

# Water Policy Briefing

Issue 22

Putting research knowledge into action



## Water governance in the Mekong region: the need for more informed policy-making

Mekong River, Vietnam

Photo Credit: Chu Thai Hoanh (CPWF)



Recent reviews of water and irrigation policies in six Mekong countries have shown that ready-made 'blueprint' approaches are fast becoming the norm. These are based on so-called 'modern' and internationally promoted 'best practices'. Yet all too often they fail to deliver.



Why? Because these top-down approaches ignore local systems and hinder the natural evolution of a locally appropriate mix of community, state and private management. To succeed, policies need to be tailored to political, economic, social and cultural realities on the ground.

# Water governance in the Mekong region: the need for more informed policy-making

Recurring water crises, global water initiatives, and demands for water reforms by development banks, have all pushed water up the agenda of most Mekong-region countries. Many changes have already been made. Now decision makers need to know what has worked, what hasn't, and why. To find out, IWMI has reviewed new water policies, plans and laws, and assessed participation, the new water 'apex bodies', and integrated water resources management (IWRM).

The findings show that top-down state policies based on 'blueprints' are widely applied in a one-size-fits-all approach, without taking local realities into account. Water planning is still largely expert-driven, and focused on procedures and targets. There is little room for decision-making that is based on negotiations between users, line agencies, NGOs and politicians, for example. Although much mention is made of participation and IWRM, little is being done on the ground.

To bridge these divides, better forms of governance are needed. And greater efforts need to be made to understand complex local situations—so that policymakers are better informed, and new policies are appropriate and workable. Key to this will be an understanding of what causes new policies to succeed or fail in different contexts.

National water policies in the Mekong region bear many common features. This is partly because water-related problems are similar. But, it is also because the region's policies have been guided by mainstream thinking, as well as by measures prescribed by development agencies and banks as a condition for funding. As a result, national water policies now include various 'best practices' (Box 1), which are neither good nor bad in themselves. But whether they were actually needed, and how they were applied, has had a crucial effect on the success of water reforms in the region.

## Box 1. Common principles behind water reforms in the Mekong region

- Improve water distribution in irrigation schemes—through greater user participation and service agreements
- Recover costs—through water charges
- Promote IWRM—e.g. by setting up river-basin organizations or other links between users and line agencies
- Control water use—through permits and rights
- Improve overall co-ordination—by setting up three tiers of management bodies, e.g. (1) operators such as irrigation providers and water-supply utilities, (2) resource managers and regulators, (3) an apex body which sets policies and standards

A good example of a 'blueprint' application of these principles is a draft water law in Cambodia, which involves a system of water-use licenses, water-resource monitoring, and fees. Yet in reality such a complicated 'solution' isn't really needed, as levels of water abstraction are very low in the country, allocation conflicts are hardly an issue, and hydrological measurements are almost nil.

It's also clear that the principles of stakeholder participation and consultation—emphasized in many policies—still aren't being translated into concrete actions. In fact, many large-scale projects that are likely to have a great impact on a huge number of people are still being designed with little public scrutiny—or even in secret. Thailand's planned water-grid project, which could involve water transfers on a massive scale, is a prime example. It also has to be recognized that governments often fail to assess the benefits of proposed projects in relation to their cost, and that they certainly don't present such cost-benefit analyses to the public as information or for discussion.

Other concepts that involve consensus among stakeholders, such as IWRM, are also being embraced on paper. But in reality, they are not really having much effect. Worse, they are sometimes being used as a smokescreen to allow business-as-usual strategies to hold sway. For example, the consultants who drew up one river-management plan in

This Water Policy Briefing is based on research presented in *Irrigation and Water Policies in the Mekong Region: Current Discourses and Practices* (IWMI Research Report 95) by François Molle, and *Evolution of Irrigation in South and Southeast Asia* (Comprehensive Assessment Research Report No. 5) by Randolph Barker and François Molle.

Thailand touted it as 'IWRM', even though the approach used by the project was hardly more 'integrated' than those used in the past.

Another issue is that reforms that could really help people and improve water management are never actually implemented in full, even though they have been set out in national law. This is because further decrees often have to be passed before reforms can be put into action (as is the case in China and Vietnam); this can lead to reforms being watered down.

