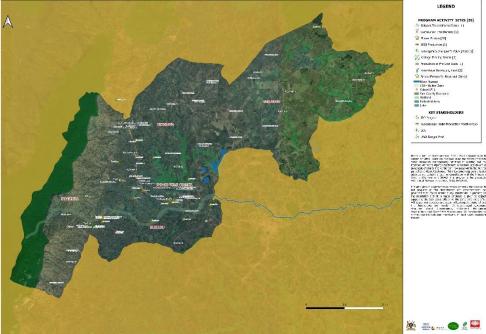
Kabambiro Model Sites Sub C

Join	For	Water
------	-----	-------

KYENDANGARA MICRO CATCHMENT PLAN



KARANGURA MICRO CATCHMENT PLAN



NYAKEERA MICRO CATCHMENT PLAN



In these hotspots the following types of activities were carried out:

Hotspot	Drinkin g Water	Treeplantin g ¹⁴	Sanitatio n	Hygien e	Agro- forestr y	Soil &wate r	Apiar y	Energ Y	Deamarcatio n
Mpanga Falls	x	Х	x	х	х	Х	х	Х	x
Rushango		Х	х	х	х	х	х	х	x
Nyakeera	х	х	х	х	х		х	х	х
Kyendangar a	x			x					
Kanyabikere	х			х					
Karago center		x	x	х	х	х			
Nyakitokoli		Х	х	х	х	х			
Fort Portal Center		Х	x	х	х				
Sambye		Х			х			Х	
Walukuba		Х	х	х	х				

<u>Result 4: the experiences and lessons learned/ best practices are documented and used for</u> <u>advocacy at national level</u>

The following documents on experiences and lessons learned were made in the programme:

N°	Document	Public	Date	Organisation	Content
1	Ecosan	VSF	2021	JESE	Construction design
	technology				

¹⁴ Tree planting mentioned is the planting of any indigenous tree species. Agroforestry focuses on the benefits such as woods, fruits and trees.

N°	Document	Public	Date	Organisation	Content
2	Micro catchment planning	VSF	2021	JESE	Mapping, digitisation of maps, stakeholder engagement, capacity building of committees, monitoring and documentation of best practices
3	Micro catchment planning	Communities	2020	JESE/NRDI	Mapping, digitisation of maps, stakeholder engagement, capacity building of committees, monitoring and documentation of best practices
4	Movie upper Lake Albert	communities	2018	JESE	Hygiene and sanitation
5	Kobo toolbox training & Manual	NNGA's & UWASNET	2020	JFW	Installation and usage
6	By-law	Karangura sub-county	2021	NRDI	Enforcement and what is permissible for community
7	Documentary water & environment week	Various	2019	JFW	Environmental awareness
8	Documentary IWRM Mpanga Fall	Various	2020	JFW	Tree planting
9	Brochure on impact of Ecosan technology in schools	Brochure printed	2018	JFW, NRDI	Eco Sans in schools
10	report on assessment of the Reuse Safety and the Fertilizing Potential of the Waste Products from Ecosan Toilets	Partners and different stakeholders in the region (oa. District sanitation coordination meetings)	2019	JFW (internship)	Safety of the use of Ecosan products
11	The future of community based drinking water management: exploring digital water tapping	Various (participants in session of world water week)	2020	JFW	Experiences with ATM
12	Advocacy short video about our partnership with NRDI and the communities where work and new catchment	Online	2021	JFW/NRDI	Experiences with hotspot areas we work in and some of the underlying advocacy issues

N°	Docun	nent		Public	Date	Organisation	Content
	area	for	new				
	progra	m					

Product 1: VSF took over Ecosan technology after an intensive theoretical and practical onsite training **Product 2/3**: VSF took over micro catchment planning approach after an intensive theoretical and practical onsite training. The same goes for our partners

<u>Product 4:</u> Movie to sensitize communities in ULA about current practices <u>https://www.youtube.com/channel/UCPscJQZFI_80k-dySmCKcfw%C2%A0</u>

Product 5: UWASNET, Ministry and Belgian NGA's now use kobotoolbox for digital data collection after our training sessions and support

Product 6: The aim of this documentation was to develop the area specific bylaw through facilitating the local leaders and community members in Karangura sub county to formulate, enact, implement and enforce environmental protection bylaws using consultative participatory approaches involving all different stakeholders to promote beneficiary ownership of project outcomes and sustain the achievements beyond project life.

Product 7: A short movie was developed to advocate the relevance of the Mpanga event in commemoration of the regional water and Environment week in the Albertine region 11th -15th march 2019, Fort Portal. The movie documented the issues related to raising public awareness and interest in efforts towards the preservation of Water resources in particular River Mpanga, coordinated efforts among CSOs, Government, Private sector and civil society in the Preservation of the Water Resources, innovations and interventions for improving WASH and IWRM in the region (2019)

Product 8: The Mpanga tree short documentary is about the trees planted along riverbanks and on sites/slopes which are moderately and heavily degraded due to human interference of slash & burn activities by farmers to increase farmland and how to prevent newly planted trees from being cut/burned and destroyed. (2020) Link: https://youtu.be/nrR6GuktIP8

Product 9: Area for documentation identified: How the Ecosan technology has impacted on beneficiaries, behaviour change, perception and attitude of school going children. 1 Brochure developed with a compilation of experiences from beneficiaries in 2 schools supported under the program (2018)

