

Living Landscapes - Landscapes for living Paesaggi Abitati Conference Proceedings Florence, February-June 2012

Planum. The Journal of Urbanism, n. 27, vol.2/2013 www.planum.net | ISSN 1723-0993 Proceedings published in October 2013

Discourse and Practice on Water management in the Southern Countries

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Programs range and international projects on water management in countries of the South of World are considerable; their fulfilment through reforms, approaches and technologies, has strongly affected territory construction and transformation. Around water, value of (un)contested centrality, complex dynamics bring out issues, transversal among political, economic, social, cultural, environmental and territorial levels at different spatial scales.

In this matrix of relationships, the paper aims to provide a new and small contribution to understand the swerve between Discourse (international framework of theories and concepts that lead strategies and policies development) and Practice (their implementation), with attention on cooperation actors' role.

In the variable configuration and conception between development-society-environment, the water has gradually played an increasingly strategic role in territory changes through different levels of incisiveness, forms and procedures.

For 150 years, water infrastructure development and management in many countries of the South was an emergent political strategy for controlling space, water and people and an important part of everyday forms of state development (Wittfogel, 1957; Reisner, 1993; Wehr, 2004; Swyngedouw, 2004; Molle et al., 2009). According to Worster (1982) water control has led to the emergence of a powerful elite that included scientists, experts and engineers who achieved sophisticated ability to manipulate the natural water environment, an expertise that they put to service of more powerful authorities. These 'water burocracies' (Molle et al., 2009) include gradually national politicians, water business companies, development banks and international agencies that "are often tightly associated in 'synergetic relationships' whereby the ways the flows of water are created or modified by water infrastructure are intertwined with flows of power and influence, often manifested in the form of political or financial benefits, whether private or collective" (Molle et al., 2009: 336). So, national interests together to development agencies additional interests hold promises of concrete and large-scale changes thanks to large water projects, maximising aid flow under the driving force of development (Howe & Dixon, 1993) and increasing international donors' interests on loans and disbursing money. This framework has given way to what noted as 'the lending culture', fostering water infrastructural development as an end in itself, rather than a means to an end (Molle et al., 2009) with inadequate consideration of the cultural, social, environmental and productive impacts in different places.

International cooperation on water: a critical overview

The international cooperation's work during the past decades indeed has been criticized for imposing and assisting governments of the South in the definition and implementation of water policy reforms and interventions, carried out under the umbrella of various buzzwords and slogans.

By way of illustration, in the 50s and 60s, the period of the economic growth and modernization (Staatz & Eicher, 1998), international cooperation's action was mostly a result of emergencies. In these cases, major agencies and organizations focused their efforts to provide a minimum level of water and sanitation to urgent and immediate human needs. It was in the 70s, when the development aid focused on income distribution, employment and nutrition, especially in rural contexts of the South, it was the boom of an interventionist approach implemented, first of all by the World Bank (Table I). During macroeconomic and institutional reforms period (80s), Bretton Woods Institutions imposed strict conditionality on 'beneficiaries' countries through the Structural Adjustment Programmes, having embraced the efficiency's cause. On water issues, this process has been translated into the introduction of mechanized systems for water extraction in order to enhance the agricultural sector, the most productive sector in countries involved.

Therefore, elites and governments of newly independent countries of the South were supported by Western countries and agencies, which had both economic and geopolitical interests. Working under modernity and development icons in 'hydraulic mission', they "were pressed to deliver 'the fruits of development' to their constituencies and by the necessity to strengthen nation building and the legitimation of their power" (Molle et al., 2009: 334).

This system has led to persevere, with a double circuit of coercion, at international and state level. On one hand, international agencies may convey the national policies of countries constrained by raising funding, until to promote, recently, strategies of water's liberalization as a driver for sector improvement and efficiency (Ciervo, 2010). On the other hand, this hydraulic mission allows the central government to mark its presence in relevance areas for their interests through tangible imprint on the territory; it allows to create approval and consensus of settled community, as well as an opportunity to raise a bulwark new institutions under the centralized structure.



Table I: number of World Bank projects on irrigation and water supply

1947-1960	1961-1970	1971-1980	1981-1990	1991-2000
11	79	288	259	367

Source: World Bank, www.worldbank.org

In different assistance forms, financial (through transfer of credit), material (in the case of humanitarian and food aid by sending commodities of various kinds), and technical (the transfer of operational capabilities by experts and equipment), besides major international institutions and governments as main actors of bilateral and multilateral cooperation, co-exist and collaborate Non-Governmental Organizations. From the results' review of the first season of intervention, these new entities focus their efforts on a perspective change, which focuses on the needs and the role of settled community.