In addition, multi-lateral banks frequently attach conditions to loans, which involve countries making reforms to their water sectors. In practice, however, governments often only set up small-scale pilot projects to fulfill these conditions—mainly because there is little support for them from the bureaucracy (as has occurred in Thailand). Moreover, both pilot projects and entire systems of reform may be abandoned when governments or policies change (again, something which has happened in Thailand).

For future policies to be more effective, it will be important to question the value of 'off-the-shelf' generic reforms, to consider local realities, and to allow a fair process of negotiation among stakeholders.

## Water and irrigation policies: what can be learned from the Mekong region?

### Current planning priorities

Water-resource development differs sharply between Mekong-region countries. Thailand, China and Vietnam have already developed their irrigation systems extensively (Table 1). By contrast, Laos, Cambodia, and to some extent Myanmar, are still in the early stages of developing their infrastructure. As a result, options for the future are still being debated—sometimes fiercely, as in the case of the

dams planned for the Salween river basin shared by Myanmar and Thailand.

Developing hydropower is a major plan in Vietnam, Laos and China (in the upper Mekong). Cambodia, Laos and Vietnam are also focusing on the rehabilitation of old irrigation schemes and the building of new ones. Both Laos' and Cambodia's plans will depend heavily on funding from international banks and donors.

China's new policies now focus less on engineering, and moves are afoot to include 'modern' concepts such as environmental sustainability, demand management, rational pricing, and institutional power-sharing.

Highly ambitious (or perhaps over-ambitious) targets for expanding irrigation are a characteristic of some Mekong countries' policies. Laos plans to have 80% of its farmland under irrigation by 2020. Furthermore, Thailand has touted a trebling of the irrigated area in 20 years as part of its gigantic 'water grid' plan.

The water-grid project exemplifies many common governance trends in the region. Although the scheme would have dramatic impacts on large numbers of people, their livelihoods and the environment, no mention of participatory processes has yet been made. In fact, the whole planning process is shrouded in secrecy, with only a few contradictory statements being released to the media. According to these, the scheme's projected cost varies between US\$5 billion and US\$10 billion.

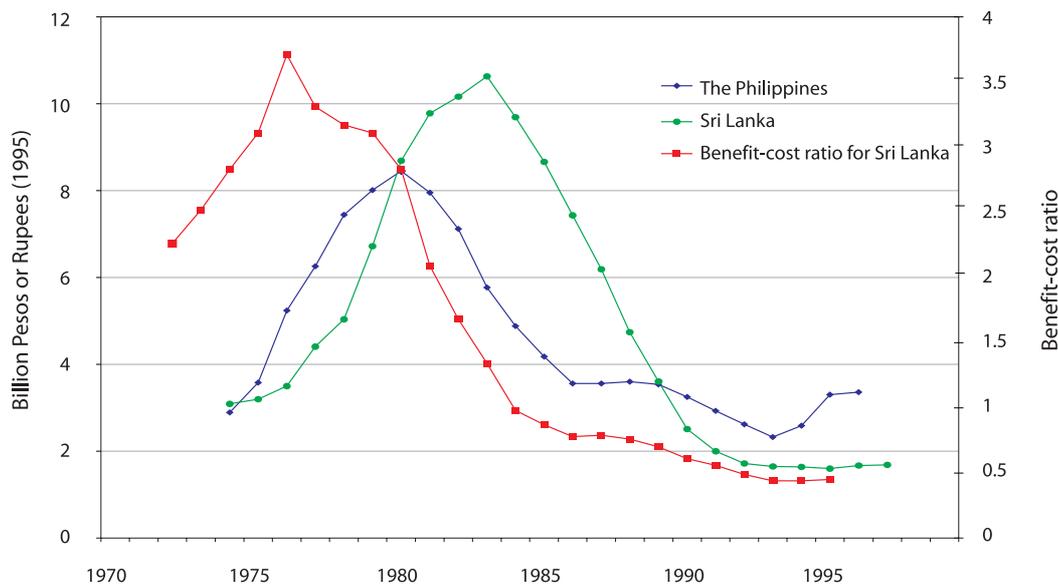
The plan is also a classic example of how large-scale investments in the region are justified (1) by repeatedly stressing the impacts of water shortages and floods, and (2) by taking into account only a project's benefits—while disregarding costs. The focus on benefits rather than on cost-benefit ratios is nicely summed up by a quote from a high-ranking Thai official, who saw the water grid project as "a worthwhile investment because it will benefit 30 to 40 million people nationwide"<sup>1</sup>.

