



Integrating Environmental Sustainability in WASH Practice

Wetlands International's approach

Nature Based Solutions, World Water Week, 1 September 2013

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Our engagement with WASH

- Shifted from conceptual to practical:
 - Conceptual development with WASH and conservation organisations
 - Publication on Wetlands & WASH
 - Partner in Dutch WASH Alliance Programme www.washalliance.nl
- Highlighting:
 - Our context & thinking on collaboration
 - Examples from on-the-ground work
 - Case of influencing a multi-partner implementation programme
 - Lessons learned & way forward

Evolving partnership approach

Operational & institutional aspects
and
conceptual & technical

Changing WASH focused organisation culture is more than
showing a conceptual approach

It is also about changing the way problem analysis are
formulated and responding to it

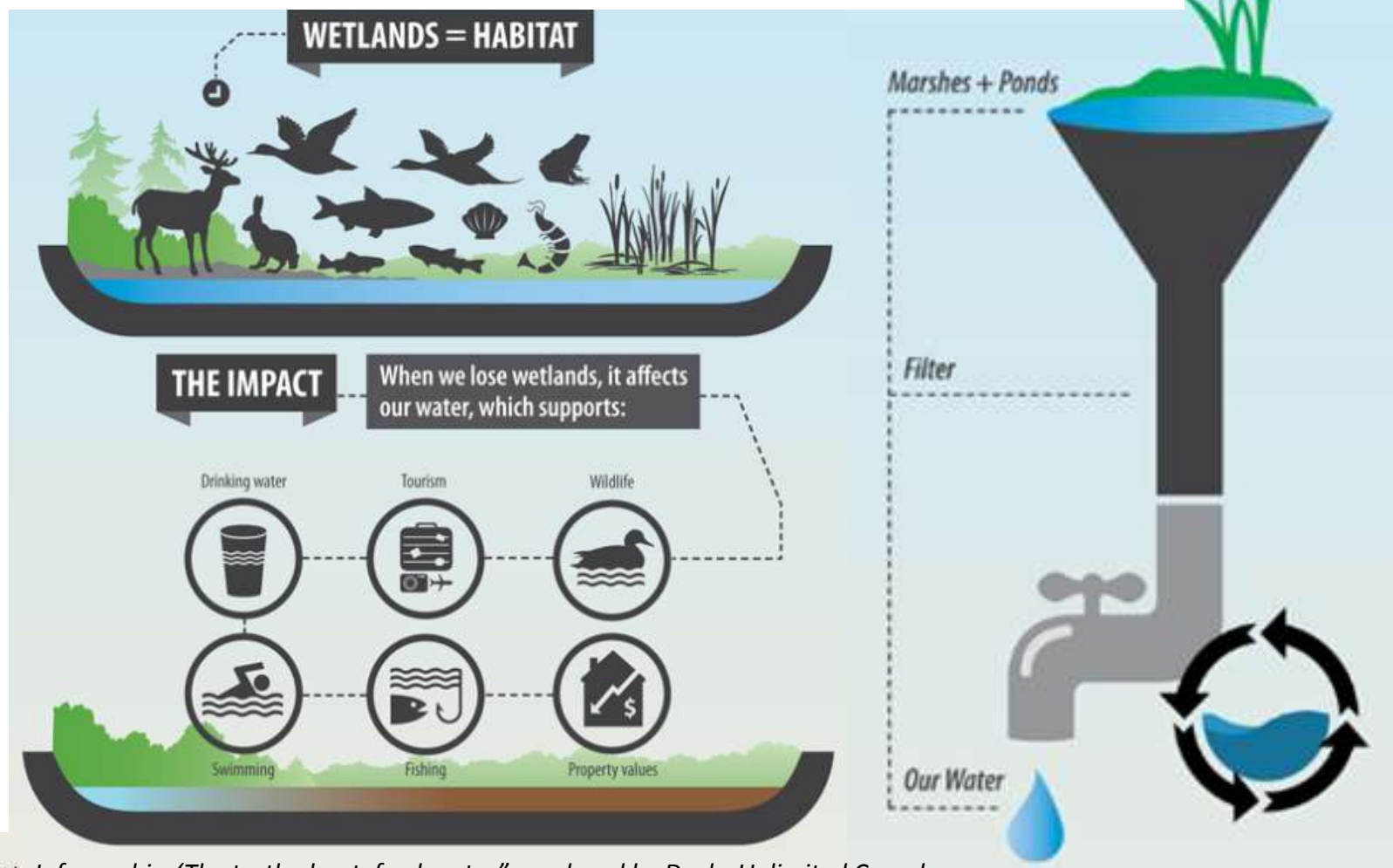
Very fundamental institutional changes that have major
implications for staff capacity and the partnerships to work in

