

RiPPLE

Research-inspired Policy and Practice Learning
in Ethiopia and the Nile Region

Beyond the Water Point

Linking research, policy and practice for sustainable
water supply and sanitation in Ethiopia



Foreword by H. E. Alemayehu Tegenu

Since 2006, the DFID-funded RiPPLE programme has provided invaluable support to the water and sanitation sector in Ethiopia. Drawing on the capabilities of local staff and working closely with the Government of Ethiopia, RiPPLE has made a significant contribution to capacity building, the generation of new knowledge, and policy and practice around the delivery of basic services in rural areas. This is a major achievement.

The challenge in meeting the water and sanitation needs of a growing population is a huge one, and climate change will make that challenge greater. But significant progress is being made, not least with the acceleration in

Reflection from Roger Calow

The global target for water and sanitation, enshrined in the Millennium Development Goals (MDGs), is to halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. RiPPLE is supporting progress towards that target in Ethiopia – a country committed to achieving universal access by 2015.

With funding from the UK Department for International Development (DFID), the ODI-led RiPPLE Programme – *Research-inspired Policy and Practice Learning in Ethiopia and the Nile Region* – is strengthening policy and practice for water and sanitation through action research and targeted training. RiPPLE has generated an impressive body of knowledge for policymakers and practitioners, covering issues around water supply options and choices, sustainability, monitoring, financing and the impacts of climate change, to name but a few. This publication provides only a snapshot.

RiPPLE has also helped train those at the ‘sharp end’ of service delivery – from community water and sanitation

water supply coverage under the Government of Ethiopia’s Growth and Transformation Plan. As RiPPLE enters its next phase and local ownership is strengthened further, the programme can play a key role in supporting this effort – conducting high quality research and providing evidence that helps extend access to basic services and builds resilience to climate change.



H. E. Alemayehu Tegenu, Minister
Ministry of Water and Energy, Government of Ethiopia

committees to technicians and water officers tasked with planning, implementing and sustaining schemes. Moreover, RiPPLE has helped build *local* research capacity, involving government staff in the design and implementation of research activities, and sponsored 36 students at Addis Ababa University, who will return to government posts after graduation, boosting the capacity of water bureaux to deliver sustainable services over the coming years.

What role can RiPPLE play in the future? As the current phase of DFID funding ends, RiPPLE will evolve to meet new demands under the stewardship of the Hararghe Catholic Secretariat (HCS). RiPPLE will continue to play an active and unique role in the sector – as a resource centre, and provider of research-based evidence for policy makers, practitioners and sector stakeholders. I wish it every success.

Roger Calow
RiPPLE Director

Learning and Practice Alliances: a novel approach to address WASH problems

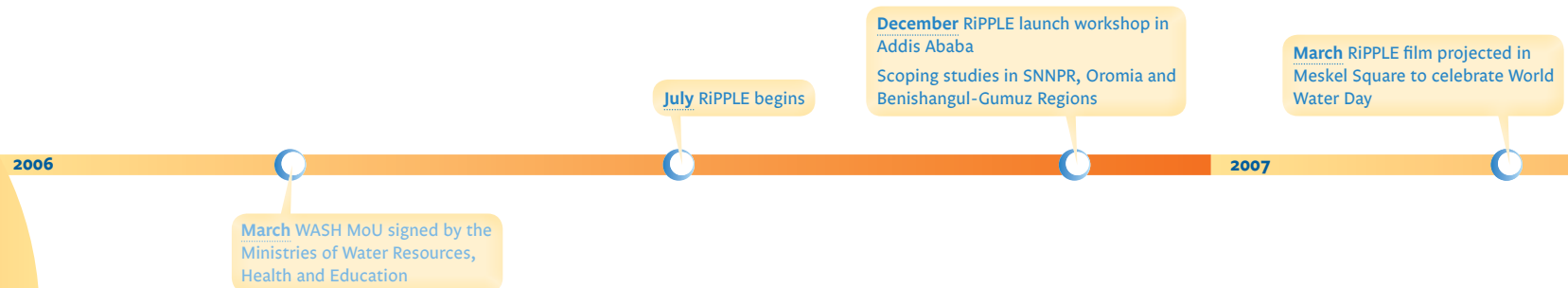
At the heart of the RiPPLE programme is the idea that research should be conducted with, rather than for, the people most likely to use research findings. The programme also recognises that the end users of research are not a homogeneous group, but have different institutional affiliations, disciplinary backgrounds and policy and practice mandates – at local, regional and national levels. So how does RiPPLE *engage*?