Table 1. Growth in irrigated area in selected Mekong countries, 1962-1998

Country	Irrigated area, 1998 ('000 ha)	Average annual growth, 1962-1998 (%)	Area irrigated as a % of area harvested, 1998
Thailand	4,836	5.1	30
Vietnam	2,767	4.9	25
Myanmar	1,663	4.7	15
Cambodia	270	8.9	12
Laos	167	34.8	19

<sup>1</sup>The Nation newspaper, 23/06/03.

Figure 1. A typical scenario of irrigation investment in Asia: the real value of investments in the Philippines and Sri Lanka, and the benefit–cost ratio in Sri Lanka, 1972–1999. Over time, the benefit–cost ratio fell as grain prices crashed (partly because irrigation triggered higher yields) and building costs increased (as new sites less suitable for irrigation were more costly to develop).



Unfortunately, thorough and transparent cost–benefit analyses and environmental impact assessments are rarely undertaken. Yet ignoring cost–benefit ratios for new irrigation schemes is perilous, as generally construction costs are rising and benefits are falling (Fig. 1). Without balancing all costs and benefits and comparing projects with alternative investments, the decision to undertake new schemes may be driven by the banks’ willingness to lend money, by national politicians’ desire to develop new projects that will win votes, or by bureaucracies seeking to perpetuate themselves. As a result, planning often involves little scrutiny of proposed projects and little accountability.

### Water laws and policies

Although Thailand and Cambodia have drafted new legislation, Myanmar still has to update its old water laws. Vietnam, China and Laos, meanwhile, have already passed new laws in recent years. Whether planned or already passed, these laws often contain widely promoted ‘modern’ principles (Box 1), especially those drafted in Thailand.

One common thread that links all the Mekong countries is that civil society has had no input into the creation of their water laws.

Although laws and reforms have been passed, this doesn’t necessarily mean they are applied. For example, concerns have been raised about Laos’ capacity to put law-based water rights into practice and its ability to monitor and enforce them. This is despite the fact that water use and allocation conflicts in Laos are still very limited.

Thailand’s water-sector reforms were driven mainly by the conditions attached to an agricultural loan of US\$600 million provided by two development banks. These reforms were largely designed by bank consultants from outside Thailand, and involved water price hikes which were met with vehement opposition from farmers and NGOs. The new Prime Minister phased out the reforms in 2002 and 2003. This shows just how important it is to assess how willing a country’s political leaders and bureaucracy are to accept change—and how prepared they are for it.

Pessimists argue that pressure from external agencies to pass water acts leads to laws that are wholly inadequate, at best innocuous, and at worst counter-productive. Optimists, however, argue that the laws are a useful set of principles that can be used to base future decisions and policies on. Both viewpoints, however, underestimate the state’s ability to control water systems and enforce laws. Decision makers need to take a long hard look at whether laws and reforms will actually achieve what they are supposed to. They should also ask whether they clash with or override traditional local norms, rights and rules that are currently used.

### Apex bodies and three-tier institutional design

The apex bodies (Box 1) set up in Thailand, Laos and Vietnam aim to advise governments on water issues and improve co-ordination between the various water-related sectors and ministries. In Asia, they have been promoted as ‘best practice’ by the Asian Development Bank (ADB), as part

of a three-tier management structure introduced in water reforms. They have been relatively well accepted, probably because the different countries that have set them up realized there was a great need to co-ordinate decision-making.

ADB sees apex bodies as bringing together “government, civil society, and nongovernment stakeholders to promote effective water policies and guide national water sector reforms”<sup>2</sup>. Yet in reality, they are inter-ministry committees that involve only government staff. And, as they are committees, they don’t necessarily have the power or resources needed to make effective changes to well-established line agencies. Indeed, the achievements of all three Mekong-region apex bodies have been rather modest to date. However, it is early days yet, and with strong leadership, political backing and legal legitimacy, they may well have a greater impact.

In line with the three-tier structure, efforts have been made to separate resource management and regulation from water-supply operations by creating two lower tiers. However, this has met with resistance from traditional line agencies. Generally, they see it as a threat to their power, and little progress has been made. Difficulties also arise because the new water resource management departments set up in Vietnam, Thailand and Cambodia are often staffed by professionals transferred from the irrigation agencies. While their competence and experience is useful, this sometimes leads to them being seen as ‘spies’ by the resource-management agency or ‘traitors’ by the irrigation agency.



