

## CASE STUDY

# ADDRESSING WATER CHALLENGES IN RURAL AND URBAN SETTINGS BY USING AN INTEGRATED AND PEOPLE-CENTRED APPROACH

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■ Climate change is more than an issue of rising sea-water levels and increasing severity of droughts. It is also causing conflicts and accelerating them. It will continue to increase the likelihood of conflicts, especially in cities. “Recent” rapid climate change has caused the migration of a high number of people from rural areas to cities. This urbanisation is taking place while climate-related risks like flooding are increasing, resources are depleting and the quality of ecosystems deteriorates. As a result, pressure is increasing on the already deteriorated basic services of cities, such as housing and water, but also on facilities such as health-care and education. These pressures make cities more and more vulnerable to stress and conflicts over resources like land, food, water and energy. The poor are particularly vulnerable to these risks.

■ This article describes two case studies of water stressed communities. The first case covers an urban community in Jakarta which struggles with an affluence of water, a sinking city and the intrusion of the sea while the second case details a rural community in South Sudan which experiences recurring droughts. These case studies illustrate how Cordaid, by using an integrated and people-centred approach, manages to address water challenges and enhance the resilience of poor communities. This approach is *process* oriented and:

- engages citizens in risk prone disadvantaged areas in a process towards increased personal and community resilience
- ensures a high level of participation of the involved communities and the engagement of and collaboration between all relevant stakeholders from different institutional and subject sectors
- requires a well-organized interaction process facilitating joint fact finding, building trust among stakeholders and coming to supported decisions and

concrete outcomes that respond to the needs and interests of all parties involved

- requires stakeholders to invest their own resources, time, knowledge, experience/practices and skills to jointly undertake a risk analysis, develop plans and implement measures that benefit all

### Marunda, Indonesia

A good example to illustrate how the integrated approach is used in practice is the waterfront neighbourhood of Marunda on Jakarta’s northern coast. In this area, due to appalling waste management and sewage systems, the water is extremely polluted. Heavy rains, sea spring tides and flooding rivers aggravate the sewage and waste problems and increase health risks. The sea wall might stop rising sea levels, but could also turn the northern coastal area into a cesspool. On top of that, it is cutting fishing communities off from the sea and is thus robbing them from an income.

In Marunda, Cordaid started with a participatory risk mapping which used the community’s analysis of risks

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and translated this information into digital maps. These maps showed the community as part of the greater Jakarta and created a general sense of “we exist”. For people who have been living their whole life in informality, excluded from decision-making processes, this was important. They felt taken seriously.

At a later stage, the risk-mapping was enriched by bringing in the authorities of the area, including private sector representatives and other CSOs. The process was taken forward and resilience measures were collaboratively developed. The project moved on well, until the spectre of evictions entered the scene. Government officials who first pledged their support were suddenly hesitant in providing the infrastructure support needs which were identified by stakeholders at an earlier phase in the program. The same held for other stakeholders such as the private sector, and even the community members who started to think: “why invest in my neighbourhood if they will demolish it”.

Ultimately, through multi-stakeholder platform meetings and consulting with community groups and other stakeholders individually, Cordaid was able to change this around. Based on the common agenda, the problem analysis was done again and new priorities were set. Given the information that the residents could be moved to a new location in due course, new resilience measures focus more on skills and knowledge building that people can apply anywhere they live, like urban farming, waste banks, saving & loan groups and sanitation.

### Wau County, South Sudan

Moving from an urban to a rural context, this case study describes the experiences of Cordaid in Wau County, South Sudan. Wau County is an area in the province of Western Bahr el Ghazal which struggles with many problems, such as conflict, forced migration, poverty, poor governance, economic hardship, market instability, hyperinflation, food insecurity and a heavy dependence on rain-based agriculture and livestock breeding. Climate change and ecosystem degradation have aggravated these problems. Due to the influx of displaced people in the area, agricultural and pasture land are used more intensively which increases the risk of droughts and floods in the area. Also, due to climate change, the migration patterns of pastoralists, and the sowing and harvest seasons have changed, causing

pastoralists to migrate earlier than usual and destroying young crops of farmers. As a result, tensions have been increasing between pastoralists and smallholder farmers, even leading to violent conflicts.

