

## **Paradigms driving the water sector reform: a mismatch between Afghanistan and the West**

A synthesis of AREU research work on water governance in Afghanistan (2011-2016)

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### **1. Background and objective of the synthesis paper**

Between 2011 and 2014, the Afghanistan Research and Evaluation has been implementing an EU funded research program entitle ‘Enabling More Effective and Equitable NRM to Improve Rural Livelihood Security: A Programme of Research.’

The overall objective of the programme was ‘to facilitate the achievement of rural livelihood security and stability.’ It started with the idea that access to common resources of irrigation water and land is particularly important for the poor, though difficult to achieve or maintain within local power dynamics. Developing and implementing strong systems for natural resource management was considered as essential to improving equitable access and conserve resources. In this regard, it was assumed that effective institutions, capable of designing and delivering demand-led policy and programs, would be the foundation of natural resource management and rural development.

Part of the research project has focused more specifically on the theme of ‘water governance.’ The overall objective of this theme was to get a ground-level perspective on the relevance and adequacy of the new water governance model and institutional arrangements proposed by the 2009 Water Law.

The AREU research papers provided evidences supporting Afghan and international actors in developing policies and programs for the water sector.

This synthesis paper aims at identifying, analysing and discussing the common thread among the AREU research papers on water governance. In doing so, it engages in a reflection on the mismatch between the Water Management Paradigms imported in Afghanistan by the West and those conceived by local and national actors in Afghanistan.

#### **About the Author:**

**Vincent Thomas** worked for 10 years (2005-2015) in Afghanistan with various NGOs and local research organisations on the social and institutional aspects of traditional irrigation systems. He is currently working in Haiti on a project related to water, sanitation and hygiene (WASH).

## 2. Common thread in AREU water research papers

The first two papers published by AREU in 2011 and 2013 share clear common findings in the form of an apparent mismatch between water management practices and the governance model proposed by the water law (Thomas et al., 2011; and Thomas et al., 2013).

On the one hand, Thomas et al. (2013) used the case study of the Sar-i-Pul river basin to highlight how water conflict resolution procedures differ from what the new river basin regulations suggest. Subsequently, the authors questioned and speculated on the relevance and added value of the sub-basin agency/council (SBA/SBC) model that is expected to operate in Afghan sub-river basins in the future.

On the other hand, Thomas et al. (2011) provided evidences that 7 years after being piloted in the Panj-Amu River Basin, the so-called ‘good’ water governance model was sidelined when it comes to dealing with water allocation during episodes of dry years. Whether it is about ‘decentralization’ or ‘devolution’ of decision-making power on water allocation at sub-basin level, the practices on the ground were contrasting with the western model. Furthermore, the findings indicated that a strict application of the model might be detrimental to performance in relation to equity in water sharing and curbing water-related conflicts.

Thus both papers converge in raising a more general question: **Are the western inspired paradigms of the Afghan water sector reform (i.e. Integrated Water Resources Management (IWRM), River Basin Management (RBM) and Participation through Multi-Stakeholders Platforms (MSP)) adapted to the context of Afghanistan?**

The third paper by Thomas et al. (2016) focuses on transboundary water management on rivers shared between Afghanistan, Iran, and Pakistan. Although the

paper does not deal directly with the water governance model proposed in the 2009 Water Law - as the Water Law is virtually silent about transboundary water resources management - it still illustrates the sharp contrast between the Western and Afghan approaches to (transboundary) water management over the past decade.

The findings indicate that on one hand the international community (i.e. senior advisers embedded in Ministries and major donor organizations such as the World Bank, USAID or GIZ) has adopted a ‘neo-institutionalist’ approach favouring dialogue and negotiations with riparian neighbours, while also putting social, economic and environmental considerations at the forefront for any consideration in supporting dams. On the other hand, the key decision-makers in the Afghan government (i.e. MEW and MoFA of the Karzai administration) have considered that this approach was not in their best interest. By contrast with the Western approach, they have preferred a ‘neo-realist’ approach based on unilateral ‘resource capture’ approach, largely away from dialogue.