Product 10: A report on assessment of the Reuse Safety and the Fertilizing Potential of the Waste Products from Ecosan Toilets in Uganda was shared among the partners and stakeholders in the region. The report findings were shared in one of the District sanitation coordination meetings for Kabarole and an action was agreed to have all the communities of Karangura adopt the Ecosan toilet technology to reduce the contamination of the water resources upstream (2019)

Product 11: The future of community based drinking water management: exploring digital water tapping - Antea Group, in close collaboration with Enabel, VITO and Join For Water organized the webinar 'The Internet of Water – Intelligent Water Management System on the World water week commemoration: The Internet of Water – Intelligent Water Management System - YouTube and Presentation (2020)

Product 12: Advocacy short video about our partnership with NRDI and the communities where work and new catchment area for new program and experiences within the hotspot areas we work in and some of the underlying advocacy issues - YouTube (2021: https://www.youtube.com/watch?v=sUQEMJDT9Ug)

24. Annex 14: logical framework

Indicator	Baseline	Expected outcome by the end of the program	Actual result	Actual result as % of expected outcome	Source					
Specific objective: in	nproved models of t	he integrated water res	sources management (IWRM)) have been implemented i	n two catchment areas and the best					
practices are valorised at national level										
IO1. Progress rate of sustainable access to drinking water due to new innovative water systems in rural areas and a better management. (figures based on reported average % of all the selected Sub-counties in the 2 catchments where protos will	75% have access to drinking water and 30% of new water infrastructure is sustainably managed	77 % have access to drinking water and 90% of new water infrastructure is sustainably managed	77% have access to drinking water and 87% of new water infrastructure is sustainably managed	100% have access to drinking water and 97% of new infrastructures are sustainably managed.	Annual program performance report+ rap Nar +kpis + 2021 follow up, Water office Kitagwenda DLG, Mid-western Umbrella Kitagwenda branch, Field reports					
work) IO.2 Number of hotspots with IWRM issues(wetlands, forests, river banks, fishing sites) that have benefited restoring activities according to the Catchment Management Plans (CMP).	4 hotspots in Mpanga identified None in Upper Lake Albert	6 hotspots in Mpanga 2 in Upper Lake Albert	8 Hot spots in Mpanga catchment and 2 Hot sports in Upper lake Albert.	133 % achieved in Mpanga catchment and 100% in ULA	Annual program performance report, Natural Resource Office Kitagwenda, Buliisa, Kabarole DLG and Fort Portal tourism city, Field reports					

Indicator	Baseline	Expected outcome by the end of the program	Actual result	Actual result as % of expected outcome	Source
IO 3: Number of hotspots in Uganda where other actors implement IWRM activities inspired by the bottom up approach of Join For Water	There are no other hotspots where IWRM is implemented in bottom up approach	+ 6 hotspots where activities on IWRM issues are implemented by other actors	+6 hot spot areas	100 % hotspot areas replicated the IWRM practices	Annual program performance report, M&E Reports, Partner quarter reports
IR1.1 Number of additional people in the Upper Lake Albert and Mpanga catchment that have improved access to drinking water in rural areas by the use of innovative	in 2 water catchmen 686 000 persons have access to drinking water in the 2 catchments (75% of the population)	ts have improved access +4 000 persons (due to 2mini grids) + 13 200 pers. (due to 11manual boreholes)	to water and sanitation by av +16 098 persons (due to 7 mini grids) + 0 persons (due to boreholes)	ailability of improved and in mini grids 402% <u>boreholes 0%</u> mean 94%	novative operational public facilities Annual program performance report, Daily performance reporting tool with Kobo account, Water office Kitagwenda and Buliisa DLG, Mid- western Umbrella Kitagwenda and Buliisa branches, Field reports
interventions IR1.2 Number of additional people in the Upper Lake Albert and the Mpanga catchment (in total 914.500persons) that have access to sustainable sanitation at home and in their learning or working environment	736.500 persons have access to sanitation at home in the 2 catchments (80%). Selected schools and fishing villages lack proper sanitation infrastructure	+ 1 500 persons have access to sanitation at home + 3 600 pupils (6 schools) + 4 300 persons in 2 fishing communities	 + 1 572 persons have access to sanitation at home + 4.200 pupils (7 schools) + 0 persons in 2 fishing communities 	105% access at household level due to program interventions 116% in schools 39.1% In two fishing communities have access.	Annual program performance report, Daily performance reporting tool with Kobo account, Health office Kitagwenda, Buliisa, Kabarole DLG and Fort portal tourism city

