

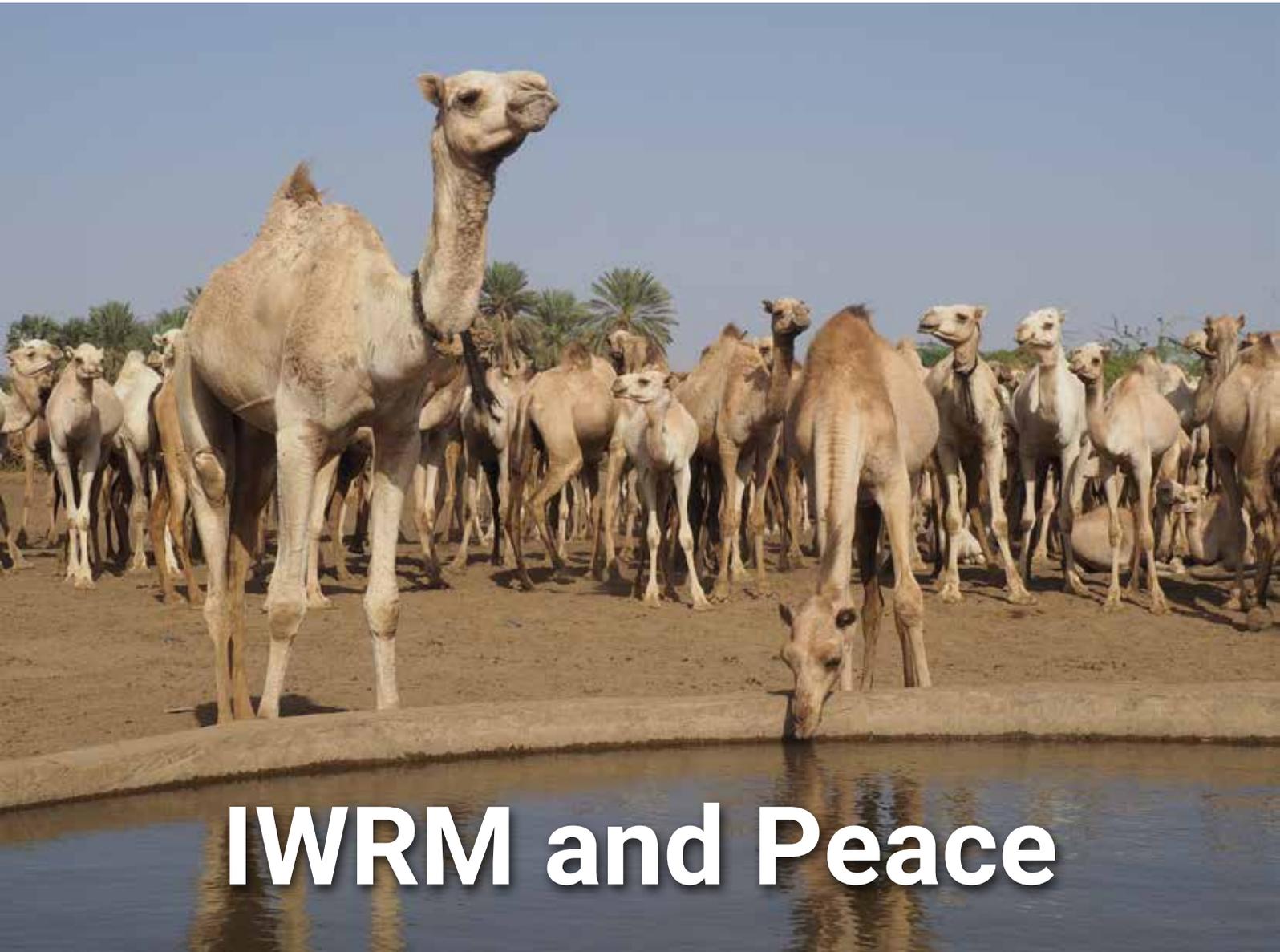
Aqua4 Sudan
Partnership 



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IWRM and Peace

The contribution of the Integrated Water Resource Management approach to conflict reduction and peace – the case of the Rural Water for Sudan project