Thus Thomas et al. (2016) raise a somewhat similar question as for the first two AREU papers:

**Are the international conventions on transboundary water resources development and dams adapted to the Afghan government development agenda?**

### 3. Discussion: Mismatch in Water Management Paradigms between Afghanistan and the West?

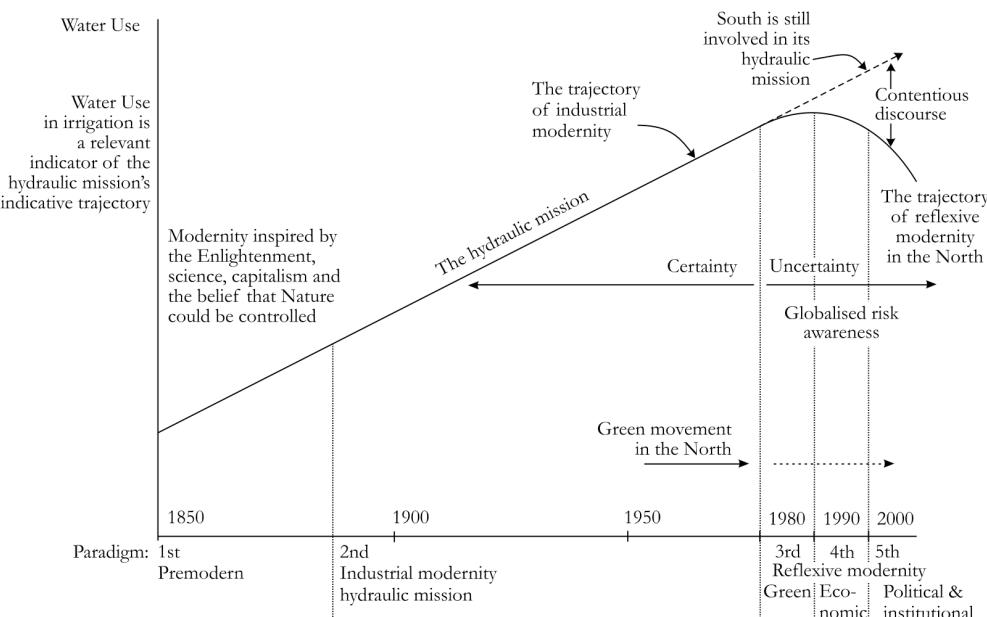
The work of Allan (2006) provides a useful basis to reflect on the questions raised by AREU's research in Afghanistan. It proposes an account of the shifts in direction in water policy-making in the West in the past couple of centuries to explain the political circumstances that have led to the sanctioning and adoption of the water management paradigms within which IWRM has emerged in most developed countries. By stressing on the relevance of political processes to understand the acceptability of a certain water management paradigms, Allan (2006) points to the reasons why what appears as new models are often rejected or difficult to implement successfully in developing countries.

Allan (2006) explains that between 1890 and the years 2000, the West has successfully gone through five water management paradigms (Figure 1):

- In the early 20th century an 'Industrial modernity' paradigm has shaped the development and management of water resources. This paradigm was defined by the underlying assumption that nature could be controlled, and by the certainty that infrastructure development activities participated in an essential modernization of the country. During this phase, States have mainly focused on large-scale infrastructure development, which is often referred to as a 'hydraulic mission' (Reisner, 1993).

- The ideas that underpinned the 'hydraulic mission' (Industrial modernity phase) started being criticized in the West during the 1960s-70s. A new paradigm (Reflexive modernity - Green) emerged in the 1980s and was largely inspired by environmental awareness. The underlying assumptions were that 'nature cannot be controlled' and that environmental considerations should be primary. This translated into water being diverted from irrigation to the environment. This paradigm was pushed by a strong civil society and NGOs (e.g. green movements).
- Inspired by economists, the fourth paradigm (Reflexive modernity - Economic) emerged in the 1990s. The discourse was about allocative efficiency with an emphasis on the economic value of water. The discourse emerged partly due to a joint alliance between actors from the Government and the private sector.
- As Allan reminds, both environmental and economic fundamentals were central to the emergence of the fifth paradigm (Reflexive modernity - Political & Institutional) where IWRM is located. In addition to these elements, the fifth and latest water management paradigm in the West has emphasized on inclusive participation through political institutions in order to facilitate water allocation issues among different groups of water users and actors within a basin.