This said, the separation of the three roles in water affairs could have many benefits, but its effectiveness will hinge on a substantial reshuffling of roles and responsibilities. Laws may play an important role in granting legitimacy to the new agencies, but their effectiveness will have to come from high-level political support, substantial funding, and support from staff with vision and leadership.

### Participation and turnover

Greater participation by local people in water management does not seem to be a goal in China and Vietnam. Their water laws make no mention of the concept, because it is assumed that all citizens are represented by their local administrative units and that people participate through these channels.

In Laos, Thailand and Cambodia, however, various attempts have been made to involve local farmers or water user groups more in the management of the countries’ large-scale irrigation schemes. But the results of these attempts, known as either participatory irrigation management (PIM) or management transfer, have been mixed. Shortcomings arise because farmers often don’t gain real empowerment, new roles, or better control over their water supply. As has been seen in Thailand, farmers’ access to water often doesn’t improve because they don’t have any control over the way water is distributed and allocated at higher levels in the system.

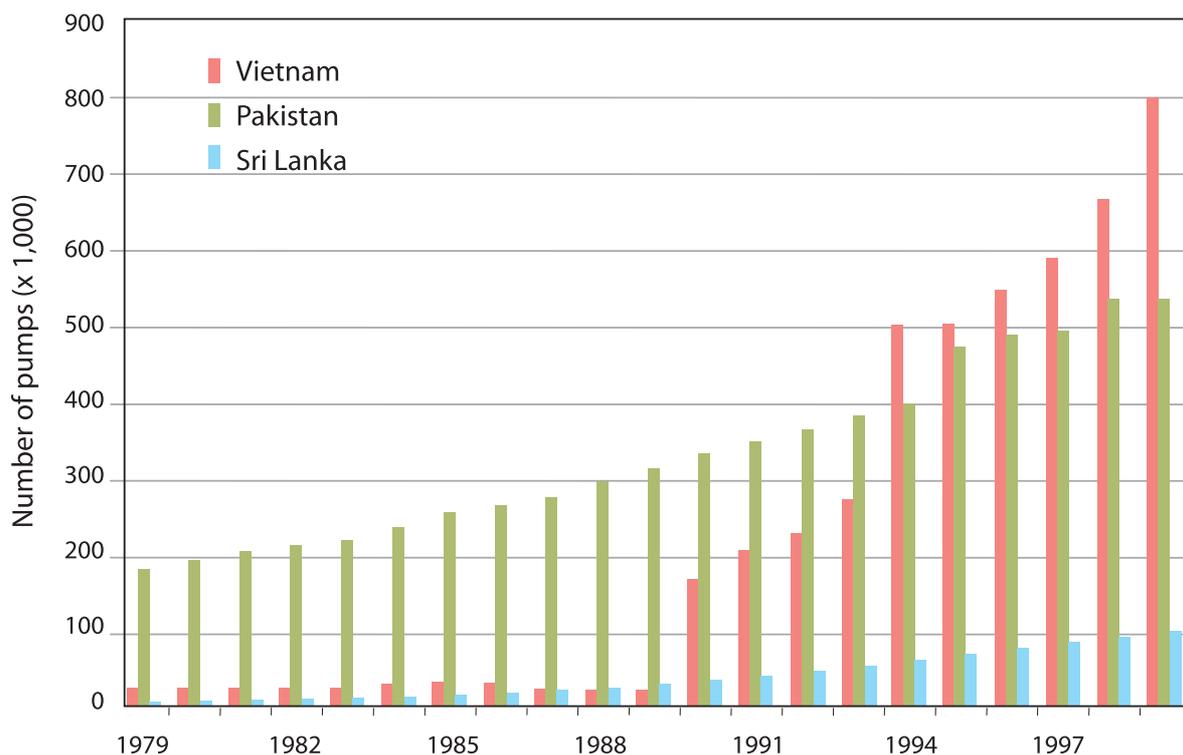
Laos’ new policies are said to include “fully decentralized ‘bottom up’ participatory planning within the governmental system”<sup>3</sup>. However, participation is actually limited, even when formally organized, as was the case for the Nam Theun II dam. The voice of civil society is further restricted by the fact that Laos does not allow the formation of national NGOs with any independent social agenda.