Indicator	Baseline	Expected outcome by the end of the	Actual result	Actual result as % of expected outcome	Source
		program			
-	e of water resources is	s improved thanks to bet	ter planning methods of and b	etter cooperation between t	the relevant actors and thanks to their
enforced capacities					
IR2.1 The number	3 Water user	+ 4 Water boards are	4 water boards installed	100% Achieved water	Annual program performance
of newly installed	associations of	installed and	and operational (3 in	board installation and	report, Daily performance reporting
Water boards in	Mpanga	operational	Mpanga catchment and 1	functionality	tool with Kobo account, Kanara,
the 2 catchments	catchment are	(reporting, setting	in ULA		Mahyoro, Nyabbani and Buliisa Sub-
that are reporting	ready to be	priorities)			county offices
and proposing their	transformed into				
priorities to	water boards				
influence decisions					
in financial					
planning					
IR2.2 Number of	No private	2 mini grids are	7 mini grids installed and	350 % achieved	Annual program performance
mini water grids in	operators of	operational and	functional	installation and	report, Daily performance reporting
rural areas being	Mpanga	minimum 1 is capable		functionality.	tool with Kobo account, Kitagwenda
managed by	catchment are	to run at least break			district local government, Mid-
delegated private	ready to be	even			Western Umbrella – Kitagwenda
service providers	transformed into				branch
that show financial	water boards				
sustainability of					
their business					
model					
R3: the planning and	implementation of t	he land use activities by	the households in het hotspor	ts is sustainably improved ar	nd guided by community based IWRM
plans at micro catchr	nent level				
IR3.1 Progress	No standardised	The standardized	The method was used and	166% standardised	Annual program performance
rates of the	method for micro	method was used for	plan was developed for 10	micro-catchment	report, Daily performance reporting
development of	catchment plans	the setup of micro	hotspots instead of 6	management plan	tool with Kobo account, JESE and
the micro-	in hotspots has	catchment plans in 6		initiated.	NRDI Natural resource department,
catchment	been developed	hotspots			
management plans					
and their					
implementation					
(selected micro					

Indicator	Baseline	Expected outcome by the end of the	Actual result	Actual result as % of expected outcome	Source
and all seconds		program			
catchments were					
shown to be					
hotspots in the catchment					
management plan)	No standard	The approved and	44% of women	1470/ of the represented	Annual program performance
IR3.2 Degree in which women are	methods for micro	documented method		147% of the represented stakeholders are women	
involved during the	catchment plans;	assures at least 30 %	participation and representation both in	stakeholders are women	report, Daily performance reporting tool with Kobo account, Monthly
set-up of micro	No guaranties that	of the represented	representation both in committees and during		Field reports
catchment plans	women rights and	stakeholders are	micro catchment		
catchinent plans	interests are	women.	management processes.		
	taken into account	women.	management processes.		
R1: the experiences		hest practices are docum	ented and used for advocacy	at national level	
IR4.1 Degree in	The IWRM group	The working group	3 meetings this year, policy		Joint sector performance reports,
which Protos is	is not active	meets 3 times/year,	brief for JSR and thematic		Annual CSO's Forum reports
giving a dynamic to	is not active	makes the annual	theme postponed to early		Annual eso si oranneports
the working group		policy brief for JSR	2022 (Covid – Kampala		
on IWRM, CC and		and the thematic	attacks).		
environment		team;			
		publication of 3 cases			
		in Sector			
		performance report			
IR4.2 The number	Only 1 brochure	5 cases of IWRM on a	12 cases of IWRM	240 %	Annual program performance
of documented and	and film on IWRM	hot spot are clearly			report, Daily performance reporting
visual products of	hotspot is	documented in a			tool with Kobo account, Albert
the innovations	produced and	format that can be			Water Management Zone and
that can be spread	being spread	spread			UWASNET Secretariat
to inspire other	(Kayinja fishing				
actors and for	village)				
influencing policy					

25. Annex 15: Monitoring scenarios

Project	Improved models of the integrated water resources management (IWRM) have							
	been implemented in two catchment areas and the best practices are valorised at national level							
Result or objective	[Result 1] The communities in 2 water catchments have improved access to water and sanitation by availability of improved and innovative operational public facilities.							
Indicator	[IR1.1] Number of additional people in the Upper Lake Albert and Mpanga catchment that have improved access to drinking water in rural areas by the use of innovative interventions.							
	Baseline	BaselineValue year 3Value year 5Source of verification						
	686.000 persons have access to drinking water in the 2 catchments (75 % of the population)	+ 2.000 persons (due to 1 mini grids) + 9600 persons (due to 8 manual boreholes)	+ 4.000 persons (due to 2mini grids) + 13.200 pers. (due to 11 manual boreholes)	Digital M&E tool, external evaluation, District and tendering reports, contracts with operators, sales register				
Definition								
Tool/measuring method/resource	- JESE (manual drill Before intervention - define target area	n: 'local baseline'						
inethour resource	- get the number o	f people living in t	-					
	- target area needs	s to remain the sar	ne over the years, b	out the number can vary				

	 source: sub/county make list of functional water points that are used by the people in your target area source: HH questionnaire (incl. name + GPS of WP) questionnaire at sample of HH calculate theoretical capacity this number cannot be more than the number of people in the target area Every year in december: go through same process, but start from 2. and add 5. calculate the difference with the number of the previous year 				
Planned trainings on tools and methods	you have to repo Akvo software	ort on this difference			
Date, period and frequency of the monitoring	baseline (before the intervention takes place) Annually – steps 2 - 5 including questionnaire				
People	Final responsible Monitoring	Lieven Peeters JESE +HEWASA field staff+ CMO + Private operators + IWRM committee + AWMZ + District/Sub county Local Government + CLTs Collecting data: e.g Focal point for JESE field staff: Becky, Lawrence, Shilla and Lukiya Focal point for HEWASA field staff: Stephen			
	Treatment data				
	OthersJESE: Marion (as she is the first contact person for JESE field staff) HEWASA: Stephen (as she is the first contact person for HEWASA field staff)				
Method of treatment of data					
Other info		she is the first contact person for JESE field staff) en (as she is the first contact person for HEWASA field staff)			