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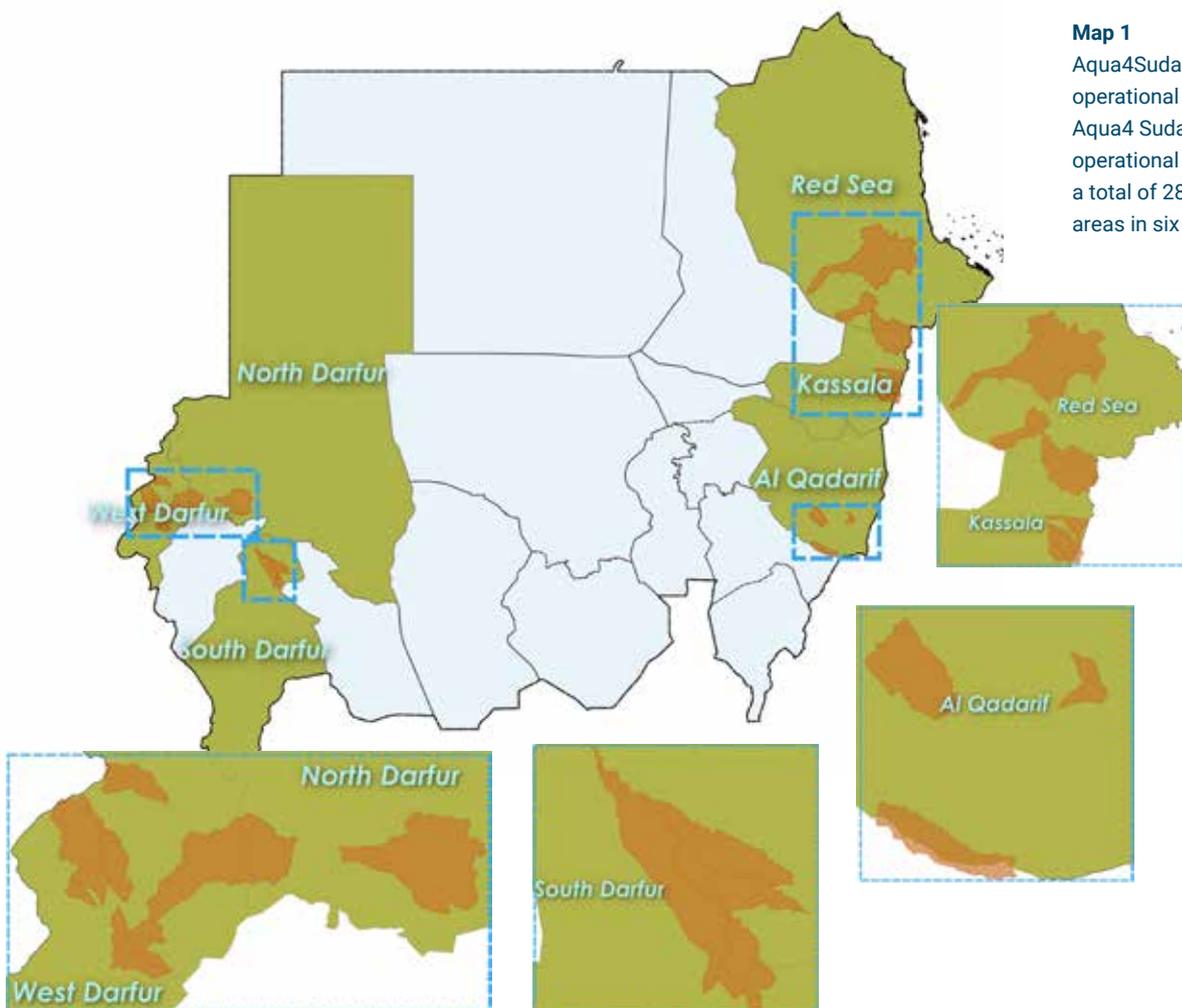


INTRODUCTION

The Aqua4Sudan partnership in Sudan consists of International Aid Services (IAS), Islamic Relief Worldwide (IRW), Practical Action, Plan Sudan, SOS Sahel, World Relief and ZOA. This partnership implements the Rural Water for Sudan project in Red Sea, Kassala, Gedaref, North Darfur, South Darfur and West Darfur with funding from UKaid and the EU.

Because water is scarce in much of Sudan, an Integrated Water Resource Management (IWRM) approach is needed that balances the different water requirements (for people's domestic use, livestock, crops, grazing lands and other uses) with

the total availability of water within a hydrological unit (a catchment area). By supporting the relevant stakeholders to jointly develop an IWRM plan for their area, conflicts related to water and water infrastructure can be minimised, and resilience to climate change can be enhanced. Infrastructure for water supply and groundwater recharge should preferably be developed based on this IWRM plan. This paper documents how this IWRM approach contributes to the prevention and reduction of conflicts, and even improves social cohesion and mutual understanding between different water user groups (from the same or different ethnic groups).



Map 1
Aqua4Sudan partnership operational areas:
Aqua4 Sudan partnership operational areas covering a total of 28 catchment areas in six states.

In Section 2 the paper describes the relevance of conflict sensitive water interventions in Sudan; followed by an overview of the essentials of the IWRM approach and how this has proven to be conflict sensitive (Section 3). However the implementation of IWRM is challenging and Section 4 sets out the preconditions that need to be in place for an IWRM project to be conflict sensitive.

Several concrete examples are given in section 5 to illustrate these findings The final Section 6 formulates recommendations for other stakeholders to adopt and fund projects based on a conflict sensitive IWRM approach.



Waterpoint

Conflict Sensitivity

Is the ability of an organisation to:

1. Understand the context in which it is operating;
2. Understand the interactions between its interventions and that context and
3. Act upon the understanding of these interactions, in order to minimise negative impacts and maximise positive impacts on conflict.



RELEVANCE OF CONFLICT SENSITIVE WATER PROGRAMMING IN SUDAN

Water-related conflicts in Sudan

Historically the majority of conflicts in Sudan are water- and land-related¹.