A mission **POSSIBLE**

Wetlands as natural solutions for managing water

Link to WASH (relies on water and impacts water):

1. Water source
2. Sink function
3. Ecosystem services for survival



What we do with partners

Landscape-specific approach
understanding WASH related
risks and benefits



Community / household approach
on WASH



What does this look like - Mali

Inner Niger Delta:

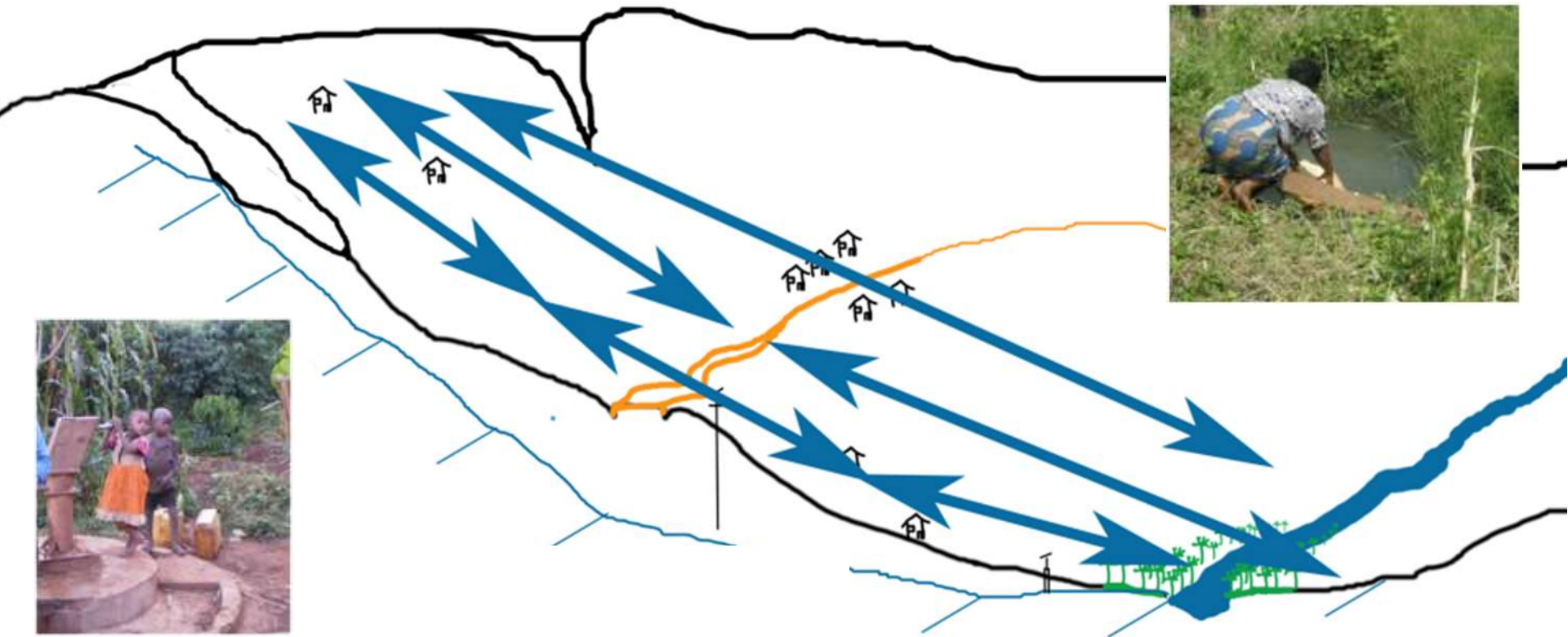
- Multi-partner research & knowledge development programme
- Analysis of water management options by communities
- Scenario analysis
- Knowledgeable communities claiming specific options