Project	Improved models of the integrated water resources management (IWRM) have been implemented in two catchment areas and the best practices are valorised at						
	national level						
Result or objective	[Result 1] The communities in 2 water catchments have improved access to water and sanitation by availability of improved and innovative operational public facilities.						
Indicator	[IR1.2] Number of additional people in the Upper Lake Albert and the Mpanga catchment (in total 914.500 persons) that have access to sustainable sanitation at home and in their learning or working environment						
	BaselineValue year 3Value year 5Source of verification						
	736.500 persons have access to sanitation at home in the 2 catchments (80%). Selected schools and fishing villages lack proper sanitation infra	+ 900 persons have additional access to sanitation at home + 1.800 pupils (3 schools) + 1.800 persons in 1 fishing community	+ 1.500 persons have access to sanitation at home + 3.600 pupils (6 schools) + 4.300 persons in 2 fishing communities	Reports of digital M&E tool, external evaluation, District Performance reports, tendering reports, sales register social marketing.			
Definition							

Tool/measuring method/resource	facilities,Hand washing facility, Safe menstruation management, Bath shelter, Rubbish pit, Separate animal shelter, drying rack), gender) Time count: incremental (compare with previous counting) Partner: - JESE (sanitation infra at HH, schools and LS (Mpanga in 1,2,3 yr) + (ULA - 4yr) - NRDI (sanitation infra at HH and schools (Mpanga) in 2,3,4 yr) Before intervention: 'local baseline' -define target area of intervention -get the number of people living in the target area -target area needs to remain the same over the years, but the number can vary source: sub/county - make list of functional sanitation facilities that are used by the people in your target area (school, Fishing village and HH) -source: HH questionnaire (incl. name + GPS of WP)					
Planned trainings on tools and methods	-Develop questionnaire/online data track tool i.e <u>http://www.kobotoolbox.org/</u> - Test questionnaire in few HH -Give training to field staff on the developed tool and how, when to collect data					
Date, period and frequency of the monitoring	-	e the intervention takes place) is 2 - 5 including questionnaire				
Implicated person	Final Lieven Peeters responsible Final					
	Monitoring Treatment	JESE + NRDI field staff+ CMO + Private operators + IWRM committee + AWMZ + District/Sub county Local Government + CLTs Collecting data: e.g Focal point for JESE field staff: Becky, Lawrence, Shilla and Lukiya Focal point for NRDI field staff: Edgar and Chris				
	data NRDI: Edgar + field staff Protos: George Bwambale; Hannelore Martens					
	Others JESE: Marion (as she is the first contact person for JESE field staff) NRDI: Edgar (as he is the first contact person for NRDI field staff)					
Method of treatment of data	Excel, Access					
Other info	HEWASA: Stephe	she is the first contact person for JESE field staff) en (as she is the first contact person for HEWASA field staff) ne is the first contact person for NRDI field staff)				

Project	Improved models of the integrated water resources management (IWRM) have been implemented in two catchment areas and the best practices are valorised at national level						
Result or objective	[Result 2] Local gover planning methods of thanks their enforced	and better cooperat	•				
Indicator	[IR2.1] The number of newly installed water boards in the 2 catchments that are reporting and proposing their priorities to influence decisions in financial planningBaselineValue year 3Value year 5Source of verification3 Water user associations of Mpanga catchment are ready to be+ 2 Water boards are installed and operational (reporting,+ 4 Water boards are installed and 						
	transformed into water boards	setting priorities,)	setting priorities,)	meetings, 			
Definition	 Definition: Number of newly installed water boards: The water board is a new structure in the water sector. It is an umbrella body that will be overseeing the operations of all water user committees, O&M of all the water sources in the sub counties of operation. Financial planning: the process of framing financial policies in relation to procurement, investment and administration of funds of an enterprise aiming to solve foreseeable problems Unit: # management structures Disaggregation: Sub counties Time count: Incremental (new structures in the year) 						
Tool/measuring method/resource	Partner: JESE - Mpanga and ULAGuide for WUA to be transformed into water board-Name of the water user association-Location(sub county and district)-Composition of WUA Committee(Males and females)-Women and youth in key positions and influencing decisions-No of WUCs registered with WUA- Level of registration(sub county, District)-Existence of a constitution- Existence of bye laws- Office premise for WUA is in place- Proper record keeping (minutes and accounts)- Monitoring visits to water points(Monthly, quarterly, Annually)- Participation in planning meetings i.e sub county and district						
Planned trainings on tools and methods	 Develop questionna Pretest questionnair Give training to field 	e – sampling on 01 V	VUA and water p				

Date, period and frequency of the monitoring	Annually		
Implicated person	Final responsible		
	Monitoring	JESE Field staff+ WUA+ District/Sub county Local Government Collecting data: Focal point for JESE field staff: Rebecca	
	Treatment data	JESE: Marion + field staff Protos: George Bwambale; Hannelore Martens	
	Others	JESE: Marion (as she is the first contact person for JESE field staff)	
Method of treatment of data	Excel, Access		
Other info	JESE: Marion (as she is the first contact person for JESE field staff)		