*Figure 1: The Five Water Management Paradigms, 1890-2000 (Source: Allan, 2006: p. 47)*



In short, Allan (2006) reminds us that there have been a number of social, economic and political circumstances rooted in history that have led to the emergence of IWRM as a sanctioned discourse among decision-makers in the West.

He also explains that the transposition of such paradigm in a context where local actors have not followed a similar path - and have subsequently adopted different beliefs on how to manage their water - is often problematic. As AREU research suggests and as we argue below, the transposition of new water management paradigms in Afghanistan is a point in case to Allan's theory.

During the last decade, western donors and Afghanistan government officials have both tried to support 'water management,' but to a large extent, the term has meant different things for each of them. For the donors, the notion of 'water management' was shaped by what Allan calls the 5th water management paradigm developed in the West. By and large, it meant developing new water governance anchored in the ideals of participation and inclusive institutions that would facilitate water allocation among water users with conflicting interests. Through this IWRM approach, all social, economic, and environmental interest should all be considered simultaneously.

For the GIRoA, 'water management' meant primarily (if not exclusively) 'infrastructure development.' In other words, the approach was shaped by the second paradigm of water management which emphasized on undertaking the State's 'hydraulic mission,' aiming at economic development through agricultural expansion, increase in productivity and production of energy through hydropower. The ideas of 'controlling nature' and the certainty about large-scale infrastructure development being a synonym of a country's modernization and development (i.e. the driving ideas of the 'industrial modernity' paradigm in the West) resonate accurately with the vision of then high-ranking Afghan officials at the MEW. A senior official at the Ministry of Energy and Water (MEW) explained that the mission of his ministry was about controlling water: "We want to control Afghanistan's water, the president has strictly ordered us to address this issue. Our planning is to build small and big dams and implement a good canal system." [...]".<sup>1</sup>

Clearly, in Afghanistan (and many other developing countries), the 3rd and 4th paradigms witnessed in the West did not emerge as it did decades ago in the West. The civil society and green movements that have pushed for the emergence of the 'environmental' phase of the 'reflexive modernity' are still - even today - at an embryonic level. Currently, the Afghan government is focusing on expanding its irrigated area rather than reducing water allocation from irrigation to the environment. Despite slowly growing awareness, environmental concerns remain largely off the radar. This was observed for instance during the 2008 and 2011 dry years in the PARB where conflicts over water allocation on the Taloqan and Baghlan rivers did not consider minimum environmental flows during discussions on water allocation, leaving the rivers dry up before reaching the Amu Darya. This was also observed in the feasibility studies of dams projects in Afghanistan, where environmental impacts assessments were virtually absent, or largely insufficient to meet the criteria of international donors (e.g. World Bank, Asian Development Bank). Similarly, the idea of water as an economic good has not found much echo in Afghanistan.

What this means is that the enabling environment that has progressively led to the emergence and implementation of IWRM, RBM and participation through MSPs in the West has not (yet?) taken roots in Afghanistan.

Although the five water management paradigms have been presented mainly to situate the concept of IWRM (together with RBM & MSP) within national borders, the arguments can be used with the same relevance to locate the changes in discourses on dams and transboundary water resources development.

As Baghel and Nusser (2010) remind, the development of large dam has been central to the 'hydraulic mission' driven by the idea of "using up every drop of water for the benefit of mankind." Dams were symbolizing modernisation and prestige of the state during the 'hydraulic mission' era (McCully, 2001). These large projects came together with was Molle et al. (2009) refer to as "hydraulic bureaucracies." The most emblematic example of such "hydraulic bureaucracies" was the Tennessee Valley Authority (TVA) set-up in the 1930s in the United States of America. This model was then exported to Afghanistan in the 1950s when the US helped to form and to develop the Helmand Valley Authority (HVA) in parallel with the construction of the Kajaki and Dahlia dams.