Water has become increasingly scarce, due to less rainfall and environmental degradation on the one hand; and an increasing demand for water for domestic use, agriculture and pastoralism, industrial and other use on the other. Reasons for the increasing demand in specific areas are population growth, displacement of people and livestock due to conflicts in the past, and insufficient water and grazing land in other areas.

The scarcity of water, a basic livelihoods resource, leads to conflicts between different water users.

Numerous are the conflicts between farmers and pastoralists about access to water sources and damage to agricultural fields by cattle on their way to water sources. These conflicts easily escalate into ethnic conflicts as different user groups often represent different ethnic groups who already have a history of violent conflict and mistrust. The conflicts are worse during dry years, when the reduction of water availability, and consequently, water supply leads to more tensions between already competing users over the same source. Because of the reduced availability of water and grazing land, livestock migration to the south in the dry season is starting earlier, before farmers have finished harvesting their crops. Traditional leaders, who used to solve conflicts and facilitate access to water sources between different water users, no longer have the same level of authority. This means that the traditional way of conflict resolution is no longer effective, especially when specific user groups have links to external powerful actors.

These water-related conflicts lead to very limited trust between the different ethnic groups, fear and hatred,

and even violence, loss of lives and livelihoods, and displacement. These feelings of hatred and fierce competition for water can easily be misused by external actors for their own interest.

Risks of conflict blind water programming

When implementing water projects without taking into account this context of conflict (i.e. without being conflict sensitive) **the interventions can do harm and create even more conflicts**. The site selection for the construction of water infrastructure may be controversial: Which ethnic and water user group will have access? What to do if the site was previously inhabited by people who are now living in Internally Displaced People (IDP) camps and plan to return, while at the moment other groups are living in this area? The project may be seen as legitimizing the perceived occupation by the latter group and the site could become a source of conflict.

Insufficient knowledge of the different water user groups and their history of conflict and power relations may also lead to the exclusion of specific groups from decision making and water management committees. Even when nominally present, the marginalized group might not have a say in decisions, and although the project tries to be participatory, existing power relations could still be replicated in the committees. Water management will then be biased and the different water user groups might not feel ownership of the operation and maintenance of the water infrastructure, leading to its breakdown and fueling more conflicts. Equally, not taking into account any negative downstream effects of upstream water interventions in a context of conflicts between upstream and downstream user groups can easily trigger more water-related conflicts. Ultimately, these conflicts will undermine the original aims of improving access to water.

¹ UNEP (2007) Sudan Post-Conflict Environmental Assessment



THE IWRM APPROACH AND ITS ADDED VALUE FOR CONFLICT SENSITIVE PROGRAMMING

Description of the IWRM approach

In Jan 1992, the water sector organized the International conference on Water and the Environment in Dublin. The keynote papers for the conference are containing almost all characteristics of IWRM as it is understood today which is outlined in the Dublin Guiding Principles³.

Dublin Guiding Principles

1. Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.
2. Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels.
3. Women play a central part in the provision, management and safeguarding of water.
4. Water has an economic value in all its competing uses and should be recognized as an economic good

The differences between IWRM-based projects and conventional demand-based water projects are the following²:

- The unit of analysis and intervention is the catchment area rather than a single village or water point. The catchment area is understood as the area from which all runoff water flows towards a single natural drainage point.
- Water demand and supply are balanced with water availability, i.e. how much surface and groundwater there is that can be used. Investments in groundwater recharge could increase availability to ensure sustainable water supply.
- Technical expertise is needed to understand the

- water availability and to analyse the effect of water infrastructure on the different water users upstream and downstream in the catchment area.
- Decisions on the construction of water infrastructure are made bottom-up and collectively by representatives of different water user groups rather than by one specific user group.

Four different stages can be distinguished when following the IWRM approach at catchment level:

1. Preparation: understanding the catchment area, the social and political context, and water-related tensions; raising awareness on the importance of IWRM with the different stakeholders
2. Establishing a Water Resources Management Committee (WRMC) at catchment level
3. Developing a Water Resources Management Plan (WRMP) for the catchment area, based on a water balance analysis and a specific planning process by the WRMC
4. Ongoing implementation of the WRMP and management of the water resources

These four stages are accompanied by ongoing monitoring and evaluation that should include both community and practitioner (NGO and government) voices, and feed into the review and adaptation of the IWRM implementation process.

Contribution of the IWRM approach to conflict prevention, conflict reduction and social cohesion

The IWRM approach explained above has proven very conflict sensitive in the Rural Water for Sudan project: it has reduced conflicts or prevented the occurrence of conflicts. The approach has even contributed to increased mutual understanding and social cohesion among different water user groups with different ethnic backgrounds and livelihoods.

²For more detailed information see: Bromwich B. and T. Gaasbeek (2018) Putting catchment-level IWRM into practice, technical paper no 1

³The Dublin Statement on Water and Sustainable Development, also known as the Dublin Principles, was the result of a meeting of experts on water related problems that took place at the International Conference on Water and the Environment (ICWE), Dublin, Ireland in 1992. The Dublin Statement on Water and Sustainable Development recognizes the increasing scarcity of water as a result of the different conflicting uses and overuses of water.