		C . I						
Project	Improved models of the integrated water resources management (IWRM) have been implemented in two catchment areas and the best practices are valorized at national level							
Result or objective		ernance of water reso of and better coopera ed capacities	•					
Indicator	[IR2.2] Number of mini water grids in rural areas being managed by delegated private service providers that show financial sustainability of their business model							
	Baseline	Baseline Value year 3 Value year 5 Source of verification						
	No private operators1 mini grid is operational2 mini grids are operational and minimum 1 is capable to run at least break evenField visits, contracts, financial reports,No private operatorsand is managed by aminimum 1 is capable to run at least break evenField visits, contracts, financial 							
Definition	Definition: -Number of water mini grids: piped water system rural areas: the interventions are done in remote or peri-urban areas -Private sector operators: are responsible for financing, designing, implementing, and operating infrastructure facilities and services on behalf of the community financial sustainability: Financially viable service providers are essential for improving sustainable access to safe water supply and adequate sanitation services, regardless of the roles of the public and private sectors. Operators must receive sufficient revenues from user fees and government transfers to cover the costs of operations and maintenance as well as finance rehabilitation and new							

Tool/massuring	desired service s - business model product or servic question, "How a Unit: facility Disaggregation:	venue streams must be consistent with the costs implied by the standards and system expansion targets. It is the strategy that a company uses to generate revenue from its ce offering. It views the business as a system and answers the are we going to make money to survive and grow?" per type and institution (village, school, health centres) remental (compare with previous counting)				
Tool/measuring method/resource						
Planned trainings on tools and methods	 Conduct buy in meetings with respective District/ Sub County leadership to identify potential sites, land acquisition issues Carryout baseline on current water use and access in the potential sites Conduct hydrogeological feasibility study around potential sites. Research into marketability of pay as you fetch/prepaid concepts in the areas identified, introduce the idea to the communities through buy in meetings. Identify potential and motivated operators to do management of the grids. Sharing the market research findings with the investors Sustainable business/financial models developed Capacity building the investor in business skills and accountability to communities 					
Date, period and frequency of the monitoring	Monthly Quarterly					
Implicated person	Final responsible					
	Monitoring	Pamela -HEWASA +field staff+ Field staff+ District Water Office+ Sub county Leadership+ Private operator				
	Treatment dataHEWASA: Steven(focal point person)+Field staff Protos: George Bwambale, Hannelore Martens					
	Others	District Water Office, Sub County Local government, private operator				
Project	•	s of the integrated water resources management (IWRM) have red in two catchment areas and the best practices are valorised at				

Result or objective	[Result 3] The planning and implementation of the land use activities by the households in the hotspots is sustainably improved and guided by community based IWRM plans at micro catchment level					
Indicator	[IR3.1] Progress rates of the development of the micro catchment management plans and their implementation (selected micro catchments were shown to be hotspots in catchment management plan)					
	Baseline	Value year 3	Value year 5	Source of verification		
	No standardized method for micro catchment plans in hotspots has been developed.	A method has been developed and executed in 4 hotspots and is being documented	The standardized method was used for the setup of micro catchment plans in 6 hotspots	Micro catchment plan, methodological guide, progress reports, internal strategic notes and reports of review meetings		
Definition	Definition: - Micro catchment management plans: These are plan of action for water resources in the catchment to provide for its protection, use, development, conservation, management, and regulation of water resources in the catchment - hotspots: region/area with significant levels of degradation Unit:# number Disaggregation: village, parish, sub county level Time count: incremental (Plans formulated, approved and implemented) Partner: JESE: Mpanga and ULA					
Tool/measuring method/resource	 NRDI: Mpanga Name of the hotspots -Location of the hotspot (sub county) Mapping of the hotspots(No. of HH, resources) Level of degradation (acreage) Social-economic activities leading to degradation of the hotspot -Existence of micro catchment management plan -Existence of a committee spear heading the implementation of the micro catchment management plan -The identified activities in the micro catchment plans are being implemented 					
Planned trainings on tools and methods	-Developing guidelines for formulation of the micro catchment management plans -Give training to field staff on the developed tool and how, when to collect data					
Date, period and frequency of the monitoring	 Micro catchment developed before intervention Annually 					
Implicated person	Final responsible					

	Monitoring Treatment data	JESE + NRDI field staff+ CMO + IWRM committee + AWMZ + District/Sub county Local Government Collecting data: e.g Focal point for JESE field staff: Becky, Lawrence, Shilla and Lukiya Focal point for NRDI field staff: Edgar and Chris JESE: Marion + field staff NRDI: Edgar + field staff				
uata		Protos: George Bwambale; Hannelore Martens				
	Others	JESE: Marion (as she is the first contact person for JESE field staff)				
		NRDI: Edgar (as he is the first contact person for NRDI field staff)				
Method of	Excel, Access					
treatment of data						
Other info	JESE: Marion (as she is the first contact person for JESE field staff)					
	NRDI: Edgar (as l	ne is the first contact person for NRDI field staff)				

Project	Improved models of the integrated water resources management (IWRM) have been implemented in two catchment areas and the best practices are valorised at national level					
Result or objective	[Result 3] The plannin households in the hot based IWRM plans at	spots is sustainab micro cathments	ly improved and guid level	ded by community		
Indicator	[IR3.2] Degree in which women are involved during the set-up of micro catchment plans Baseline Value year 3 Value year 5 Source of					
	No standard methods for micro catchment plans;The tested methodsThe approved andMeeting reports, participation lists, evaluation reports, M&ENo guarantee that womensteps with at least 30 %assures at least 30 % of the represented stakeholders are andtools,					
Definition	Definition: - degree - the amount, level, or extent to which something happens or is present -set-up - the way in which something, especially an organization or group, is organized, planned, or arranged. -micro catchment plans - plan of action for water resources in the catchment to provide for its protection, use, development, conservation, management, and regulation of water resources in the catchment Unit: Number Disaggregation: members of catchment committees formed and trained with at least women on the executive body					

