

Who stole our water? The need for fair allocation and safeguards for sustainability Yaeda River, Internal Drainage Basin

At a glance

The Yaeda River in Mbulu provides a tragic example of how poor water resource management can cause conflict, negative impacts on livelihoods and health, and undermine sustainable growth.

The Yaeda River rises above Dongobesh on the Mbulu plateau before passing through Mangisa where its waters are used for irrigation. It then runs down the rift escarpment to the Yaeda Chini basin which receives little rainfall and relies on the river to replenish domestic water sources. The basin is an important wildlife migration route and livestock watering point for the Barabaig, and is home to the Hadzabe, one of the last hunter-gatherer tribes in Africa.

In 2003 with the support from the International Fund for Agricultural Development (IFAD), IrishAid and the World Food Programme, the Ministry of Agriculture expanded irrigated agriculture on the plateau through the Participatory Irrigation Development Programme (PIDP). Under the scheme they built a dam at Mangisa and expanded the area of irrigated land on the plateau by almost two thousand hectares using water from the Yaeda River. The scheme was deemed to only require an 'Initial Environmental Examination' by its proponents instead of a proper Environmental Impact Assessment.

The examination falls well short of a proper safeguard assessment. Whilst it recognises the significant hydrological impacts of the dam, it fails to quantify water required by farmers, water available from the river, and downstream needs and impacts. To mitigate any future upstream - downstream conflict it suggests, "strengthening water user

groups" and that a more detailed study be carried out. This was never done.

The scheme has had direct impacts on the ability of downstream communities to meet their domestic water needs and this has led to armed conflict. In 2004 downstream users marched upstream with spears, bows and arrows, and clubs and demanded that irrigation furrows be closed so that water could be released to meet their basic needs.

The dam development at Mangisa flouts national law and policy which prioritises domestic use over agricultural water use, and shows why water resources management and environmental safeguards under the Environmental Management Act 2004 need to be improved. Because of a lack of investment in local water management capacity of a Water User Association, irrigators who use water from the dam are now in conflict among themselves. The situation also raises big questions about the water permitting regime and the ability of the Basin Water Board to ensure fair and sustainable allocation of water.

The absence of any meaningful water balance assessment by an irrigation project receiving support by high profile donors is a real concern, particularly given the scale of irrigation expansion planned across Tanzania. All irrigation and dam building projects must meet the requirements of the Environmental Management Act 2004, the Third Schedule of which (Section 81(1)) obliges the proponents or developers of projects involving dams, water resources and rivers to undertake environmental impact assessment and to obtain an EIA certificate. Without this, construction constitutes an offence.

What's going on along the Yaeda River?

Fact 1. Dam construction without Environmental Impact Assessment and certification



Mangisa dam was constructed with donor support through PIDP in 2003. Four irrigation schemes: Diyomat, Dirim, Harsha and Mangisa of 1,820 ha are served by water from Yaeda River.

- ◆ No water availability study has been conducted in the river. Flow measurement is not carried out.
- ◆ Environment and Social Impact Assessments had not been carried out before the dam was constructed.

Fact 2. Downstream communities face water insecurity

- ◆ Water points are scarce in downstream villages of Endalat, Endamilay, Yaeda Chini and Mongo wa Mono villages, and many people cannot access services across scattered settlements of Iraq, Barabaig and Hadzabe communities.
- ◆ Many people are forced to use the river (which could mean 3 – 7 km) to fetch water direct from the river for domestic purposes such as drinking, cooking and bathing.
- ◆ The River now runs for large parts of the year, impacting the health and livelihoods of down-streamer villages.
- ◆ The communities blame their water shortage on irrigation expansion that did not take their needs into account. They complain that their voices have not been heard.

Fact 3. Water use conflicts along the Yaeda River



At the beginning of 2003 conflicts over water use emerged in the Yaeda valley among users within irrigation schemes & with downstream users. In 2004, a fight for water occurred when

downstream communities organized a group of 400 armed people to demand water release upstream. The conflicts were resolved by the district administration but the resolution has not been sustainable as water insecurity persists.

Fact 4. No institutional arrangements at the local level or permitting system to support fair water use

- ◆ The DIDIHAMA AMCOS agriculture cooperative is in place but represents a single set of irrigation users and is not well placed or able to oversee fair water use.
- ◆ No Water User Association has been established to coordinate or control water uses in the River. No Water Use Permits have been granted in the Yaeda to control or manage allocation.

How reliable is our data?

The Uhakika team has visited the Yaeda Valley on four occasions since 2013 to document the situation. Field work has consisted of interviews with village authorities, participatory meetings with community members and field surveys and inspections. In February 2015 the team surveyed the river at Endalat, interviewing representatives of the village and community members and initiated an action plan to seek government support to remedy the issues. The DIDIHAMA AMCOS was also supported with an action plan which approached the Basin Office and District Office (Irrigation department) to assist them with establishing a Water User Association.

What needs to change?

Locally: Along the Yaeda River

1. There is strong community demand for a Yaeda Water Users Association which can improve coordination and address conflicts. As an urgent priority a group which includes downstream users should be established and facilitated by the Basin Water Board.
2. The irrigation scheme and dam should be subject to an environmental audit as required by EMA 2004 which should consider the amount of water which can be safely abstracted by each scheme. This work should draw on a flow assessment which should specifically recognise the prior use values provided to internationally important ecosystems and vulnerable downstream people.
3. A simple allocation and permitting regime should be implemented and adequate budget provided to the BWB to enable regular monitoring. It should reflect national water policy which requires scaling back of non-essential use during dry spells to ensure water for domestic needs.

PIDP co-sponsors have responsibility for remedying the problems seen along the Yaeda.

Nationally: case study learning and response

1. By law, all development of water resources, including for irrigation, must undergo environmental assessment, certification and be permitted by the Basin Water Boards, but in reality this seems a rarity. The Directorate of Water Resources should agree standards of service with the Irrigation Commission, the Ministry of Agriculture and PMO-RALG so that plans for irrigation are supported by proper analysis of water resources to support sustainability. A clear process of alignment between national irrigation and water resources policies, strategies and laws is urgently needed.
2. To promote transparency and accountability NEMC should publish a public list of all major irrigation schemes along with their regulatory and certification status.
3. The Basin Water Boards are accountable for ensuring that water is used in line with the National Water Policy and WRMA 2009. They should control works that affect water use and ensure adequate planning. They should be supported, provided with the resources they need and held to account for delivery of these key functions.

PRIORITY ACTION: Irrigation development across Tanzania must be supported by analysis of water availability, and Basin Water Boards must have authority and resources to regulate use in line with policy and sustainable limits.