See: <https://www.wmo.int/pages/prog/hwrp/documents/english/icwedece.html>

IWRM is not a blueprint, but a process which will come to different solutions depending on the catchment context, as each catchment area is different from a social, political, economic and hydrological perspective. IWRM is therefore not a “one size fits all” approach, but instead requires time for NGO practitioners, communities and other stakeholders to understand the context and to facilitate the different stages of the IWRM approach. **The approach helps implementers not to rush and prioritise quick hardware solutions without sufficient context knowledge**, which often leads to conflicts between different water user groups – either immediately or in the future.

The **participatory and collective approach**⁴ which is followed to establish the WRMC (stage 2) and to develop the WRMP (stage 3) brings together different water users and other stakeholders, including government, men and women, farmers, nomadic pastoralists and returning IDPs. They jointly assess the different water needs in the catchment area and visit the different sites, which helps to look beyond their own water needs and understand the needs and concerns of other water users. This realisation creates empathy and room for discussion and finding non-violent solutions to address water priorities.

Consensus building and joint prioritisation is a crucial step in the development of the WRMP (stage 3). **The hydrological studies** for the catchment areas assess water resources and quantify water availability under current and future scenarios. The studies also provide recommendations for technically feasible interventions for water infrastructure developments, and show when not all water needs can be covered. This technical, objective information can help to facilitate the difficult discussions on the priorities of different ethnic and water user groups, which has led in the past to tensions and conflicts.

The jointly developed **WRMP at the catchment level** provides a solid basis for the construction of water infrastructure including groundwater recharge facilities. Potential conflicts around site selection and downstream effects of upstream water investments will be detected during the planning process. As the WRMP is based on the balance between water availability, water supply and water demands, all new water infrastructure construction will be analysed against their effect on the water availability and other water supply and demands, therefore preventing water

depletion. Without this analysis, increased water depletion in the catchment area may lead to more competition for the scarce water and to water-related conflicts.

The WRMP can explicitly target water needs where shortage is a cause of conflict. Making improved grazing land and water available for livestock at the northern end of the livestock corridor helps to delay the livestock migration to the south and therefore reduces the cases of conflict between pastoralists and the farmers who have not yet finished harvesting their crops.

Steps for the development of the WRMP (stage 3 of the IWRM approach):

1. Hydrological analysis and data collection
2. Getting an overview of the situation
3. On-site investigation
4. Discussion on possible alternative options to address the problems
5. Discussion on effects of possible interventions
6. Review, prioritise, and plan
7. Feedback from stakeholder communities
8. Approval of the plan
9. Implementation and dissemination of the plan
10. Follow-up by the WRMC at catchment level

Increasing water availability through groundwater recharging and water harvesting helps to reduce competition between different water users. Conflict resolution is an important role for the catchment level Water Resources Management Committee (WRMC). The training and coaching of the WRMC members on conflict resolution, and their positive experiences with interest based negotiation on water needs positions them to also solve other conflicts in the communities. Members of the WRMC are sometimes local leaders – in this position they can apply their conflict resolution skills. The engagement of government stakeholders at different levels in the IWRM process supports their adoption of the approach and their acceptance of the analysis that is generated with the water users, of the effects of future water projects. This joint analysis, for example in the state level IWRM council, helps to prevent conflicts and to take mitigating measures where needed.

⁴Also called the Participatory Action Plan Development (PAPD), see for example <https://answers.practicalaction.org/our-resources/item/consensus-building-with-participatory-action-plan-development-in-sudan>

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WHAT IS NEEDED TO MAKE THE IWRM APPROACH WORK FOR PEACE?

Internal preconditions

Water practitioners need to have **deep knowledge of the specific context**, its history of conflicts, and power relations between the different stakeholders. Where staff is new in the area, they need time to develop this knowledge and to build trust and relations with different community groups and with government stakeholders.

Managers of governmental and non-governmental organisations need to be aware that an IWRM project requires **staff that are interested in community development and willing to put communities in the driver's seat** while they step back. This kind of attitude and capacity is different from the more emergency-oriented mindset which focuses on quick implementation based on organisation's own planning.

IWRM knowledge is crucial, but also difficult to find among water practitioners. Where lacking, training on the technical and process side of the IWRM approach is needed. Staff need to be able to explain to the different community groups the relatively unknown IWRM process, the technical studies on water availability, and the hydrological effects of constructing specific water infrastructure. Otherwise the technical input will not be understood, could be mistrusted and even cause conflict.

A good understanding of the IWRM approach is required within the organisation at different levels. Managing a project that follows the IWRM approach is not easy as the speed of the implementation heavily relies on community decisions. Implementation of the less tangible activities (stages 1-3 mentioned above) requires specific guidance and monitoring. A joint understanding of the approach at both management and implementation levels prevents an unhelpful push from management to implement and spend the budget more quickly. It also helps to make the implementation

of the different process steps visible⁵ so that the process can be monitored for progress and quality.