	Time count: Cumulative (committees formed, with women leadership			
	representation)			
	Partner			
Tool/measuring	-At least 1/3 of women representation on the committee			
method/resource	their rights and interests are taken into account (resolutions) -Which specific positions are occupied by women? Chairperson, Treasurer,			
	Secretary			
Planned trainings	-Develop a questionnaire to track women performance on the committee			
on tools and	-Test questionnaire at the committee level			
methods				
Data wariad and				
Date, period and	Annually			
frequency of the				
monitoring				
Implicated person	Final	Lieven Peteers		
	responsible			
		JESE + NRDI field staff+ CMO + IWRM committee + AWMZ +		
	Monitoring	District/Sub county Local Government		
	Collecting data: e.g			
	Focal point for JESE field staff: Becky, Lawrence, Shilla and Lul Focal point for NRDI field staff: Edgar and Chris			
	Treatment data JESE: Marion + field staff			
		NRDI: Edgar + field staff		
	Protos: George Bwambale; Hannelore Martens			
	Others			
	JESE: Marion (as she is the first contact person for JESE field			
	staff)			
		NRDI: Edgar (as he is the first contact person for NRDI field staff)		
Method of				
treatment of data	Excel, Access			
Other info	JESE: Marion (as she is the first contact person for JESE field staff)			
	NRDI: Edgar (as he is the first contact person for NRDI field staff)			
Project	Improved model	s of the integrated water resources management (IWRM) have		
FIUJELL	been implemented in two catchment areas and the best practices are valorised a national level			
Pocult or objective	[Result 4] The experiences and lessons learned/best practices are documented			
Result or objective		ocacy at national level		
Indicator	[IR4.1] Degree in which Protos is giving a dynamic to the working group on IWRM,			
Indicator	CC and environment			

Baseline	Value year 3	Value year 5	Source of verification
The IWRM group is not	The working group	The working group meets	Exchange visits and

	active	meets at least 3 times per year and is able of producing an annual policy brief for the Joint sector review and the thematic team.	3 times/year, makes the annual policy brief for JSR and the thematic team; publication of 3 cases in Sector performance report	coordination meetings, reports of the working groups on IWRM, progress reports CMO, reports annual Joint Sector Review
Definition	 Definition: Dynamic: Capable of changing or being changed; in a state of flux, not static working group: UWASNET thematic group IWRM: integrated natural resources management CC: Climate Change refers to the global process of changes in weather and the natural environment that affect the livelihoods of people. Unit: # number Disaggregation: thematic group (IWRM) Time count: Cumulative (presentations made and meetings held during the year Partner: UWASNET 			
Tool/measuring method/resource	 Develop a questionnaire to monitor and evaluate the indicators. Who are the members Who qualifies to be a member Participation Assessment of members in IWRM capacities Number of documents published on IWRM Number of alternative business established e.g (Indigenous tree planting) to promote conservation. Access to social marketing (formal or informal) Formation of environmental groups practicing environmentally friendly practices as per IWRM recommendation. Number of women farmers with increased entrepreneurship and business skills/knowledge Number of reports uploaded on the IWRM website for public engagement and feedback. 			
Ducient	Improved models of	the integrated water r	esources manage	ement (IWRM) have
Project	Improved models of the integrated water resources management (IWRM) have been implemented in two catchment areas and the best practices are valorised at national level			
Result or objective	[Result 4] The experiences and lessons learned/best practices are documented and used for advocacy at national level			
	[ID4 2] The number	f documented and vis	ual products of th	a innovations that as a

	Baseline	Value year 3	Value year 5	Source of verification
	Only 1 brochure and film on IWRM hotspot is produced & being spread (Kayinja fishing village)	3 cases of IWRM on a hotspot are clearly documented in a format that can be spread	5 cases of IWRM on a hotspot are clearly documented in a format that can be spread	The film, brochure, document itself; edition of the book; total presentation documents; participation solicitation letters for workshops
Definition	Definition: - Number of documented visual products: Any case studies, documentaries and other policy and learning products presented. Learning products refers to success stories, change stories, lessons learned from pilots and implementations - innovations: mini grids, ram, flower toilets, manual drilled boreholes - actors: WASH stakeholders - influencing policy: to affect or change someone or something in an indirect but usually important way through networking and coalition-building Unit: Number Disaggregation: Thematic group (IWRM) Time count: Cumulative (presentations made during the year Partner: UWASNET			
Tool/measuring method/resource	 Develop a questionnaire to monitor and evaluate the indicators. How many documentaries/brochures developed How many people have accessed them Mechanism of showing the films and giving out the brochures How many people watch the films or read the brochures After seeing the film, what next? Is there most significant change? Criteria of choosing another documentary Exposure visits to the case study areas Number of brochures, monthly newsletters capturing case studies, success stories, and change stories documentaries, published on IWRM for public engagement and feedback. Utilization of Online platforms to disseminate information regarding IWRM best practices. Conduct engagement meetings at national level for publication and dissemination of IWRM best practices. 			