RiPPLE research and knowledge sharing is based around a series of interconnected platforms – **Learning and Practice Alliances (LPAs)** – that bring together stakeholders from different government departments, civil society organisations and the private sector. Researchers from partner organisations such as ODI and IRC work with LPAs to identify and fill knowledge gaps on WASH: one in each region and *woreda* (district) where RiPPLE works, and one at national level, the Forum for Learning on Water and Sanitation (FLoWS) hosted by the Ministry of Water and Energy (MoWE). The LPAs, including researchers and practitioners, as well as local officials and ‘champions’, carry out the research, but also the necessary reforms. All are tuned into local conditions and politics, so once a problem is identified, changes in policy and practice can quickly follow. Such was the case in Southern Nations, Nationalities and People’s Region (SNNPR), where research findings from two *woredas* highlighted major problems with the upkeep and maintenance of water points, leading to a ten-fold hike in *woreda* water budgets.

Working through LPAs has brought other benefits too. LPA members’ capacity to undertake research, and their understanding of the importance of *evidence* for problem solving, has increased. This, in turn, is generating demand for further research – on climate change impacts and adaptation for example – and for the establishment of

local resource centres where books, reports, CDs and maps can be freely accessed by sector stakeholders.

Not surprisingly, working through LPAs also encourages a more integrated approach to WASH planning and implementation, as sector staff share experience, articulate concerns and look for common solutions. As one LPA member in SNNPR put it: ‘[...] *although government encouraged integrated planning in water supply and sanitation among the bureaux of health, education, water and finance and economic development, it was RiPPLE that put the concept into practice through the LPA and multi-disciplinary research*’.



Supporting the National WASH Inventory for better service delivery

In 2010, the Government of Ethiopia began rolling out the **National WASH Inventory (NWI)**, collecting data about every water scheme in the country, and the water, sanitation and hygiene access and practices of every household. This is a huge task, so why is it being done, and what role has RiPPLE played?

Effective planning has until now been hindered by a lack of accurate coverage figures. Local government will now be able to plan more strategically to fill gaps in coverage and ensure equity, while at national level government and donors will develop a joint programme of action based on *reliable* information about needs. In addition, they will be able to monitor results to better understand what works, where and why. Critically, joint planning will extend to health and education sectors to enable much greater progress in sanitation.

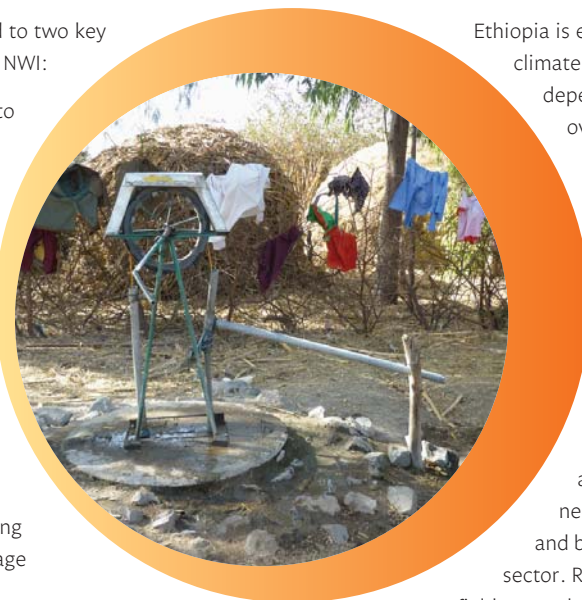
The NWI emerged as a government and donor priority in 2006. Responding to local demand in SNNPR, RiPPLE has helped identify data gaps and information bottlenecks in the planning process for new water investments. *Woreda* water staff joined the research team, and the studies were followed by a training programme for *woreda* water officers on information-based planning. Subsequent RiPPLE research revealed that significant numbers of people access water through self-supply – for example family wells. This demonstrated that the NWI should collect information about water access from community *and* household sources. In parallel, RiPPLE has provided practical support for the implementation of the NWI in SNNPR and Oromia Region.

In 2010, RiPPLE co-organised a national symposium on WASH monitoring, bringing together key stakeholders to learn lessons from the first phase of the NWI roll-out.

The symposium contributed to two key changes, strengthening the NWI:

- » the government agreed to collect information on family wells in the second phase of the NWI; and
- » the Central Statistical Agency joined the discussion, a necessary step to ensure that data from the NWI will be officially endorsed, published and, potentially, used by the UN Joint Monitoring Programme for its coverage reporting.