Regular monitoring of the occurrence of conflicts and tensions is important – not only to detect at an early phase any negative effects of the project, but also to spot opportunities where the IWRM approach can help to contribute to peaceful relations. This monitoring should be closely linked to an effective and trusted accountability mechanism at community level, where community members feel free to report their feedback. The monitoring also helps to build up evidence of the IWRM approach actually contributing to conflict reduction and social cohesion.

External challenges

Communities are often used to quick relief projects where they see tangible results in a short time (e.g. construction of wells) while the IWRM process takes longer to construct concrete water infrastructure. However, **pressure to implement quickly will lead to more conflicts and ownership issues.** Collaboration with all water user groups, including minority groups, is a new approach and some community groups might be afraid of losing some of their power if they share responsibilities in planning and management of the water resources with others. Internal power dynamics and historical conflict relations could make the IWRM approach sensitive and time consuming, but it also shows the relevance of having this process. **Where violent conflicts are still ongoing or have only recently ended, the community members will not be ready to engage in a dialogue and consensus building process, which the IWRM approach requires.**

Similar challenges can also be identified at the level of **government stakeholders.** They might not be familiar with the IWRM approach and may prefer quick, concrete investments in water infrastructure instead of following a complex and time consuming,

⁵See for example the description in Bromwich B. and T. Gaasbeek (2018) Putting catchment-level IWRM into practice, technical paper no 1

yet more sustainable, process. The **WRMC could become a powerful and resourced body**, which can be seen by the government as a competing parallel structure instead of a collaboration partner. Therefore, involvement of and close collaboration with government bodies is crucial for successful implementation.

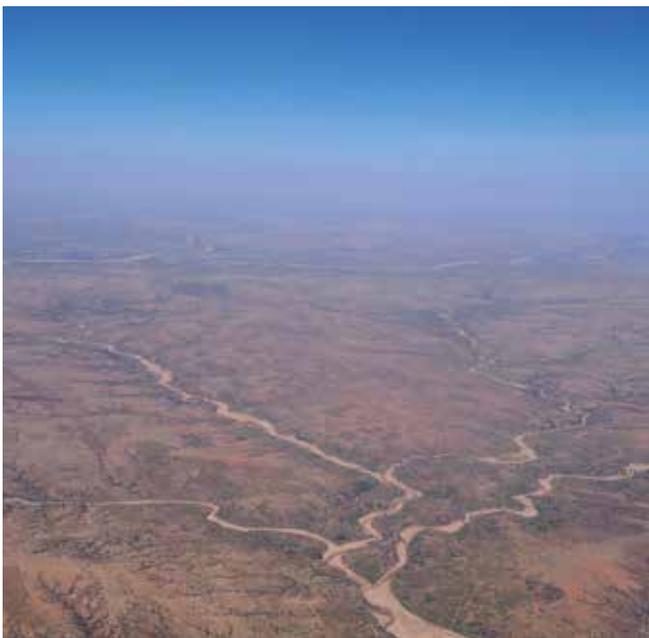
The power balance between different community groups and with different government actors is also influenced by **changes in the wider political context**. The regime change in Sudan has led to specific groups feeling more empowered to claim their rights; the position of some WRMC members might be challenged as they are perceived by the community as linked to the previous political regime. These dynamics need to be handled in a transparent and accountable way, otherwise it will undermine the IWRM approach.

There is an urgent need for creating a **comprehensive government led enabling environment** i.e. policies, legislations and institutional roles for IWRM at federal and state level which will ensure the sustainability of existing WRMC and, at larger scale, guarantee that other water stakeholders (government, NGOs, private actors, etc.) are obliged to follow a government-coordinated IWRM approach. Currently, in areas where Aqua4Sudan partnership operates, water infrastructure can still be constructed, by external actors, without taking into account the established WRMP and the hydrological effects now and in the

future on other water users, leading to water-related conflicts.

Another challenge is the fact that the IWRM **management instruments** (i.e. information databases, technical assessments and regulations) **are often missing, outdated or poor quality**. The crucial hydrological assessments are often not available and expertise to conduct these studies is difficult to find or very expensive. The inadequate information can mis-inform decision makers resulting in unsustainable water resources use. This could, potentially, increase competition over resources and the emergence of conflicts between water user groups.

The IWRM approach at catchment level has proven effective in bringing together community and local government stakeholders. However **the approach is limited when faced with external and national level powerful stakeholders** with high water interests. The WRMC cannot solve these conflicts in the catchment area unless it is supported by national level policy and institutional frameworks that effectively govern how to manage competing interests, such as where the land rights of returning IDPs in Darfur are at stake; or there are interests attached to large agricultural schemes or mining operations. The IWRM approach therefore is not a panacea, but requires political will to support the IWRM principles and to take responsibility for addressing conflicts according to the government's mandate.