26. Annex 16: Concept of Micro Catchment Plan

RATIONALE

Catchment Based Integrated water Resources Management (CbWRM) at national level has led to the development of many large scale catchment plans. This progress is vital, but at the same time, Integrated Water Resources Management (IWRM) practically worked and decisions were taken close to the communities where we work. Consequently, there was need for a convergence where the top down meets bottom up planning processes backed up by trials and documentation. This bottom up planning process was critical in integrating the different issues, challenges, concerns, and priorities among diverse groups closer to the hotspots in the targeted micro catchment. The micro catchment planning process was ultimately aimed at taking decision making closer to the communities. Catchment management approach is a strategy that works collaboratively with landowners, partnerships and local interest groups by raising awareness of the problem affecting the ecosystem

GOAL

Facilitate and document an empowering process that promotes sustainable coordination, development and management of water and related land resources for improved livelihoods and ecosystem health.

OBJECTIVE

- 1. To Mobilise and sensitize stakeholders, including communities, on the value (and need for proper management) of micro catchments.
- 2. To Assess the status, importance and level of degradation of the micro catchment
- 3. Promote sustainable land use management practices intended to restore degraded wetlands and other natural resources (hotspots)
- 4. To Strengthen micro catchment management structures and promote IW RM Planning
- 5. To develop standardised guidelines for Micro catchment management planning

TARGET GROUPS

The micro catchment planning process involves small holder farmers adjacent to the hotspots in the micro catchment, Local leaders, technical persons at Sub County and district, Religious leaders, schools, partners and other CSO's working within the micro catchment, and any other groups that were co-opted during participatory stakeholder identification processes.

APPROACH/STRATEGY

The proposed micro catchment planning process was drawn from the principles and concepts described in the National guidelines for Catchment management and planning 2014¹⁵. The difference however was in the emphasis on bottom up planning.

• In general our approach characterized by a strong emphasis on stakeholder engagement right from planning to implementation in order to ensure that the process and plans therefore are in line with and supported by the views of the stakeholders.

This critically ensures that the interests of all stakeholders are taken into consideration. The composition of the stakeholders were based on the issues and concerns identified in the micro catchment and the scope of the area targeted for implementation.

- Bottom up planning strategy was foreseen in integrating the different issues, challenges, concerns, and priorities among diverse groups in the society.
- A rights based approach was mainstreamed to ensure Gender and social inclusion. Emphasis on the participation and inclusion of the concerns of women, youth and other groups in society was considered at all stages including; stakeholder identification, Problem analysis, resource mapping, planning, implementation and monitoring.
- A capacity building approach was necessary in IWRM implementation. This new concept in water resources management required the use of different capacity building strategies to promote a common understanding of its principles and practices.

IMPLEMENTATION AND DELIVERABLES

• Initial Stakeholder participation

Inception meeting: Inception meetings were organised for initial stakeholder engagement at sub county level. These meetings were attended by representatives of all relevant stakeholders at district, sub county levels and local council 1 chairpersons. These meetings were aimed at informing the stakeholders of the purpose and approach of the program, and thereafter to collect their views and general insights. *Output: inception Report*

Stakeholder identification and analysis

Reconnaissance visits to the field sites were conducted to further understand the scope of resources and the general issues relating to their management. Consultative meetings were held at the parish and village level to mobilise the relevant actors to participate in the stakeholder identification and analysis. A step wise process was then conducted to identify, analyse and profile the different stakeholders in relation to their interests, power influence, and vulnerability among other attributes.

Output stake holder profile and participation matrix

Participatory visioning and mapping of degraded hotspots

In each parish, four separate Focus Group Discussions were held: differentiated by gender for example; 1) women only, 2) men only, 3) youth and 4) local leaders. Each group would have 6 – 12 people, to ensure the groups are manageable yet still resulting into meaningful discussions. The motivation for meeting men, women and youth separately is to ensure that the participants can freely express their opinions without suppression. The group of local leaders were aimed to give insight into administrative matters and priorities at village level.

At such meetings, a checklist (*was developed*) and used as a guide, and scoring and ranking was used to collect stakeholder's views on the underlying reasons for the degradation of the river bank/wetland micro catchment (i.e. problem analysis) and the possible interventions to address the degradation (i.e. joint action planning) Reference was made to the RAAIS tools in

the CCA manual developed by Join for water Resource maps were drawn indicating the socioeconomic activities carried out in the hotspot micro catchment. *Output; Hotspot assessment report*

• Micro catchment delineation and analysis

This was the first activity to be conducted following the preliminary stakeholder analysis and hotspot mapping. The DEMs of the watershed will be pre-processed and processed using an ArcGIS 10.1 based Soil and Water Analysis extension to re-delineate the watershed and its sub-catchments. The delineated IWRM interventions analysed for soil, land-use/cover, hydrology, slope, geometry, size and morphology. This helped in obtaining the exact hotspots and their environment characteristics and determine the potential interventions for restoration.

Output; delineated map showing micro-catchment boundaries

• Preparation of inventories and general maps

The team used mixed-methods approach using data generated from both secondary and primary sources. Secondary data was obtained from the review of existing maps and hotspots reports (*mostly during the inception phase*) while the primary data was obtained through field observations, meetings with stakeholders, and key-informant interviews.