Like in Marunda, the solution to these problems can be found by using an integrated approach and conducting a joint and participatory risk analysis, developing an action plan, improving the facilities together and advocating for resilience processes to become part of existing government policies. All relevant stakeholders were involved including farmers, pastoralists, displaced people, returnees, different tribes and the district and province government. Ultimately, the following actions were taken:

- An early warning system was set up that mitigates conflict by informing farmers when pastoralists are moving to their area. This way, farmers can harvest their crops or can appoint communal land where the livestock of pastoralists can graze. When crops get damaged, pastoralists need to compensate for the loss as is documented in a Memorandum of Understanding (MoU) between pastoralists, farmers and local authorities.
- Water committees were set up to ensure that all parties adhere to the agreements in the MoU and that the water infrastructure is well maintained and everyone has equal access to water.
- Peacebuilding committees developed into effective advocates to solve conflicts between farmers and pastoralists.
- Pastoralists have helped farmers to dig wells which both groups can use.
- The local government has appointed land to returnees which reduces the risk between these returnees and farmers.

### Success factors

Based on the case studies, three key success-factors have been identified:

- 1 *Do not leave anyone behind and be flexible.* All relevant stakeholders should be involved to ensure the process and ultimately the outcomes are

sustainable. This requires a tailored approach for each stakeholder as all have different needs, interests, values and views of what must be achieved and how. Understanding these differences offers insights into the design of your engagement, which clearly showed in the Marunda eviction debate where stakeholders were engaged at an early stage, enabling them to provide information as part of the project analysis and incorporating their ideas. Flexibility is also key as changes can occur which influence the process. For example, there can be a change in political priorities or change in dynamics between groups. In Marunda, stakeholders were only involved over time.

- 2 *Resilience building is a long-term process and requires a lot of time and patience.* Time is needed to build trust and successfully engage with communities who have in the past been marginalized, to negotiate, to come up with innovative resilience measures, and to settle conflicts. Also, efforts need to be made to ensure no one drops out.
- 3 *Start small, grow with the community.* The process should lead to concrete resilience measures for which upfront funding is reserved by stakeholders involved. For example in Marunda, the multi-stakeholder process has led to small-scale urban farming activities to diversify residents' livelihoods. Over the years, the Jakarta government even adapted the multi-stakeholder approach in the Jakarta Urban Farming Grand Design (regional plan).

## Challenges

Numerous challenges exist when using an integrated and people-centred approach:

- When implementing a new project in a new context, the basic steps of the process from joint risk mapping to monitoring and evaluating the process and its results remain the same. Nevertheless, in each new setting, steps of the approach need to be tailored to the new context and (local) realities. This requires investment of time and resources.
- Finally, there are a number of challenges with regards to funding. First of all, funding needs to be flexible, allowing for resilience measures to be

formulated by the stakeholders instead of upfront by the INGO's. Secondly, funds are needed which not only aim at concrete results, but also support a lengthy process. Thirdly, decentralisation of budgeting is needed, because resilience is localized. Finally, in order to scale to a larger area, there is a need for community engagers/facilitators who are able to manage these processes. This requires investments in knowledge and expertise development.

## Conclusion

The two case studies illustrate that, even in high-risk areas, knowledge of the risks, joint analyses and participation of every stakeholder in a community can reduce the risk of disaster and enhance the resilience of the people involved. To accomplish this, it is crucial to adopt an integrated approach: to determine the risks, natural environment, infrastructure, livelihoods, sources of potential conflicts and to make this context-specific and leave no one behind. Based on Cordaid's experience in putting this approach in practice, using this approach should be the way forward to make urban as well as rural areas and its vulnerable populations more resilient to climate-related risks in the future. ■

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## NEDERLANDSE SAMENVATTING:

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Zelf in hele risicovolle gebieden is het mogelijk om het risico op een ramp te verminderen en de weerbaarheid van de gemeenschappen te versterken d.m.v. kennis van de risico's, gezamenlijke analyse, conflictsensitiviteit en participatie van de gemeenschap en alle betrokken stakeholders. Cruciaal daarbij is een integrale benadering: kijk naar de risico's, natuurlijke omgeving, infrastructuur, bestaansmiddelen, de bron van potentiële conflicten, maak dit context specifiek en sluit niemand uit. Dit betekent dat iedereen moet meedoen en dat vertrouwen moet worden opgebouwd tussen de verschillende stakeholders. Dit kost veel tijd en is geen gemakkelijke opgave wat ook betekent dat fondsen beschikbaar moeten zijn die een dergelijke procesbenadering ondersteunen. Alleen dan is het mogelijk om tot inclusieve oplossingen te komen voor de uitdagingen van de toekomst.

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