Cambodia’s draft water law also enshrines the principle of participation. However, in reality, efforts by the state have so far mainly consisted of a process to turn over smaller irrigation systems to farmer water user committees (FWUCs) in 22 pilot projects. Even this is still very much a top-down initiative, in which government experts tell FWUCs what to do. In fact, the main aims are cost-sharing and making farmers responsible for operations and maintenance. This is paralleled by several NGO-based initiatives to test different forms of self-/co-management of irrigation schemes. The concept of participation officially embraced may have to be adapted to take into consideration the strong sense of hierarchy which pervades

<sup>2</sup>Arriens, W.T. 2004. ADB’s water policy and the needs for national water sector apex bodies. Asian Development Bank. [www.adb.org/Water/NWSAB/2004/Arriens\\_Paper2.pdf](http://www.adb.org/Water/NWSAB/2004/Arriens_Paper2.pdf)

<sup>3</sup>Khamhung, A. 2001. Land and water investment in the Lao PDR. Rome: Food and Agriculture Organization.

Figure 2. Number of pumps in selected Asian countries. 1979-1999



the country’s society, the great control of the state over local life, and the association of communal work with forced collective labor, for example.

Across the region, and despite much official mention of participation, mindsets haven’t changed much. Farmers often see PIM as a state scheme, especially when their access to water has not improved. Likewise, irrigation agency staff often don’t believe that farmers are capable of running schemes themselves. Such perceptions will take time to root out.

It is also important to realize that the number of pumps and wells in Asia has boomed over the last 10-15 years, especially in the Mekong delta in Vietnam (Fig. 2). Many farmers now pump river- or ground-water, and depend less on surface irrigation systems—so there is less incentive for people to manage them collectively. Less participation in irrigation associations or PIM schemes may jeopardize their success, so decision makers must consider the local context before introducing such schemes.

### IWRM and river-basin management

IWRM and river-basin management are widely promoted as ways of addressing upstream and downstream issues as well as interactions between surface water and

groundwater, water quality and quantity, and water uses and users. They form a special case, in which decentralization and participation have to be balanced with centralized co-ordination and legal support for new measures. They feature prominently in the water laws of all six Mekong-region countries, though Cambodia, Laos and Myanmar are only applying the concepts in one pilot basin per country.

China’s river-basin management involves collecting data, and planning and co-ordinating management between provinces. However, the process is centrally directed by the water ministry and its provincial departments, and no other stakeholders have a say in negotiations about water allocation or development plans.

Vietnam set up three river basin organizations (RBOs) in 2001, two of which were heavily supported by external donors. RBOs aim to co-ordinate the actions of different ministries, state agencies and administrative units as well as advise the Ministry of Agriculture and Rural Development. All are state-controlled. In the Mekong delta, for example, standing members of the RBO are mainly staff from central government agencies in Hanoi—1000 km away—while its representatives from the local provinces have no voting rights. However, this said, RBOs could help to integrate the different water-management strategies currently used by different provincial authorities.

Thailand is currently setting up an RBO for each of its 25 main basins, based on a thorough analysis of local resources, water use and problems. Though the early pilot RBOs suffered because farmers were grossly under-represented, this has now been corrected. A further positive step has been taken in three of the country's RBOs, as representatives from local villages have been chosen for, or elected to, sub-basin committees. These members also take part in decision-making at the sub-district and basin levels.

However, Thailand also provides examples of consultancy firms 'marketing' conventional infrastructure projects as IWRM. These claimed to fully involve local stakeholders, but actually measured 'participation' in terms of the number of meetings held to determine local issues such as people's domestic supply needs. By contrast, people are little consulted about the large-scale projects that are being planned or developed. These are classic examples of 'business as usual' being given a new IWRM label to attract extra funds or increase support at home and abroad.

It doesn't cost anything to make abundant references to IWRM in policies and laws; but in reality, IWRM

involves redistributing power, changing mindsets, and capacity-building—all of which require considerable time and effort.

One way forward might be to avoid applying IWRM to all basins in a country irrespective of whether it is needed or not. Instead, decision makers should consider focusing efforts and resources on basins which have obvious local competition and allocation problems.

Overall, this brief synthesis shows there is a clear need for more informed policy-making on water governance in the Mekong region. Well-targeted research can help (Box 2).