1 <http://www.asiacalling.kbr68h.com/en/archives/946-afghan-iran-water-war>. As quoted in Thomas et al. (2016)

Just like Nehru (then Prime Minister of India) saw dams as “new temples of resurgent India... the symbol of India’s progress”, Afghanistan also considered dams as more than engineering artefacts. To quote Cullather and al. (2002): “For Nehru, for Zahir Shah [then King of Afghanistan], for China today, the great blank wall of a dam was a screen on which they would project the future.” (p. 13)

During The hydraulic mission was a response to “the recurring complaint of ‘water running waste to the sea’” (Baghel and Nusser, 2010, p. 238). Today, this rhetoric is still recurrently echoed by Afghan authorities. Although water is not literally ‘wasted’ to the sea in the case of Afghanistan, it is often referred to as ‘lost’ and ‘benefiting’ downstream neighbours. This issue is considered by Afghan authorities as particularly problematic in a context where bilateral relations are to a large extent seen as a zero-sum game. Thus the call for ‘control.’

The period of the ‘hydraulic mission’ was also characterized in the West by the strong belief that dams were the key to solving multiple development problems (Baghel and Nusser, 2010), something that is also very present in the rhetoric of the Afghan leaders. To quote the then Minister of Energy and Water in 2009: “Once we have water, no one will grow poppies, no one will fight, no one will leave Afghanistan [for work]...water will resolve all problems in Afghanistan.”<sup>2</sup>

Until the 1970s and 1980s, social and environmental impacts of dams were only considered as ineluctable side effects. Controversies over large dams have been developing over the 1980s and 1990s, leading for instance to the World Commission of Dams (WCD) to take the initiative to develop standards, criteria and guidelines - applying social and environmental justice principles - to inform the decision making of large dams construction. Allan (2006) refers to such initiative as a “*classic example of the fifth paradigm process*” whereby social, economic and environmental considerations are put at the forefront.

During this same period, the World Bank - involved in the funding of numerous large dams - adopted guidelines taking into account social and environmental concerns in relation to the impacts of large dams. These included guidelines on dam safety (1977); on involuntary resettlement (1980,

1986, and 1990); on safeguards for indigenous people (1982); on natural habitat (1986 and 1995); on environmental aspects of dams and reservoirs (1989); and on an environmental assessment (1991).

During this period, the UN Convention on the Law of Non-navigational Uses of International Watercourses was passed (1997) and illustrated the demand for containing claims of absolute territorial sovereignty over rivers. The World Bank also adopted a principle of prior notification (1994) as a condition for providing loans, to ensure that downstream states (in most cases) would have a say on transboundary water resources developments in upstream countries.

McMurray and Tarlock warned in 2005 about the foreseeable difficulties for Afghanistan to assert its claims for increased use of water (i.e. mainly through irrigation) in this ‘fifth-paradigm era’ “when international water law is evolving from its historical function of storage and diversion promotion” and giving ever increasing weight to ecologically balanced regimes and the conservation of aquatic ecosystems.

Clearly, the water management paradigm influential in the West in the post-Taliban era was much less conducive to large-scale hydraulic development as compare to the cold war era when the Kajaki and Dahlia dams were built with strong support from a US government eager to limit spreading of communist influence in Afghanistan (Mojtahed-Zadeh, 2004).

And while the 3rd, 4th, and 5th water management paradigms of the West emerged during the decades of wars in Afghanistan, it is perhaps not surprising that the dominant view in the MEW during the Karzai administration has been that Afghanistan should benefit from “a period of grace” during which international conventions should not be strictly applied in Afghanistan (Thomas et al., 2016). Such view echoes the perspective of some countries such as India which considered the WCD conclusions as “wholly incompatible with [...] development imperatives” (Baghel and Nusser, 2010; p. 240) as the guidelines were heavily complicating the construction of dams.