What does this look like – Uganda

Rwambu catchment, Rwenzori Region:

- Planning & implementation: design of WASH project in catchment context
- Recognition by JESE and CSOs that WASH access problems are related with landscape; solution approach needs to be too
 - Combined sanitation, waste management, water recharge retention & reuse techniques + wetland management



What does this look like – India

Loktak Lake, Manipur Delta:

- Inclusive IWRM planning: ensuring WASH for wetland dependant communities as one of core actions in Loktak management plan
- Advice on WASH implementation at right locations in landscape in line with community expressed needs



Influencing Dutch WASH Alliance (DWA)

- DGIS funded / € 45 million / 2011-2015 / 25% own funding
- 6 WASH organisations / 8 countries / 6 thematic partners



- Direct poverty alleviation, CSO strengthening, policy influencing
- Full sustainability approach: 'FIETS'
- Technical Leadership on Environmental Sustainability (= E)
- Influencing WASH provider thinking and approaches

What does this look like – DWA

FACTSHEETS ON E: DEVELOPED WITH DWA PARTNERS

WASH ALLIANCE

Environmental Sustainability
in WASH projects by the Dutch WASH Alliance

How can you support people in living healthy lives? One way is to ensure that they have access to enough clean water. Another is to support them in building proper sanitary facilities. Or to increase awareness of good hygiene practices. The Dutch WASH Alliance aims to raise and embed these conditions around the world. To ensure that it is done in the most sustainable manner possible, the Dutch WASH Alliance follows a unique strategy called WASH. This factsheet explains part of the strategy: the focus on environmental sustainability.

The Dutch WASH Alliance is a coalition of Dutch, Multilateral and private WASH, especially in drinking (surface) and water purification (point-of-use) projects, with governments, universities and civil society organisations. The strategic and operational objectives of the Dutch WASH Alliance are to support the development of water services in urban and rural areas, to work to prevent the need for additional investments, to ensure that the projects are sustainable and to ensure that the projects have a positive impact on the environment and on the health and well-being of the population.

When you together find answers to these questions result in an integral, landscape-specific plan. The guiding principle is always that water, land and other resources are part of a single enterprise, and cannot be dealt separately. The characteristics of the scope/area determine the WASH options and the development possibilities for the local community. The goal of this approach is to improve the quality of life for the local community without undermining the natural environment.

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Landscape-specific approach

WASH ALLIANCE

Environmental and technological sustainability

3 Environmental and technological sustainability

WASH projects are technologically sustainable when the technical tools used are low-tech, high quality, durable and affordable. The local community should be able to access and solve technical problems, so they are the ones who will eventually have to operate, maintain, repair, upgrade and/or improve the technical installations. WASH technologies should take as little material as possible in the acquisition, and ideally they should actually have beneficial effects. For example, you can pump water up out of the ground, but that will be unsustainable if there is no refill of the water table. In these cases it is therefore better to choose alternatives such as low-tech rain water. There are also technologies for preventing sewage from coming into contact with clean ground water. Technology must of course be located in the right place. Installing toilets near open water is not a good idea, for example.

4 Environmental and social sustainability

WASH projects are socially sustainable when they do not hinder a person's own ability to make decisions and taking of his/her own initiative and without dependence on others. WASH projects should be based on people's own initiatives, and should be based on people's own initiatives, and should be based on people's own initiatives. WASH projects should be based on people's own initiatives, and should be based on people's own initiatives. WASH projects should be based on people's own initiatives, and should be based on people's own initiatives.

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Social sustainability in practice



WASH ALLIANCE

Environmental Sustainability
in the storage, management and use of water

How can you store large amounts of clean water that would otherwise be lost or run off? And how can you access that water when it is needed? The answers to these questions differ for each area or watershed. The Dutch WASH Alliance therefore works to find the most sustainable, suitable and context-specific solutions. The goal is to provide people with enough clean water in a way that benefits both them and their natural environment. The '3R' approach plays a vital role in realizing this goal.

What does '3R' stand for?

It stands for the three elements required to store, manage and otherwise:

- 1 Recharging** water involves the application of techniques for restoring groundwater levels. This form of water storage prevents natural water sources from drying up as a result of climate change or excessive use of ground and surface water.
- 2 Retaining** water involves storing water, for example in water tanks, to ensure that the water does not flow away to the river or sea when it rains, but is captured in the area and made available when needed.
- 3 Re-using** water involves using and re-using water for multiple purposes. At the household level this can entail reusing stored kitchen waste water, for instance for watering plants.