Although large-scale water projects contributed somehow to improving life quality, welfare and well-being, including energy and food generation, flood protection and water supply, they can no longer be expected to provide the answer to most water problems. Major new projects now compete with innovative smaller-scale, locally managed technical, institutional and economic solutions, water-conserving land management methods and rainwater harvesting approaches (Gleick, 2000; Venot, 2011).

The 'centrality of the local' gradually makes its way in the strategies of international agencies and most recently Community-based water management is a recurring requirement by donors in the development programs. However, this achievement turns out to be often poorly fulfilled. Looking at the problem, Duncan Miller of OECD Development Centre highlighted that there are two key points that, somehow, weaken the use of predefined approaches:

"First, where there is no pre-existing experience, it should start with modest goals, apply to groups of small size, and to make reference to traditions, associations and institutional indigenous systems. This does not mean that project managers should be obliged to work exclusively with local elites. Second, bear in mind that self-management and popular participation are not readily transferable, are effective where there are already a spirit of cooperation between central and local communities and some decentralization tradition. If attempts partial and paternalistic to mobilize local resources fail in general the objective, the benefits of wide participation mature, over time and space" (D. Miller, cit. in Ward, 2003: 111).

The disapproval on the international uses of participatory approaches and connected buzzwords are that these become often a mere instrument of consensus and legitimacy as 'managérialisme populiste' (Sy et al., 2007, 196), rather than a real implementation process for local empowerment (emerged in the '80s) and participation (in the next decade); the critiques highlight the connected risk of hitting the attitude of 'colonialisme des idées' (Courade, 2006) through the use of conceptual and ideological schemes of other societies and the use of its own representation of contexts that is not always coherent with reality.

On the other hand, an internal evaluation of the WB projects with operational objectives (the management of natural resources) and socio-institutional aim (as the empowerment of community organizations) highlights the disjunction between discourse and practice. Lewis et al. sustain that, in the projects it is involved in a variety of entities as in most of the projects of the WB, the commitments made by donors, NGOs and other organisms can not be easily supported during implementation phase because of its own multi-agency structure that involves a difficult coexistence of different configurations and practices (Lewis et al., 200x). Community-based water resource management¹, for example, strongly promoted by NGOs is one of the most common approaches currently, despite the limitations and sometimes the impropriety that it can show. The direct involvement of local actors in process of control and water management aims to promote a responsibilities distribution between state, international actors and community; at the same time, investing in

¹ It is based on the assumption of collective ownership of a public good of water point (*forage*) and self-management by a management committee democratically elected by the users, which also involves traditional bonds of solidarity and reciprocity (Diop & Dia, 2011).

'human and social capital' as well as physical and material features, this approach allows a greater projection towards local development (Ciervo, 2010; Guesnier, 2010; Makkaoui & Dubois, 2010; Etienne, 2003, Shiva, 2003; Ward, 2003). Therefore, gradually takes shape a doing way other than the centralized interventions of massive hydraulic artefacts, which certainly produce the benefits of innovation technology, but not address the hydrological and environmental impacts, nor its social, cultural and economic implications.

About Community-based water resource management, Diop & Dia offer some reflections on its economic and management features. They argue that in many cases there are no objectives and procedures actually and formally shared by the community, which gradually weakens participation. Also they underline that often the management committee skills are not able to cope with the required maintenance, being levied on the water loss. Olivier de Sardan focuses instead on the idealisation of the international organizations of the concepts of community and reciprocity that cannot be generalized to the multifaceted social dynamics. Furthermore, he highlights that often the management committees retrace the local power dynamics as a counter-productive effect for local development.

Therefore, in the various forms of cooperation appear the gap between programs establishment and their implementation may be inscribed in a broader disconnection between formal and life experience, between planned and reality. In our point of view, it refers to the distance between conception and definition of strategies, policies and objectives on water, and their contact on the context of intervention. Let us, therefore, to highlight main actual global narratives components, in which international cooperation draws sustenance, and to which national strategies must meet (in the South countries, as well as in the North).