2 Wikileaks, “Afghan Government’s High Hopes For Hydropower,” [https://www.wikileaks.org/plusd/cables/09KABUL2688\\_a.html](https://www.wikileaks.org/plusd/cables/09KABUL2688_a.html), 5 September 2009. As quoted in Thomas et al. (2014)

## 4. Conclusion and way forward:

The Five Water Management Paradigms (1850-2000) presented by Allan help putting in context the difficulties in implementing the western models of the Afghan water sector reform as well as the very limited endorsement of international conventions for transboundary water resources development. Like many other developing countries, Afghanistan is still in its ‘hydraulic mission.’ However, Afghanistan’s development has been - and still is - highly conditioned by Western aid. During the past decade, this has generated a contention between two discourses: ‘industrial’ versus ‘reflexive’ modernity.

The points made by Allan and applied in the context of Afghanistan water sector reform also provide insightful elements to reflect on the reasons why the so-called ‘good water governance’ of the Water Law have not been taking off more than 10 years after their introduction. They also contribute to the explanation for limited transboundary water resources development directly supported by Western organizations in Afghanistan.

Allan (2006) calls for ‘Knowing about, Wanting, Having, Operating and Effectively operating [the KWHOE approach] water reforming policy and practices. This KWHOE approach could be relevant for policy-makers supporting reforms in the Afghan water sector that have an actual impact on local water users and stakeholders. The key elements are:

- First, stakeholders and local water users have to ‘Know’ and then ‘Want’ the innovation and proposed change in paradigm behind the reform.
- When the innovation is wanted, it will be possible to ‘Have’ the new system or institution.
- With the new institutional system in place it will then be possible to ‘Operate’ it, or to comply with it (in the case of a regulatory system like the one proposed for Afghanistan).
- Considering that operating the new system is unlikely to be highly effective in the early stages of the reform; the final stage is about achieving ‘Effective’ operation of the system (or to achieve effective compliance). ”

It may be relevant for the advocates of IWRM to question where the efforts have been put so far with the KWHOE approach in the context of Afghanistan. Most particularly, one should question the extent to which the preliminary steps of ‘knowing’ and

‘wanting’ have been successfully cleared in all the 34 sub-basins of Afghanistan (see Table 1).

Regarding the ‘knowing’ pre-condition, clear efforts have been made by the EU to explain and raise awareness at the national and local level, starting in the pilot PARB area in 2004. However, as argued in an AREU policy note (Thomas, 2013), a fundamental issue is that IWRM, RBM, and MPS have been advocated by the EU without extensive and grounded understanding of the existing institutional arrangements around water allocation at basin level. Thus, it was not possible to demonstrate both the added-value and limitations of the new water governance model in that specific context. Furthermore, at the time of the adoption of the Water Law in 2009, which enshrined IWRM, RBM and MSP as the new models of water governance, local actors in most sub-basins in the country had not been exposed to any awareness on the new water reform and its possible benefits in relation to the current system.

The first AREU paper by Thomas et al. (2011) clearly underlined the limited local buy-in with the reform at the local level in the Taloqan and Lower-Kunduz sub-basins. The second paper by Thomas et al. (2013) raised the question as to whether a similar scenario would also happen in the Sar-i-Pul sub-basin considering the contrast between traditional practices on water conflicts resolution and the proposed model.

In its rhetoric, the MEW shows that it supports the reform. However, as underlined again in one AREU policy note in 2013, one fundamental problem is that the Western push for governance and institutional reform came in the form of a package including significant infrastructure development (Thomas, 2013). This was, for instance, the case with the pilot PARB. The only way for the GiroA to get support in its hydraulic mission was to endorse at the same time an institutional reform. Whether that institutional reform alone was wanted is questionable.