The NWI alone will not solve all the problems associated with the planning and implementation of WASH in Ethiopia. However, it represents a significant step with the potential to create greater equity in services, a better understanding of service sustainability, and a more coordinated, results-oriented approach among both government agencies and donors. RiPPLE, for its part, has played a significant role in supporting and strengthening the NWI, demonstrating the benefits of long term, evidence-based engagement with partners on issues that matter to them.



Climate change: from action research to policy and practice engagement

Ethiopia is extremely vulnerable to the impacts of climate change. Most of the population is still dependent on agriculture for a livelihood, and over 95% of food production is rain-fed. Irrigation remains limited, water storage to buffer rainfall variability is under-developed, and increasing access to reliable water sources – sources that work across seasons and are maintained properly – remains a huge challenge.

The Government of Ethiopia (GoE) and its development partners are taking action. The GoE has produced a National Adaptation Programme of Action (NAPA), and is currently identifying further actions needed to support vulnerable communities and build resilience, many of these in the water sector. RiPPLE is supporting these efforts, combining field research on climate change perceptions and impacts with detailed evaluation of adaptation options in the water and food security sectors. RiPPLE is also bringing evidence to the policy table: through FLoWS, through a cross-ministerial working group on climate change and adaptation, through civil society networks, and internationally through conferences and peer-reviewed publications. But what *kind* of evidence has RiPPLE provided?

Working through its LPA in East Hararghe, RiPPLE initiated research on local perceptions of climate variability and change, canvassing the views of farmers and agro-pastoralists along a highland-lowland transect. These groups already report changes in weather patterns, with shifts in the seasonality, amount and intensity of rainfall, higher temperatures, and knock-on effects on crop yields and fodder for livestock. While this is not

‘hard’ evidence, it does highlight the significance of even small shifts in weather patterns for fragile, rainfall-dependent livelihoods.

RiPPLE has also investigated the effectiveness of proposed adaptation strategies, including small-scale irrigation, rangeland management and the use of multiple use water systems. The research has looked at whether these interventions make communities more or less vulnerable to weather-related hazards, how costs and benefits are distributed between different household groups, and whether livelihoods become more specialised or more diversified. An obvious danger is that dependence on vulnerable natural systems is increased, yet research suggests that natural water storage from groundwater aquifers could be tapped much more effectively, liberating water for both domestic and (small-scale) productive uses. Multiple use systems, in particular, have the potential to increase production income (net annual benefits of roughly US\$ 50 per household), and raise much needed cash for maintenance and operation, sustaining water for basic needs and income generation.

Perhaps most importantly, however, RiPPLE research highlights the role access to *reliable* water sources plays in building resilience more generally. Extending coverage reduces reliance on poorer quality, ephemeral sources most likely to be impacted by climate change, and frees up time – particularly for women and girls – for more productive activities. This, in turn, makes households more secure – in food and income terms, and from a broader livelihoods perspective. This is why the RiPPLE team has also looked at how indicators of water stress, drawing on data from the NWI and other sources, could be integrated in Disaster Risk Reduction (DRR) policies that, historically, have mainly focused on food availability and access.

July Case studies launched on multiple use water services (MUS), sustainability of water supply, sanitation and hygiene, mapping and WASH financing

March Learning across borders: WASH technology study conducted in Ethiopia and Sudan
Colloquium on Nile-Regional Practices and Experiences in WASH Sector Learning, Kampala

May FLoWS 1: Launch.
RiPPLE presents case study highlights

December 2nd Multi-Stakeholder Forum (MSF): RiPPLE presents FLoWS and LPA approach

August HCS becomes RiPPLE host
FLoWS 2: Community management of water supply and sanitation

September WASH Media Forum established

November RiPPLE co-organises International Symposium on MUS, Addis Ababa
FLoWS 3: Financing WASH

August World Water Week, Stockholm: RiPPLE presents sanitation case study

February Revised UAP 2009 – 2012 launched, including a focus on low-cost technologies and MUS

March 5th World Water Forum in Istanbul: RiPPLE presents the LPA approach and studies on sustainability and sanitation

March FLoWS 4: Sanitation

June Alan Nicol (ODI) leaves RiPPLE; Roger Calow (ODI) and Zemed Abebe (HCS) take over as new Directors

May 34th WEDC Conference in Addis Ababa: RiPPLE presents sustainability, climate change and water economy (WELS) studies

Championing practical learning to improve WASH services for communities

Low levels of access to water and sanitation in Ethiopia are due in part to a lack of capacity in local government to adequately plan, deliver and maintain services. This capacity gap means that even limited *woreda* water budgets are not always fully spent, and expansion of services is slower than needed to meet ambitious government targets. Moreover, many schemes break down after a few years because of inadequate maintenance and the inability of community members or government staff to address the problems.