### The way forward?

Most people feel that the state should solve 'problems' by finding 'fixes'—whether technical, legal, or institutional. This mindset, which dominates policy processes, is a major weakness. Whether a water issue is actually a 'problem' which needs to be 'fixed' depends on who you ask. Ideally, therefore, an open process of policy-making is needed, in which people with different perspectives (e.g. water users, experts, and decision makers) toss ideas back and forth to decide how to improve a situation.

This should involve a fair process of negotiation, which takes into account and balances the interests, priorities, and aspirations of each group of stakeholders. Forums which bring together line agencies, politicians, business, development agencies and banks, and civil-society groups (e.g. water-user associations and NGOs) offer one way forward.

Whatever the process, questioning the use of blanket, generic reforms will be vital (Box 3).

### Box 2. More informed policy-making—questions which research should be used to answer

- What are the most pressing issues related to water, irrigation practices, and policies, and where is action needed most urgently?
- What government measures would be realistic and successful, given the political-economic environment?
- What could be achieved by using bottom-up approaches which create a sense of ownership and benefit local people? What are their costs and limitations?
- What incentives can be designed to encourage the staff of line agencies to adopt new ways of working?
- What can we learn from the way policies are implemented on the ground? What scope is there to enhance social learning, build trust, and favor endogenous processes?
- What is the underlying structure of power and interests within the bureaucracy, political parties, and other stakeholders, and what bearing does this have on the options available and possible outcomes?
- How can external development banks and agencies better provide support to both government and civil society?
- How can we analyze policy failures beyond the infamous "lack of political will" explanation?
- What are the implications if the private sector and/or communities take over some current government roles?

### Box 3. Critical questions that policymakers must ask

- Will the benefits of change actually outweigh the costs?
- How will benefits and costs be distributed in society, and what compensation will losers get?
- If laws are passed, can they be practically applied and enforced?
- If an apex body or river-basin organization is created, does it have the power, expertise, political support, and funding needed to do its job?
- Are water abstraction rates so high and allocation conflicts so common that IWRM approaches are needed?
- Will greater participation be possible given local culture and politics?
- Are there sufficient administrative and political resources to implement reforms effectively?



Prawn fishing, Vietnam

Photo Credit: Chu Thai Hoanh (CPWF)

## Water Policy Briefing Series

The **Water Policy Briefing** Series translates peer-reviewed research findings into useful information for policymakers and planners. It is published several times yearly, with the goal of bringing new and practical approaches to water management and planning into the policy recommendation process. The series is put out by the International Water Management Institute (IWMI) in collaboration with national and international research organizations. It is free of charge to development professionals.

The Water Policy Briefings are also available online: <http://www.iwmi.cgiar.org/waterpolicybriefing/index.asp>

You can sign up to receive the publications by email or post. Comments and questions are welcome. Please send correspondence to:

The Editor, Water Policy Briefing  
International Water Management Institute  
P.O. Box 2075, Colombo, Sri Lanka  
Telephone: 94 11 2787404 Fax: 94 11 2786854  
Email: [waterpolicybriefing@cgiar.org](mailto:waterpolicybriefing@cgiar.org)

## About IWMI

IWMI is a non-profit scientific organization funded by the Consultative Group on International Agricultural Research (CGIAR). IWMI's research agenda is organized around four priority themes covering key issues relating to land, water, livelihoods, health and environment:

- Theme 1: Basin Water Management: *understanding water productivity*
- Theme 2: Land, Water and Livelihoods: *improving livelihoods for the rural poor*
- Theme 3: Agriculture, Water and Cities: *making an asset out of wastewater*
- Theme 4: Water Management and Environment: *balancing water for food and nature*

The Institute concentrates on water and related land management challenges faced by poor rural communities in Africa and Asia. The challenges are those that affect their nutrition, income and health, as well as the integrity of environmental services on which food and livelihood security depends. IWMI works through collaborative research with partners in the North and South, to develop tools and practices to help developing countries eradicate poverty and better manage their water and land resources. The immediate target groups of IWMI's research include the scientific community, policy makers, project implementers and individual farmers.

**For further information see [www.iwmi.org](http://www.iwmi.org)**



Writer: Dr. S.E. Williams and Dr. J.C. Weale, SCRIPTORIA ([www.scriptoria.co.uk](http://www.scriptoria.co.uk));  
Editor: Sharni Jayawardena; Design & Layout: Sumith Fernando