



# MEKONG UNDER THREAT

## NEW STRATEGY PROMOTES DAMS AND DIVERSIONS

A new wave of large-scale water infrastructure projects is threatening the Mekong River, supported by the World Bank and the Asian Development Bank's (ADB) latest plan, the Mekong Water Resources Assistance Strategy (MWRAS). The MWRAS aggressively supports the construction of controversial dam, irrigation, and water diversion projects on the Mekong River and its tributaries by misleadingly claiming that the river's ecological balance will not be adversely affected. However, the strategy fails to recognize the risks to the complex Mekong River ecosystem and the accompanying threat to the fifty million people dependent upon the river's resources for their livelihoods.

### JUSTIFYING LARGE INFRASTRUCTURE DEVELOPMENT

In a working paper released in June 2006, the World Bank and the Asian Development Bank outline their new Mekong Water Resources Assistance Strategy (MWRAS). The strategy is a major new collaboration between the Banks and the Mekong River Commission. It promotes the construction of controversial water infrastructure projects in three sub-regions of the Mekong Basin that include dams, irrigation schemes, and water transfer projects (see box on next page).

The strategy claims that livelihood restoration programs for affected communities could mitigate any negative impacts from the projects, and goes so far as to suggest that affected communities might even benefit from the new river flows, leading to potential 'win:win' situations. Sadly, this optimistic view is not likely to be borne out in reality. Livelihood restoration programs implemented in the Mekong Region to date have struggled to restore affected communities'

livelihoods, let alone improve them beyond pre-project levels.

The MWRAS claims that economic and other pressures on each of the Mekong countries means it is inevitable that large-scale water infrastructure projects will go ahead. The MWRAS does not question whether the infrastructure projects themselves are the most effective way to reduce poverty in the region or if they are sustainable. Instead it claims that development in the Mekong Basin over the past decade has been too cautionary and has 'tended to avoid any risk associated with development, at the expense of stifling investments'. Rather than calling for the sustainable development of the Mekong Basin, the MWRAS legitimizes each Government's infrastructure wish-list by calling for 'Balanced Development,' in which trade-offs between economic benefits, social equity and ecological integrity must be made. As such, whilst a powerful few will derive significant benefits from the projects, comparatively powerless riparian communities will bear the project risks and receive little, if any, benefit in return.

### SPURIOUS APPLICATION OF A HYDROLOGICAL MODEL

The MWRAS claims ‘there remains considerable potential for development of the Mekong water resources’. This sweeping statement is based on a report, commissioned by the World Bank, that employed a hydrological model to predict likely river flow changes arising from six development scenarios for the Mekong Basin ranging from ‘Low’ to ‘High’. The low development scenario describes a minimum level of development based on population growth up until 2020. The high development scenario includes extensive hydropower construction throughout the basin, together with a significant expansion in irrigated agriculture made possible through water transfers. The model has not been released for public scrutiny, although it is already known to be incapable of accurately modeling hydropower scheme operations.

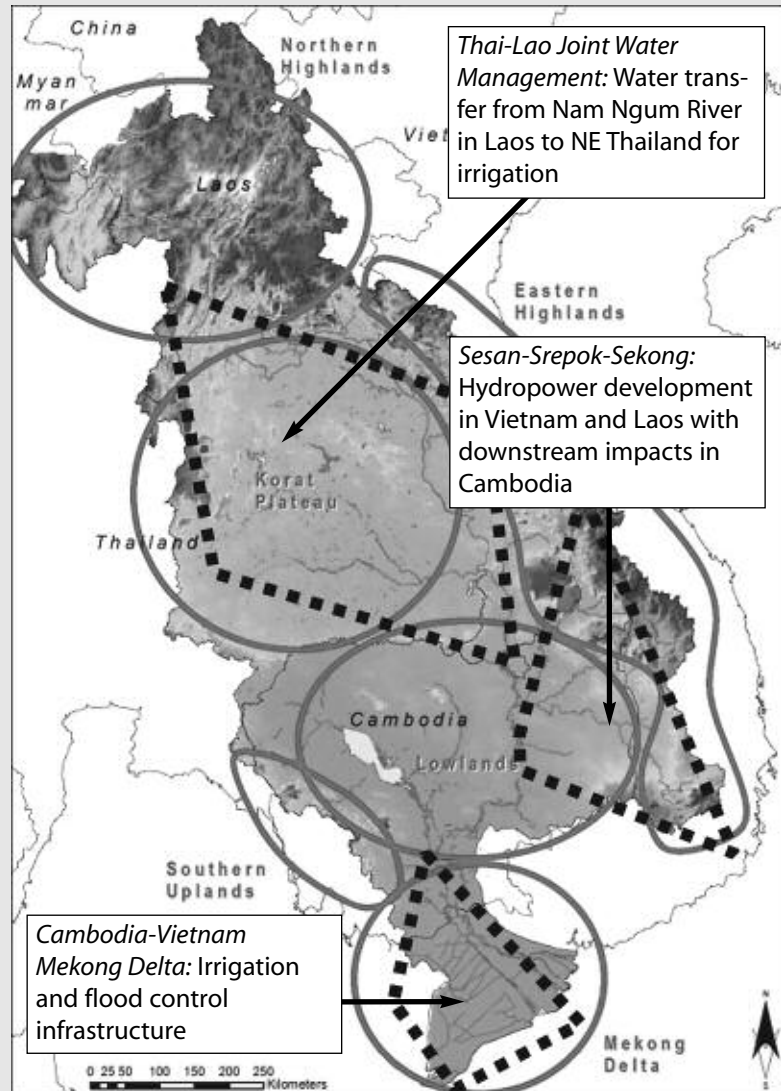
According to MWRAS, the hydrological model shows that even under a high development scenario overall river flows remain largely the same as they are today. This is a massive oversimplification. The hydrological model is capable only of simulating *water flow* in the river, and completely ignores the significant changes that will occur to the river’s *ecology* as a result of changes in sediment flow, water quality, timing of the flood pulse, and the blockage of fish migrations that will result from dam and water diversion projects.