New water paradigms and "not-new" failures

The global discourse on water is strengthened since the 90s from an intensification of the international level of knowledge, policy and regulation tentative. Although some scholars have argued that the appearance of water emergency is due to the interests of major international agencies and donors as World Bank (Homer-Dixon, 1996; Lasserre & Descroix, 2005). Anyway, a series of events, declarations and programs have effectively marked the last two decades advancing new concepts and theories. Following strengthened awareness on the multidimensional value of water², new concept of Integrated Water Resource Management (IWRM) has been introduced in the "United Nations Conference on Environment and Development" in 1992, for integrating the major water uses and priorities (water supply and sanitation, irrigated agriculture, environmental protection, flood protection and hydro-power).

Today, global organisms recognize IWRM³ approach to address contemporary water challenges. By way of illustration, in the Challenge 'Meeting basic needs'⁴: "[IWRM] depends on collaboration and partnerships at all levels, from individual citizens to international organisations, based on a political commitment to, and wider societal awareness of, the need for water security and the sustainable management of water resources. To achieve [IWRM], there is a need for coherent national and, where appropriate, regional and international

- 2 It includes water and sanitation services, the water-related risks and threats to human health, the links between water management and poverty, water for industry, agriculture and energy, water for environmental sustainability, human-driver processes, as well as water-related cultural diversity, heritage and knowledge (UNESCO 2006).
- 3 "Integrated water resources management includes planning and management of water resources, both conventional and non-conventional, and land. This takes account of social, economic and environmental factors and integrates surface water, groundwater and the ecosystems through which they flow. It recognises the importance of water quality issues. In this, special attention should be paid to the poor, to the role, skills and needs of women and to vulnerable areas such as small island states, landlocked countries and desertified areas" (Ministerial Declaration on Water, 2000: 2).
- 4 The Ministerial Declaration of The Hague on Water Security in the 21st Century is the political outcome of the 2nd World Water Forum (2000). The document identify seven global challenge: 1) Meeting basic needs, 2) Securing the food supply, 3) Protecting ecosystems, 4) Sharing water resources, 5) Managing risks, 6) Valuing water, 7) Governing water wisely.



policies to overcome fragmentation, and for transparent and accountable institutions at all levels" (Ministerial Declaration, 2000: 2).

In the same document, the word governance appears once where the challenges for achieving water security are listed. One of these is "Governing water wisely: to ensure good governance, so that the involvement of the public and the interests of all stakeholders are included in the management of water resources" (Ministerial Declaration, 2000).

Since 2000 indeed, "governance" emerges as a core theme in global water discourse. First of all, the World Water Vision report recognizes that the water crisis primarily is crisis of management (Cosgrove & Rijsberman, 2000). The need of coordination among actors and the strengthening of water governance are subsequently confirmed in various World Water Forums with the progressive acquisition of new purposes and objectives, until the Millennium Development Goals. The most recent 6th World Water Forum report relates:

"The water crisis the world community faces today is largely a governance crisis. Securing water for all, especially vulnerable populations, is often not only a question of hydrology (water quantity, quality, supply, demand) and financing, but equally a matter of good governance. Managing water scarcity and water-related risks (floods, natural disasters etc.) requires resilient institutions, collaborative efforts and sound capacity at all levels. Good water governance is therefore a key condition of success to ensure everyone's well-being, contribute to economic development and keep the planet blue, but also to foster peace and stability" (World Water Council, 2012: 63).

It is therefore validated awareness that water scarcity is closely linked, beyond the physical-geographical features, at the managerial, institutional, political dimensions. In this framework, however, the controversy between two opposing currents is amplified: global assumptions are based primarily on the idea that water is an economic good; otherwise, water as a universal human right and a common good is supported by different disciplinary contributions and, especially, as more and more defended by civil and social movements in inter- and intra-national networks. The disapproval about the strategic and operational features of IWRM and Water Governance promoted by international agencies and donors are directed to theirs economic and financial nature, that aimed to increase privatization and commercialization of resource⁵. Or, as underlined Olivier De Sardan, their normative meanings strongly 'polluted' of neo-liberal ideology.

Already at initial appear of the new paradigm, Jenkins (2001) argues that 'governance' as used in the mainstream international development discourse of the international development funding agencies; it tends to become a 'technical' issue, that governments and other international actors located in the instrumental reason, assists in reproducing state power and legitimacy, as well as the reproduction of development assistance programmes.

