Building better dams by sharing the benefits

Whether or not to build dams is no longer the issue – for many developing countries, and investors, they are often the preferred solution for addressing growing energy and food demands in the context of a changing climate. The question now is, how to build better dams, with fewer negative impacts? Jamie Skinner from the Global Water Initiative in West Africa gives more details.

The Global Water Initiative (GWI) in West Africa is an action-research and advocacy project implemented by the International Institute for Environment and Development (IIED) and the International Union for the Conservation of Nature (IUCN). We work with family farmers and governments to shape policies and practices that support livelihoods and food security in the context of large multi-purpose dams. Funded by the Howard G. Buffett Foundation, our research and advocacy focus on three existing dam sites: Bagré in Burkina Faso, Sélingué in Mali, and the linked Nandoulou and Ouinoufatt dams in Siné-Ndaw and two sites under development in the Niger basin: Fomi in Guinea and Kandadji in Niger.

Benefit-sharing

Earlier this year, communities affected by the Samendeni dam in Burkina Faso – which displaced 40,000 people – took to the streets demonstrating seen in Burkina Faso. Our experience in the region has shown the key ways to do this include: formal agreements between government and local people; local development funds; improved livelihood opportunities for smallholder farmers; and secure access to land.

Formal agreements

Formal agreements between governments and local populations can ensure both trust and the practical implementation of benefit-sharing. Achieving this also benefits the developers and the government – and avoids the kinds of demonstrations seen in Burkina Faso. Our experience in the region has shown the key ways to do this include: formal agreements between government and local people; local development funds; improved livelihood opportunities for smallholder farmers; and secure access to land.

Formal agreements help to keep both sides honest. In some cases governments are surprised by the evolving and escalating demands of affected populations. Experience in West Africa suggests that such agreements can help codify the commitments of each party, so that both Rites and affected populations can hold one another to account.

In line with international standards, particularly those around ‘due, prior, and informed consent’ (FPIC), all agreements should be written in clear and accessible language and be drawn up together with affected populations through meaningful consultation. GWI in West Africa has successfully developed agreements with local people in Niger for the Kandadji dam, using FPIC principles, including a proposal for a new type of long-term lease to secure access to what is effectively now public land.

Local development funds

Large hydropower dams will become more acceptable to communities if some of the revenue is shared directly with them. This gives local people a stake in the project that is disrupting their lives, and the means to develop alternative livelihoods post dam construction. Having control of a revenue stream can empower the communities, and prevent them becoming overly dependent on government handouts.

A number of such benefit-sharing schemes are already working worldwide, including through taxes and royalties used to reallocate revenue to local municipalities or to development funds. The main challenge is good governance and ensuring that revenue redistribution is clearly and directly linked to assisting the affected communities to rebuild their livelihoods.

Everyone benefits from benefit-sharing

Benefit-sharing mechanisms can be positive for all stakeholders. They allow populations affected by dams to become partners in projects and provide them with a stronger voice in decisions that affect them. It also ensures that they are first among project beneficiaries, not last.

For governments, benefit-sharing mechanisms provide practical policies which lead to greater social inclusiveness and which balance social, economic and environmental factors in the planning, design, implementation and operation of dams. From a dam management perspective, benefit-sharing helps to work effectively with local communities and maintain good relations with them. This reduces the risk of project delays, increases local cooperation in catchment management and in implementing environment mitigation measures. All of which reduces reputational risk.

For potential investors, an explicit policy framework with realistic provisions for local benefit-sharing is an indicator that local affected communities and the public are more likely to support a dam project, reducing exposure to risk.

From a consumer perspective (domestic, service sector or industry) it means a greater likelihood of more secure, reliable and less expensive water and energy services.


[1] Women replanting rice in the irrigated area around the Bagré dam in Burkina Faso. Credit: Barbara Adshead/IIED

[2] A farmer on his motorbike on the bank between irrigated rice fields at Sélingué in Mali, with pylons for the hydroelectricity produced by the dam in the background. Credit: Mike Goldwater/GWI West Africa

[3] A smallholder farmer in Sélingué in Mali on his garden plot growing lettuce for sale to women who buy direct from him. Behind him are dam-irrigated rice fields and pylons for the hydroelectricity. Credit: Mike Goldwater/GWI West Africa

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local level should then be negotiated and agreed with local communities. GWI has been working with local and regional government and civil society in Niger to develop a proposal for a local development fund at the future Kandadji dam. The fund – known as the PIDEL-K – would channel 3% of the hydropower revenue from the dam to an account managed by a group of local communities, supported by technical staff in local government. Improving livelihoods of smallholder farmers

Why should dam-builders focus on smallholders? Most of those affected by large dam irrigation schemes are small farmers and agriculture is the main source of livelihood for most of the local communities affected by these projects. Of the 150 existing dams in West Africa, 90 support irrigation. An additional 39 dams are on the drawing board. However, irrigation systems alone do not usually produce sufficient yields to support smallholder livelihoods or provide a return on the investment in building the dam. The main reasons for the low return on investment in irrigation systems GWI has examined include: Over-optimistic pricing for crops. Lower than predicted yields. Slower than planned extension of irrigation schemes (the dam is over-dimensional).

As a result, rice is imported from Asia, and is the most important agro-food import in West Africa. Planners often assume that when farmers are given water they will able to farm more intensively on a smaller area to meet their livelihood needs. But this ignores the realities of their livelihood strategy, which relies on growing a variety of crops and earning income from many different activities.GWFI has been working with local communities to develop new policies for the exploitation of land for public use, compensation processes, and secure tenure on public land for both the states and those who live and farm on it. The legal tools developed by GWI in Niger can be adopted by states later this year.

Security of land tenure

Land tenure is at the heart of ensuring that dams benefit local peoples. Firstly, to ensure compensation for land lost to the thousands of people displaced by large dams. Secondly, to ensure that farmers – whether as owners, tenants or long term lease holders – can securely invest and develop their new land after dam construction. In many developing countries with weak land tenure legislation, this is easier said than doing. In the community of West African States (ECOWAS) land tenure is at the heart of ensuring that the benefits of dams are shared with local populations and for sharing revenue from hydroelectricity.

References

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International and regional standards

There are a plethora of standards that apply to social and environmental safeguards in dam construction, mainly linked to financing. Where multinational banks’ operational safeguards do not apply, local resettlement is guided solely by the (often lower) standards of national law. This can lead to different dams in the same country following different resettlement practices depending on the donor/financier. The main boundary of many shared river basins also means that river basin organisations do not plan and implement dams in a harmonised way. A common framework at regional level has been developed in West Africa by the Economic Community of West African States (ECOWAS) through a regionally binding directive on large water infrastructure. This has been agreed by the Community’s Water Ministers, and is due to be adopted by states later this year. GWI has supported the dialogue process which led to the drafting and validation of the directive, but we have also sought to identify practical methods and legal tools to support implementation. This has included ways to secure land tenure for local farmers, ensuring that the benefits of dams are shared with local communities, and undertaking ex post reviews of the economic value of existing dams in order to inform more realistic planning for future ones.

Sharing the benefits of large dams with local people is not only socially just, it is also common sense for anyone wanting to build better dams which deliver for everyone.

Author information

Jamie Skinner is the Director of GWI West Africa and a principal researcher at IIEC where he leads the Water team. He was the environment adviser at the Secretariat of the World Commission on Dams and currently chairs the social chamber of the Hydropower Sustainability Assessment Protocol.