Recognising these constraints, RiPPLE and its partners SNV and MetaMeta have developed a new training course for *woreda* water staff based on a 'learning by doing' approach. The course, **Guided Learning on Water and Sanitation** or **GLoWS**, has been successfully piloted in SNNPR. Trainees follow a number of distance learning modules and carry out exercises on the job with regular support visits from trainers. Problem-solving exercises culminate in the development of community water and sanitation plans covering water supply improvement, water quality risk management, sanitation and hygiene, management of water points and financial book-keeping.

Government staff report clear benefits for themselves and for the communities they serve. Practical exercises have improved their understanding of conditions on the ground, and equipped them with the skills and confidence to respond to community needs. In particular, GLoWS helps local government staff engage communities

in a bottom-up planning process in which community members are able to articulate priorities and work with government staff to find joint solutions.

GLoWS trainers and resource persons have been selected from organisations based in Hawassa such as the SNNPR Water Bureau, the Technical and Vocational Education and Training College (TVETC) and Hawassa University to ensure sustainability. With support from UNICEF and the Government of Finland the intention is to take the approach to scale through other TVETCs, strengthening the skills of more government staff and improving service provision across the country.



FORTHCOMING BOOK Achieving Water Security: Lessons from research in the water supply, sanitation and hygiene sector in Ethiopia

RiPPLE will publish a book in 2012 documenting the lessons learned from five years of action research on water supply, sanitation and hygiene in Ethiopia. It will provide evidence-based insights into the state of the water sector, focusing on the challenge of expanding access and the importance of water for livelihoods, food security and climate resilience. It will draw conclusions for policy and practice of relevance for Ethiopia and also for sub-Saharan Africa, linking findings from Ethiopia with current international debates. Furthermore, the book will discuss how policy and practice uptake has

been achieved in Ethiopia through an innovative action research approach involving end-users through Learning and Practice Alliances.



RiPPLE publications

A significant component of RiPPLE's work is the sharing and dissemination of research findings. RiPPLE produces different outputs aimed at informing and influencing debates within the WASH sector.

RiPPLE Briefing Papers summarise key findings, research conclusions and policy recommendations.
www.rippleethiopia.org/outputs/list/briefing-papers

RiPPLE Working Papers present detailed research results. They are intended to stimulate debate on policy and practice implications and provide ideas for further research. Short summaries are also available.
www.rippleethiopia.org/outputs/list/working_papers

RiPPLE Syntheses bring together research findings on major themes.
www.rippleethiopia.org/outputs/list/synthesis_reports

RiPPLE Infosheets provide an introduction to key issues and approaches.
www.rippleethiopia.org/outputs/list/infosheets

RiPPLE Toolkits provide practical guidance on how to implement methodologies and approaches.
www.rippleethiopia.org/outputs/list/toolkits

RiPPLE Maps and Posters provide visualisation of particular issues or topics through maps, photos, graphs and accompanying text.
www.rippleethiopia.org/outputs/list/posters

September Long-term Action Research Studies (LARS) launched on improving access to WASH and WASH for livelihoods and poverty reduction

November FLoWS 5: National WASH Inventory

October 3rd MSF: RiPPLE presents MUS study

December COP 15 in Copenhagen

April Training of WASH committees in water scheme management

June GLoWS (Guided Learning on Water and Sanitation) module piloted in Hawassa

March World Water Day

July Research themes launched on climate change, water and food security and self supply

August FLoWS 6: Climate change

September Launch of National WASH Inventory (NWI)

September RiPPLE organises climate change, water and food security workshop

October 7th African Development Forum focusing on climate change. New Minister for Water and Energy appointed

October RiPPLE holds symposium on WASH monitoring in Addis Ababa

November 3rd Africa Water Week, Addis Ababa

May RiPPLE organises stakeholder workshop on National WASH Inventory

July Final event: RiPPLE Research Highlights and Future Directions



RiPPLE is a research programme and resource centre that has been funded by the UK Department for International Development (DFID) and led by ODI from 2006 to 2011. The objective of RiPPLE is to advance evidence-based learning on water supply and sanitation and to inform the policy and practice agenda around service delivery, water resources management and climate change adaptation. From July 2011, RiPPLE will be led by an Ethiopian team under the Hararghe Catholic Secretariat (HCS).



RiPPLE Research Programme 2006–2011

RiPPLE was led by:



Overseas Development Institute
www.odi.org.uk

RiPPLE Consortium partners:



International Water and Sanitation Centre
www.irc.nl



WaterAid Ethiopia
www.wateraid.org/ethiopia/



Institute of Development Studies,
 Addis Ababa University
www.aau.edu.et



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