Aerial view catchments North Darfur



Sheep drinking North Darfur Kabkabya

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CASE STUDY 1

Increased collaboration between IDPs and recently settled pastoralists, and less conflicts in Wadi Bargo catchment area, North Darfur

At the start it was very difficult to bring together displaced farmers and recent settlers from nomadic background in the IWRM approach. Project staff had to mediate very carefully, holding many meetings with each group separately and together, and working with the leaders from both groups while explaining the benefit of working together. In the end both groups accepted to send village-based representatives to the WRMC. The joint site visits helped them to understand each other's realities. "It is my first time to visit this part of the catchment area. I understand we have a water problem and that the catchment plan should be for the whole catchment area and not only for my own village" (WRMC member)

Livestock accessing the water sources may cause crop damages and farmers who expand into fertile animal corridor lands can block the herd movements.

These incidents frequently cause conflicts between farmers and nomads. This catchment area has important livestock migration routes. However, in recent years the livestock migration has started earlier than in the past because of droughts, when farmers have not yet harvested their crops. In the WRMP priority was given to invest in water infrastructure at the northern end of the livestock migration corridor. In Edalnabag, a check dam has been constructed as well as a sand dam to provide cattle with more water. Combined with an improvement of grazing land, this had led to a later start of the livestock migration. The timing of the start of the cattle migration is now discussed in the cattle migration committee, and in case of conflicts the communities turn to the WRMC with representatives of the different livelihood groups. This has led to a decrease in the incidence and scope of livestock-related conflicts.

Farming community members from Wadi Bargo participating in the construction of water harvesting structure providing water for pastoralist community

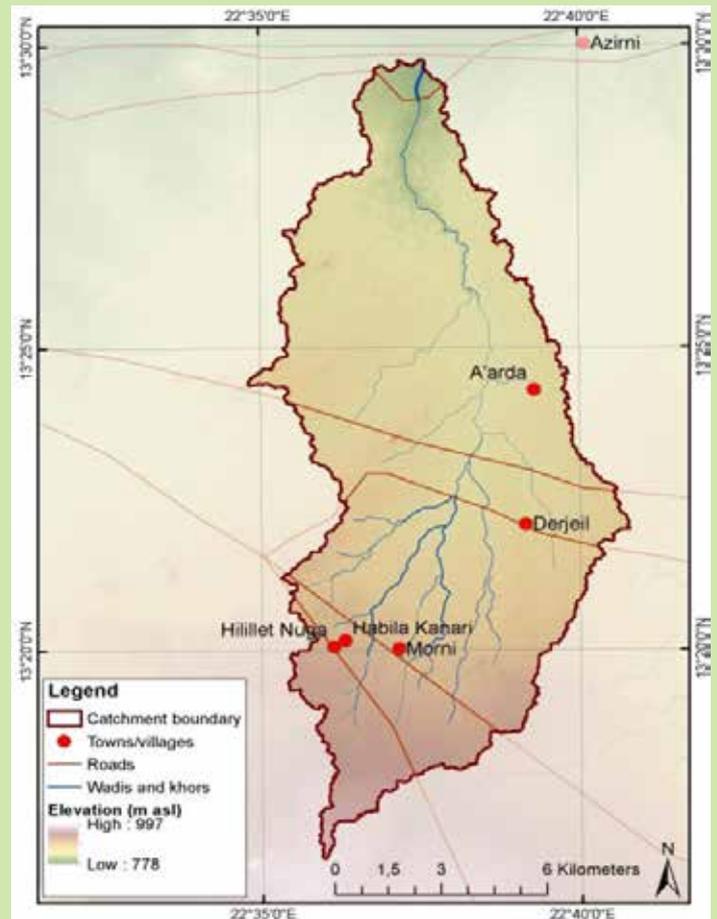


CASE STUDY 2

Conflicts detected at an early stage leading to discontinuing the project in Wadi Burei, West Darfur

During the preparation stage of the IWRM approach, the project team held many meetings with IDPs, now living in IDP camps around Geneina, and the pastoralists who had recently settled in the area where previously the IDPs had lived. It became clear that the IDPs did not want to work together with the pastoralists, as they did not trust them and asked for government action to return their land to them so that they can go back to their villages. They were very critical of the IWRM project because they were afraid that any new water infrastructure in their villages of origin would legitimize the presence of the recently settled groups and attract even more. They said “this is too early, we still have too many issues with the government and the conflict has not yet finished, may be in 4 years we can work together”.

The project staff reported this situation to their management and said that they could not proceed because there is no commitment for collaboration. The IDPs requested the project to provide water sources specifically for the IDPs, but this was not possible as it would lead to more tensions. In the end it was decided to suspend physical developments in this catchment area while continuing advocacy and awareness raising for IWRM with government and community stakeholders in this specific catchment and in neighbouring areas. It was not an easy decision as the need for water is high. But continuing would have led to more conflicts as the people were not yet ready for joint actions. It would also have led to serious problems for the NGO because of disputed land rights and the perception that the NGO would support the recently settled group. Thanks to the thorough preparation stage of the IWRM approach, these risks were detected and actions taken.