• Desk review and analysis of secondary information

Existing information was identified collected and analysed during the inception phase, including reports, maps and other data. The visualization capacity of Geographical Information Systems (GIS) was used to assist the team in capturing the broader spatial and social contexts of the wetland micro catchment.

The micro catchment was categorised based on importance to socio-economic activities and generally prevailing land use. GIS-generated base maps of the micro catchment were developed. These initial maps will be useful in planning subsequent activities like defining buffer zones. Existing geographic data and maps of the area may be used to extract possible demographic, social and geographic variables that could be used to match intervention in the area.

Output: Socio economic and land use data generated

• Field assessments and participatory mapping

Following the review of existing information, field level assessments (through transect walks and participatory mapping) were conducted, whereby activities already happening were identified, mapped, and their environmental implications determined. This was (largely) a participatory process done together with the stakeholders. The aim of the participatory mapping and transect walks is to make it possible for communities to join the team, to describe and to define the current and desired status of their wetland micro catchment.

Community members were asked to draw a map of their community (and wetlands/river banks) as they see it now and how it was in the recent past. Maps drawn by community members were transferred to charts for further processing and digitizing.

Transect walks were conducted immediately after the participatory mapping exercise, to explore in more detail some of the issues that emerged in the participatory mapping process. During the transect walks, the community members were engaged in discussion about what they are observing as well as clarify or confirm issues that may have emerged in the mapping exercise.

Together with a more practical understanding of the (status of the) area provided through transect walks and participatory mapping made it possible to determine how the buffer zone has changed in the (recent) past and to infer how it is likely to change in the (near) future if no corrective action is taken. A map or maps depicting this change were developed which further served as a visual awareness creation tool that can stimulate corrective action. *Output: Sketch maps showing Resource status and trends*

After the mapping process there is a restitution to the communities and local leaders.

• Guidelines for micro catchment management planning established and standardised through Action Research (answering the question; can micro catchment level planning effectively address catchment degradation?) by the partners (especially JESE)

Annex 18: Landscape approach 27.

Table 1: Project adherence to principles of landscape approach as defined by Sayer et al.(2013)

Principle	Project			
Continuous learning and adaptive management	Upscaling based on lessons learned from a pilot intervention			
Common concern as entry point	Overlaps between actors on several common concerns (cycad restoration, erosion,) but the 'most' common is the hydropower plant			
Multiple scale	Starting from the pilot intervention at local scale, in the next phase upscaling to other parts of the catchment			
Multifunctionality	Agroforestry, beekeeping, and other more sustainable agricultural practices combine agricultural production with ecosystem service provision			
Multiple stakeholders				
Negotiated and transparent change logic	Multi-actor approach and involvement of the catchment committee as a multi stakeholder platform; definition of restoration objectives jointly with the involved local communities			
Clarification of rights and responsibilities				
Participatory and user- friendly monitoring	Building a trust relationship with the communities; involve the catchment committee in monitoring activities, with the use of indicators defined in a participatory manner with the different stakeholders; indicators will be defined using the road to restoration guide (WRI) as a reference			
Resilience	JFW and BOS+ are part of a joint strategic framework that seeks to enhance resilience of social-ecological systems; the project outputs by themselves will make for a more resilient catchment, and enhance the resilience of the cycad ecosystem			
Strengthened stakeholder capacity	strengthening the functionality of the Catchment committee			

28. Annex 17: expenditures and budget at the time of report

Item	Budget	Expenditures	% Expenditures
Investment	792,539	581,273	73%
Means of transport	74,600	17,251	23%
Office equipment, ICT	50,727	26,930	53%
Infrastructure	667,213	537,093	80%
functioning costs	537,517	323,630	60%
Travel costs, cars and motorbikes	179,808	133,789	74%
Office costs and supplies	91,860	69,689	76%
Costs of training, support, studies,			
publications, exchange, advocacy	265,849	120,151	45%
Staff costs	947,535	815,220	86%
Local staff	487,976	419,123	86%
Expatriate staff	323,903	256,875	79%
Staff at HQ Join For Water	135,656	139,222	103%
Total operational costs	2,277,591	1,720,122	76%
Budget and expenditure per actor			
JESE	740,924	693,500	94%
HEWASA	191,237	211,148	110%
NRDI	185,023	229,652	124%
Join For Water	1,160,408	585,823	50%

The under-expenditure on wages for Join For Water in this table is mainly due to the fact that not all Join For Water expenditures have yet been entered in the accounts and some of the investments that were on the Join For Water budget has not yet been built at the moment of the report.

29. Annex 19: List of consulted documents

- Technical and Financial File MYP 2017-2021 (Join For Water)
- MYP internal annual narrative reports (2017, 2018, 2019, 2020) (Join For Water)
- Mid-term evaluation report on financial sustainability and universal access to safe drinking water and sanitation (Join For Water)
- PSP's and ATMs Performance Report Jan 2021 to Jan 2022
- Kaborale district Master Plan for Universal Access to Wash Services 2018
- Kamwenge district Wash Masterplan 2020-2030
- Ministry of water and environment (Uganda). Water and Environment: Sector Performance Report 2019-2020.; 2020. doi:10.1080/02508068008685878
- Turyahabwe N, Tumusiime DM, Kakuru W, Barasa B. Wetland Use/Cover Changes and Local Perceptions in Uganda. Sustain Agric Res. 2013
- Water and environment sector performance report 2015 MWE
- Annual district water dev`t and sanitation conditional grants reports 2015/16