How can you best implement the '3R' approach?

First, by analyzing the following elements:

- what water sources are available in the area or watershed;
- when and how can you use these sources;
- how much clean water is needed and how much of a shortfall must be made up;
- whether the availability of clean water varies according to season;
- whether climate change will affect the availability of clean water over time;
- which storage options the landscape offers;
- how many people need water and when they do;
- what the purposes of their water need is (agriculture, livestock or household tasks, for example);
- whether water use could be optimized and who controls the water sources;
- which other sources and services the natural environment offers, by means of.

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Recharging, retaining and re-using renewable water sources

WASH ALLIANCE

Prevention of contamination and waste

1 Purify contaminated water sources

Nature is often able to remove contaminants from water on its own. Take fertilizers for example: they can be converted or purified in natural systems, such as wetlands. Streams or rivers receive more water products from the water that flows through them. But sometimes nature needs a helping hand in the form of artificial filters placed in the water flow.

2 Reuse/nutrient of nutrients from sewage and waste

The largest material in sewage and waste consists of a number of substances. Some of these are harmful, but others are beneficial for the growth of agricultural crops. There are a number of methods for obtaining the beneficial nutrients from sewage and waste, such as drying the organic material (biogas), giving it a special bio-aerobic treatment (digested) or exposing it to microorganisms (composting). Composting is often combined with deforestation or bio-fertilizer.

3 Prevent sewage and waste from entering water sources

The environment (damage and diseases) that are spread through water are often the result of waste or sewage coming into contact with sources of drinking water. People are often unaware of how important it is to limit this contact, or it is what they receive information about water, sanitation and hygiene. Sources of water must also be protected from waste and sewage, so that the sewage can be used for agricultural purposes. Special sanitation technologies make it possible to separate and recycle sewage and/or for beneficial purposes.

People often have to be encouraged to use these technologies. In the Indian region of Tamil Nadu, this encouragement was provided in the form of a small amount of money when people visited the newly installed public toilets. The money was provided from the profits from the sale of the urine to local farmers. These toilets were popular because they separate urine from urine and recycle the beneficial nutrients and store the beneficial substances.

Preparation of projects

Here are a few suggestions for starting a project in a developing country:

- Determine the needed cost (based on water quality and the local community's resources) and see whether that can be covered by the local community.
- Find out how and where the water can be used to benefit the local community.
- Find out how the local community can be involved in the project.
- Research which resources the local government can offer and how to use them.

Preparation of projects



Results so far of DWA effort

- Dutch Ministry of Foreign Affairs is using sustainability model FIETS to judge proposals for the Sustainable Water Fund (150 million euro)
- Catchment assessments are at the basis of WASH intervention planning in both Malian and Ugandan sites
- AMREF - one of Africa's largest international health development NGOs – committed to reflect ecosystem services within its WASH Strategy.
- Environmental sustainable thinking is increasingly mainstreamed in tools, guidelines and communication;
- Joint initiatives are under development, e.g. “One hundred wetlands” proposal by AMREF, RAIN, WI and Ugandan NGO's.

Lessons learned on inter-sectoral engagement

- WASH organisations are concerned with local scale interventions.
- Ecosystem services posing opportunities & risks to WASH must be assessed at the landscape scale and at the beginning.
- Process of co-creation regarding definition, vision, approaches, tools and activities.
- Develop information material and tools tailored to specific context of collaboration.
- Invest in the most interested organisations / lead thinkers
- Be willing and flexible to adjust along the way and at the same time fall back on the co-created ambition and hold each other accountable for this.
- Behaviour change is achieved through partnership; it requires a significant investment of time, institutional commitment and is incremental

Way forward and how to support

- Seeking allies to scale up our work
- Modular capacity building tool
- Video in the making to inspire allies – looking for feedback
- Get further in touch with anyone interested to support

Invitation to follow-up with us during World Water Week:

Monday 2 September 09:00-12:00

Room M 20; located beside Hall B (Exhibition Area)

Chris Baker, Bakary Kone & Susanne Boom

Free coffee available ☺