The exceptional productivity of the Mekong River and its flood plains is linked inextricably to the system’s annual flood pulse. Using measurements from only a few key points on the Mekong River, the hydrological model predicts that whilst the dry season flows will notably increase as a result of infrastructure development, wet season flows will change only a little. The MWRAS claims that therefore the overall *shape* of the hydrograph is preserved. This is misleading, however, because it is actually the *range of flows* during the wet and dry season that maintains the Mekong’s productive flood-pulse ecosystem and not just the magnitude of flood in the wet season alone.

The hydrological model’s broad-brushed findings also disregard many other impacts that arise from large-scale water infrastructure development. Dams block the transport of sediment, causing massive erosion downstream and depriving floodplain agriculture of essential nutrients. In addition, dramatic changes to the local flow regime can result in accelerated river-bank erosion, water

## THE MWRAS TARGET AREAS

MWRAS focuses on three geographical sub-regions of the Mekong Basin. Whilst many of the projects have a controversial past, the MWRAS makes no reference to these histories. Instead MWRAS attempts to wipe the slate clean by justifying the infrastructure using a fundamentally flawed hydrological model.



Adapted from MWRAS map

quality problems, and decimation of wild fisheries. The cumulative impacts of these developments could cause much greater impacts to the Mekong River ecosystem as a whole, dramatically affecting the livelihoods of local communities.

There are in fact a plethora of ecological, environmental, and social consequences that would be linked to changes in the existing river flow regime and are not accounted for by the hydrological model. The Bank’s suggestion that the model can justify infrastructure development is a gross misrepresentation of how hydrological models may be used within the planning process.

## BANKS FATTEN THEIR LOAN PORTFOLIOS

It is unclear precisely who requested the development of the MWRAS. Reading between the lines it seems clear, however, that a principal objective of the plan is to find a role for the World Bank and ADB in the Mekong Region now that private investors are providing finance to sectors such as hydropower that traditionally have been the Banks' domain. Their aim through MWRAS, therefore, appears to be to stimulate further investment in large-scale water infrastructure by first justifying national plans for infrastructure development and then identifying complementary investments that the Banks could finance in an attempt to mitigate the consequent negative impacts.

### FACILITATING INVESTMENT: THE NEW ROLE OF THE MEKONG RIVER COMMISSION

The Mekong River Commission (MRC) was established in 1995 to facilitate cooperation for 'the sustainable development, utilization, conservation and management of the Mekong River Basin water and related resources...' In the past decade, the MRC has busied itself with developing a knowledge base for managing the Mekong Basin, but has been reluctant to engage in controversial river development issues. The Banks have also actively avoided engagement with the MRC over their more contentious projects, such as the recently approved Nam Theun 2 hydropower scheme in Laos.

In response to the member country Governments' demands, and championed by its new CEO, the MRC is now attempting to reorient itself towards more actively promoting large infrastructure projects. The MWRAS encourages this change in direction and envisions a close collaboration between the Banks, the MRC, and the member country Governments to seek out and develop large water infrastructure projects.

There is not, however, unanimous support for the MRC's reorientation from a Basin *Management* Organization to a Basin *Development* Organization. Some donor agencies and many non-governmental stakeholders think that there are already too many organizations promoting infrastructure in the Mekong Basin and, acting as a counter-balance, the MRC should emphasize the conservation and joint management of the river basin. Civil society groups observe that, to date, the MRC has paid far greater attention to its donors and the member country Governments than to other legitimate stakeholders. They feel that if it is to maintain its relevance, the MRC needs to ensure inclusive and meaningful dialogue amongst all of the Mekong River Basin's stakeholders.