Wadi Burei

CASE STUDY 3

Working transboundary without creating conflicts between Haya and Sinkat locality in Khor Arab catchment area, Red Sea state

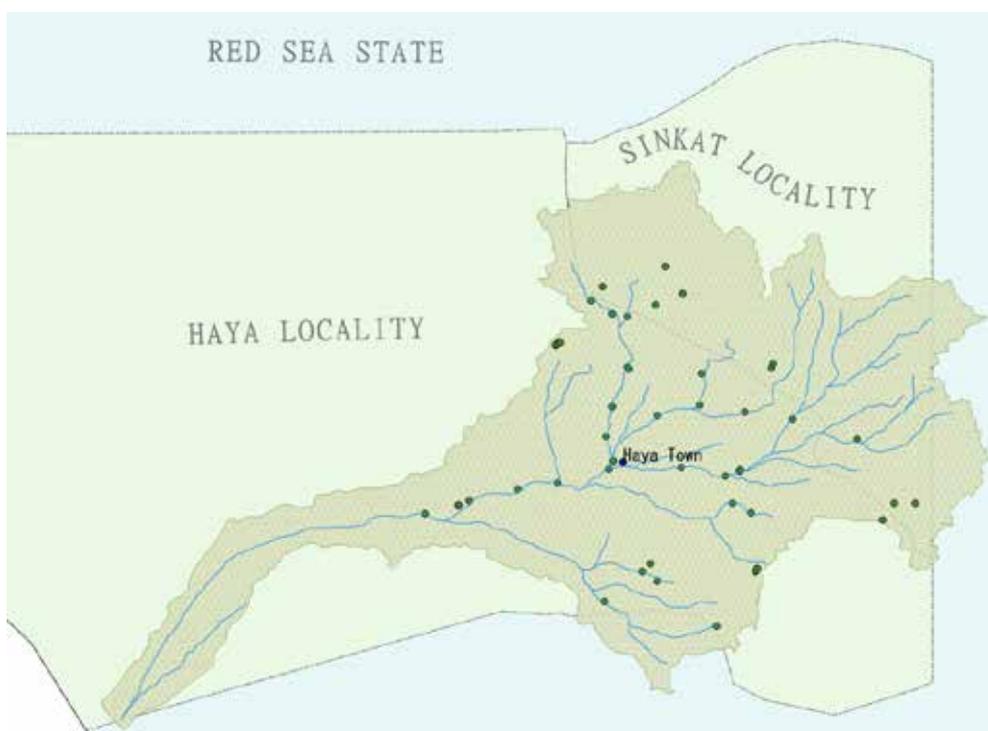
In Red Sea state, most of Khor Arab catchment area is in Haya locality (administrative area). However, the upstream part of Khor Arab is located within Sinkat locality. The hydrological assessments showed that the Sinkat part represents the sub-catchment with the highest runoff, which makes it suitable for flood control measures. Moreover, this area is highly populated with a significant water supply gap. This justified the technical need to intervene in the Sinkat locality as part of the Khor Arab catchment area.

However, the technical agreement, a legal document that describes the operational area where an INGO can implement project activities, mentioned Haya locality as the operation area. This was because technical agreements were obtained before catchment delineation was carried out. Thus, it was very difficult to convince both Sinkat and Haya locality to intervene in both localities as Sinkat locality was not involved from the start and Haya locality was afraid to lose water infrastructure and budget to Sinkat. This required intensive advocacy and awareness raising

about the hydrological boundaries of a catchment area which transcends administrative boundaries and about the hydrological advantages for Haya if Sinkat would also benefit from water infrastructure.

While establishing the catchment-level WRMC in Khor Arab and developing the WRMP, community stakeholders living in Sinkat locality, but in villages adjacent to Haya locality boundaries, showed interest to participate in project activities. It was possible to partially involve these communities because they often fetch water from villages in Haya locality.

The implementation of the IWRM approach therefore requires careful research and catchment delineation before obtaining the needed technical agreements. Engagement with the government stakeholders from the start to explain the difference between administrative and hydrological boundaries is an important step to prevent creating conflicts between different localities during implementation.



Khor Arab catchment divided between two localities

CASE STUDY 4

The IWRM approach bringing displaced and host populations together in Darrasta catchment area, Kassala

The seven villages in the Darrasta catchment area are inhabited by the Hadendowa population who have been living in this area for many centuries and by another Hadendowa group who moved into the area around the year 2000 because of conflicts in the border area with Eritrea. The influx of these displaced people led to conflicts with the host population because of the competition for the scarce water resources. Additional water infrastructure was constructed specifically for the IDPs, which increased conflict with the host communities as they felt left out while they considered themselves as the founders of the villages.

The IWRM approach started with bringing together all water users in the WRMC, including both the host population and the displaced community. This was quite new, as most water management committees for specific water infrastructure were separate because this infrastructure was not used by both groups. However during the process of the WRMC establishment and the development of the WRMP for the whole catchment area, both groups learnt to work together, to look beyond their own water needs and to set joint goals. Prioritisation of water infrastructure was based on technical feasibility and the hydrological effect on the whole catchment area, and no longer dependent on the background of the population group.