Although the ‘knowing’ and ‘wanting’ steps were not fully cleared, the EU has been pushing for ensuring that the Afghan government adopts (i.e. the ‘having’ step) all the instruments of the reform. This meant developing the legislative component (i.e. the Law and regulations) and forming organizations - at least the RBA and sub-RBA - which included line-ministries staffs. The most striking example was the stopping of sub-basin working groups meetings before the 2008 dry year until early 2011. The reason was that the PARB wanted to focus on developing and passing the

water law - and related regulations - first. Thomas et al. (2011) indicate that newly introduced institutions have been by-passed in times of dry years to deal with water allocation, meaning that local users have not been operating or complying with the new institutional system.

A central argument of the GIRoA to brush critics aside is that ‘it always takes time to implement IWRM’. That is certainly true even when all the stakeholders know about and want the reform. But what should raise concern is when these pre-conditions are not met and when the broad enabling environment (whether social, economic or political) in which the paradigms of the ‘holy trinity’<sup>3</sup> of good governance (i.e. IWRM-RBM-Participation) are more likely to be sanctioned and adopted, are not there.

In order for the Afghanistan water sector reform to be successful, priority should be made on supporting the enabling environment that facilitates its actual endorsement by local and national actors.

*Table 1: The KWHOE approach and how it has flared in Afghanistan*

	Phases of Innovation: KWHOE (Allan, 2006)	Afghan case (for IWRM, RBM, MSP)
Pre-conditions	“ <u>Knowing</u> about the benefits of new (water reform) instruments, which will reflect the environmental and economic values of water.”	The EU has raised awareness only partially at national level and at local level in the Panj-Amu Basin, while ADB has also made some efforts in the Western basins. It was not done extensively in other basins.  The fundamental issue is that IWRM, RBM and MPS have been advocated by the donors without extensive and grounded understanding of the existing - traditional - afghan models.
	“ <u>Wanting</u> the new instruments, which will reflect the environmental and economic values of water.”	IWRM has been adopted in the Water Law in 2009. There are however clear signs at local and national level that most stakeholders do not (yet?) consider the proposed governance model as particularly useful (AREU papers #1 and #2).  The fundamental issue is that governance and institutional changes came as a package with significant infrastructure development. GIRoA’s support for infrastructure (hydraulic mission) development may mask limited interest in institutional development as defined in the 5 <sup>th</sup> water management paradigm.
Implementation	“ <u>Having</u> the new instruments, which will reflect the environmental and economic values of water.”	The EU and MEW have been putting their efforts mainly on developing the Law and regulations, and ensure that organizations are formed (at least for RBA) - before clearing the ‘Knowing’ and ‘Wanting’ steps.
	“ <u>Operating/complying</u> with the new instruments, which will reflect the environmental and economic values of water.”	The first AREU paper underlines how newly introduced institutions have been by-passed in times of dry years to deal with water allocation. Thus there are signs that compliance with new instruments may be limited so far.
	“ <u>Effectively operating/complying</u> with the new instruments, which will reflect the environmental and economic values of water.”	NA yet.

3 The term was coined by Warner (2007).

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## About the Afghanistan Research and Evaluation Unit

The Afghanistan Research and Evaluation Unit (AREU) is an independent research institute based in Kabul. AREU’s mission is to inform and influence policy and practice by conducting high-quality, policy-relevant research and actively disseminating the results, and by promoting a culture of research and learning. To achieve its mission AREU engages with policymakers, civil society, researchers and students to promote their use of AREU’s research and its library, to strengthen their research capacity, and to create opportunities for analysis, reflection and debate.

AREU was established in 2002 by the assistance community in Afghanistan and has a Board of Directors comprised of representatives of donor organizations, the United Nations and other multilateral agencies, and non-governmental organizations. AREU currently receives core funds from the Swedish International Development Cooperation Agency (SIDA) and the Swiss Agency for Development and Cooperation (SDC).

Specific projects in 2014 are currently being funded by the European Commission (EC), the Swiss Agency for Development and Cooperation (SDC), the Overseas Development Institute (ODI), the United Nations Development Programme (UNDP), the World Bank, the University of Central Asia (UCA), United States Institute of Peace (USIP), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Embassy of Finland.