### NON-INCLUSIVE STAKEHOLDER PARTICIPATION

The MWRAS analysis claims that competition between water users is unavoidable and trade-offs will have to be made



Photo: Vinya Sysamouth

Operation of the Theun-Hinboun Hydropower Project, funded by the Asian Development Bank and completed in 1998, has resulted in massive riverbank erosion downstream along the Hai and Hinboun River in Laos.

between economic, social and environmental uses of the Mekong River. The critical issue lies not in the fact that difficult decisions must be taken - which are inevitable in any development process - but in the way in which decisions are taken. Equitable decision-making requires that all stakeholders affected by a decision are meaningfully involved in the decision-making process. To date, preparation of the MWRAS has been a Banks-led process developed almost exclusively in consultation with the Mekong region Governments, who the Banks consider to be the main stakeholders. Of fourteen official MWRAS consultations, only one was held with regional civil society groups and none with representatives from communities likely to be affected. In other words, the MWRAS appears to put forward a two-tier decision-making system in which local communities and broader civil society groups are consulted on the negative impacts resulting from large infrastructure projects, but not on the overarching decisions regarding whether the projects themselves should be developed.

The internationally-recognized recommendations of the World Commission on Dams (WCD) are very clear on the need for informed participation by all stakeholders, stating that 'the most unsatisfactory social outcomes of past dam projects are linked to cases where affected people played no role in the planning process...' The WCD recommends that all potential risk-bearers should have a voice in decisions affecting their lives. In addition, a Comprehensive Options Assessment that evaluates whether proposed large infrastructure is the best way to address development needs should be carried out before making decisions to proceed with individual projects.

Both the World Bank and the ADB claim that their existing policies are largely in-line with the recommendations of the WCD. Yet, by identifying the Governments as the Mekong Basin's main stakeholders, the Banks appear more intent on legitimizing existing infrastructure plans than on instigating a proper multi-stakeholder decision-making process.

## RIVER BASIN ORGANIZATIONS

The MWRAS believes that community-based programs can mitigate the environmental and social impacts of large infrastructure projects. Based on the planning principles of Integrated Water Resources Management, the MWRAS recommends investing in River Basin Organizations (RBO). Unfortunately, the experience to date both globally and in the Mekong region has been that it is far easier to construct large infrastructure than to implement successful livelihood restoration programs and establish RBOs.

In theory RBOs are a progressive co-management arrangement in which central-level Government ministries give more responsibility to local water users and local authorities to make decisions regarding the river basins. In practice, however, RBOs have proven difficult to establish. Even in Thailand, where the concept is most advanced, success on the ground has been limited. RBOs still lack formal recognition and exist more as consultative forums rather than empowered decision-making bodies. In Laos and Cambodia RBOs remain at the conceptual stage. In Vietnam RBOs exist, but their role is to provide information to the central government, which then makes decisions.

Considering the current political, cultural, and social context in the Mekong Region, it is questionable whether conditions are conducive for the establishment of meaningful RBOs, especially in Laos and Vietnam. Whilst RBOs should certainly be promoted, it is overly-optimistic for the MWRAS to assume that the RBO concept will be readily implemented any time soon.

The MWRAS also suggests that responsible operation of the infrastructure itself will minimize local negative impacts. Whilst



Photo: Carl Middleton

The Tonle Sap Lake, Cambodia, is a vivid illustration of the important role of the flood pulse.

such arrangements do exist in several developed countries, considering the current state of cooperation between the Lower Mekong countries, again the MWRAS appears excessively optimistic. Operation of infrastructure is driven mainly by the services it provides rather than the needs of local communities. Operating infrastructure under sub-optimal conditions will also result in lower profits. In the case of hydropower, for example, demand for electricity in urban centers determines when water is released from the reservoir, not when downstream communities require a particular flow in the river.

## IS INTEGRATED WATER RESOURCES MANAGEMENT A SOLUTION?

Since the beginning of the 1990's the concept of Integrated Water Resources Management (IWRM) has risen to become the predominant water-sector development paradigm promoted by almost all major international development institutions. The Global Water Partnership defines IWRM as, "a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems." However, it is questionable whether the principles of IWRM can be implemented in practice. A research report on the water sector in the Mekong Region released by the International Water Management Institute in 2005 writes that '...despite encouraging changes and trends, there is still a significant gap between the rhetoric of participation or IWRM and reality on the ground.'

Molle, F. 2005. Irrigation and Water Policies in the Mekong Region: Current Discourses and Practices. International Water Management Institute Research Report 95, Colombo, Sri Lanka.

## WHAT YOU CAN DO

Despite the dubious claim that the Mekong River Basin has significant potential for infrastructure development, and the uncertainty surrounding the likelihood of success of community-based mitigation programs, the MWRAS hopes to give the green light to government decision-makers to approve risky infrastructure projects and therefore also initiate a new series of investments by the World Bank and ADB.

To date, consultation with civil society has been inadequate. We urge individuals and organizations to ask the World Bank and the ADB to conduct a fully participatory multi-stakeholder consultation process before proceeding with the MWRAS. Discussion and consensus is required amongst all stakeholders over whether there is a genuine need for MWRAS, and if so, what core principles should guide its development.

For more information, contact International Rivers Network at the address below.

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International Rivers Network protects rivers and defends the rights of communities that depend on them. IRN opposes destructive dams and the development model they advance, and encourages better ways of meeting people's needs for water, energy and protection from damaging floods.