Following the WRMP, the project addressed the water shortage by constructing 6 and rehabilitating 1 water recharge facilities, increasing the water availability; rehabilitating 3 hafirs⁶; upgrading 7 existing handpumps into mini water yards⁷ rehabilitating 1 existing mini water yard; and establishing 5 new boreholes. This water infrastructure is now being used and managed by both groups. There is no longer

a water shortage, which has removed a root cause of the conflicts between the host and the displaced population groups. The relations between the groups have improved and the host population has accepted that the displaced group will no longer return to their area of origin, but will probably stay in the villages in the Darrasta catchment area.



Returnee community from Darrasta repairing hand pump after receiving tools and training from Aqua4Sudan

⁶A hafir is a surface water harvesting method to store runoff water through a natural or manmade pond of approx. 3.5m deep

⁷A mini water yard is an infrastructure with which water is pumped directly from the well into an elevated reservoir tank instead of tapping from the well directly in hand pumps

CASE STUDY 5

Involving semi-nomadic pastoralists in the management of water infrastructure prevents conflicts in Gala al Nahal catchment area, Al Gedaref

Gala al Nahal town, with 17,000 inhabitants, is the main town in the Gala al Nahal catchment area. As part of the project, an existing hand dug well near the town was upgraded to a motorized water yard as the technical investigation showed good water availability. This water yard provides up to 40-50% of the domestic water needs in the town and is therefore crucial, especially in times when another existing piped water supply system, operated by another group, cannot provide enough water.

Semi-nomadic pastoralists from outside the catchment area, who used to come to the waterpoint to water their livestock, now had to pay a higher water tariff than before. This led to accusations towards the water management committee (who mainly represented farmers) that the farmers benefited at the expense of the pastoralists. Because of the increased water supply, more pastoralists came to the water yard with their livestock; but the water committee gave priority to the domestic water needs of the town and regularly refused to provide water for livestock, leading to more conflicts between the farmers and the pastoralists.

In order to mitigate these tensions, the water management committee for the water yard decided to include representatives of the pastoralists in the committee, so that they would participate in the decisions on the tariff setting. This increased the transparency of the calculations for Operation and Maintenance costs, and therefore the tariff setting, as well as the transparency of the management of the collected fees. The pastoralists, through their representatives who live in the catchment area, are now also part of the WRMC, which was not the case at the start, because the pastoralists were not present in the area during the establishment of the WRMC. The WRMC planned to build a dam close to the town, but this was not technically feasible. In consultation between the WRMC and the technical experts of the project it was decided to build a hafir instead, with the triple goal to increase groundwater recharge, provide water for agriculture and to provide an alternative water source for the livestock of the pastoralists. The pastoralists are now also included in the water management of the newly built hafir. The inclusion of the semi-nomadic pastoralists, who migrate with their livestock through the catchment area, in the water management committees for the specific water points and in the WRMC has prevented conflicts between farmers and pastoralists from happening. The relations between these water user groups have improved as they see the mutual benefits. Pastoralists benefit from the water for their livestock; the farmers earn more money with the sale of crop residues as fodder to the pastoralists; and their farmland is improved thanks to the manure.



Women group in Gala al Nahal area visiting a vegetable farm to monitor the impact of groundwater recharge enhanced by the newly constructed Hafeer on farming activities



CONCLUSION AND RECOMMENDATIONS

As the case of the Rural Water for Sudan project has shown, the IWRM approach is a long and demanding process, but it is crucial when working in a context where water is scarce and a source of conflicts. The IWRM approach contributes to the sustainability of the water infrastructure as it supports joint ownership and takes into account the water availability now and in the future, preventing conflicts from happening. It also brings different community groups together who before did not collaborate, and this experience of joint planning and management has contributed to more mutual understanding and social cohesion.

The Rural Water for Sudan project has proven that it is possible to implement this innovative IWRM approach, but it requires commitment from the different stakeholders. Therefore the following recommendations aim to support wider implementation of this effective IWRM approach:

NGO practitioners

- The IWRM approach is not a blueprint but a process. Each catchment area is unique with its own hydrological characteristics and specific conflict dynamics. This type of work requires a different style of management and implementation than short-term emergency projects. Therefore the NGO needs to have staff at all levels who understand the technical and social aspects of the IWRM approach, and who are sensitive to these community dynamics.
- The IWRM approach needs engagement with government stakeholders at different levels from the start of the project as the approach is unknown. Early engagement and providing examples of positive experiences which support the government in their responsibilities to provide water, help to get commitment.

Donors

- Working according to the IWRM approach requires long-term funding and a flexible donor who is willing to adapt programming in line with the challenges faced in the field. The speed of the implementation depends largely on the community decisions and slowing down may be necessary in order to prevent conflicts in the future. A push for fast implementation is unhelpful and unproductive in the long run.

Government

- It is the role of the government to work on the enabling environment through the establishment of IWRM frameworks and policies at different levels, but also through addressing land rights issues and peace processes where needed. With these government actions the upscaling of the IWRM approach will gain effectiveness.

All

- Engage with researchers for profound evidence-based learning on how different water user groups and government stakeholders cooperate in this IWRM approach and the effect on conflict and peace. So far the evidence is promising as outlined in this paper but still anecdotal.

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