Referring to governance and water policy reforms that has been promoted in most developing countries by a number of donor agencies and international organizations, Hartje argues that the "World Bank is clearly the most prominent donor institution endorsing the concept analytically and providing substantial financial support for its implementation [...] its role as a bank and its competitive advantage as a lender for long-term, complex projects with reliable and competitive conditions" (Hartje, 2008: 2). About the implementation of the IWRM principle by the WB, Hartje highlights the defect precisely because "its (IWRM) uptake faces the potential opposition of the water using sectors which fear losing control or losing access to water at low cost. Thus, on one side analytical sector work and considerable efforts in the diffusion of the concept were expanded and on the other side the Bank adjusts by continued lending on a project level".

⁵ The Alternative World Water Forum (AWWF) argues that the World Water Council is a mouthpiece for transnational companies and the World Bank and they falsely claim to head the global governance of water. Instead, for several years, different civil society movements have fought side by side for water conservation and citizen management of water. Activists have created platforms, propositions and campaigns at events gatherings helped solidify the movement to re-appropriate water as a communal resource, which belongs to all of humanity.



Expanding the question on translating the concept into a set of policies guiding operations in World Bank strategy, Hartje argues that:

"There is a considerable difference between stated objective and actual performance, particularly with respect to the inclusion of environmental objectives, but increasingly about social and human rights considerations as well. While NGOs emphasize the devastating effects of non-performing projects and suspect evil motives on the side of the multilateral financial institutions, economists and political scientists take the difference largely as given. Weaver (2006) calls it the 'IO Hypocrisy' and Gutner (2005) the 'gap between mandate and performance'" (Hartje, 2008: 2).

The main 'line of defence' has built on the macro-institutional theories in institutional arrangement and economic level. (The Moigne et al.,1992; Dinar & Saleth, 2004, 2005; Lewis et al., 2003). According to Dinar & Saleth (2005), the fragmentation among water institutions and, consequently, the relationship between theory and practice on water reforms and approaches, depends on both endogenous and exogenous features of the institution.

Therefore, the responsibility of the international agencies is limited, subject to failures and risks due to the factors that they can only partially control.

Which glimmer?

Referring to this framework, Mollinga suggests that:

"the addition of 'governance' to the water resources policy vocabulary may be considered a step forward. [...] (It) signifies a less exclusively sector focused understanding of water resources management, that is, recognition of its embeddedness in broader socio-political structures [...] and ecological dimensions. [...] The object called 'water resources management' is a heterogeneous object. Its composite elements include water, technical artefacts, people, institutions and social relations of different kinds, a physical landscape, and more. Thought of as a system it is a complex system, with specific time and space characteristics that influence the social interaction that is part of it" (Mollinga, 2008: 16).

More than part of it, this is the engine that allows its performance: "it is the social and even cultural features that, ultimately, will determine whether or not we able to reach a situation where water governance can be labelled as "sustainable" (Lundqvist, cit. in Grillotti & Bernardino, 2006: LXXI). Some final remarks are therefore necessary.

Water complexity requires careful attention to local specificities that global paradigms and approaches can hardly grasp without transmute them into a mechanical sequence of acts. "This is because next to the achieving, there is a 'combination' that not only presupposes a relationship, but claims to qualify it. And the relationship, every relationship, is never given once and for all, but changes: with the changing of the actors, circumstances, places, information" (Turco, 2010: 14)⁶.

The need to overcome the rationality despotism, often exogenous, promoted by technocratic structures highly centralized and often auto-referential (easily exposed to internal crisis or/and failure put in contact with the context) opens the door to a perspective change. It not means nullify the valuable contribution of global scientific and technical advancement; but rather open to scientific curiosity and imagination technique, compatible with life in the territories at human scale (Guesnier, 2010), maintaining the awareness that the 'local' must be central in all the phases of water management, from each decision-making step to each operative action.

A change of perspective that turns the slogan 'think globally, act locally' into the formulation 'think locally, act (locally and) globally', as to more aptly capture the need for a greater empathy with local life experience. In this sense, the relationship of undisputed and necessary relevance among different spatial scales may are



⁶ Translation by the author.

established; a trans-scalar relationship among all the actors involved on the water management process may be possible through the responsibilities distribution between international agencies, scientists and experts, NGOs, State, local and civil associations. In this context, as claimed by Godard, international cooperation, especially the decentralized one, offers the opportunity to culturally bring communities of civil society in different countries and to allows a transfer of experience, practice and knowledge on the multidimensional common value.

References

Castro J., (2007) Water governance in the twentieth-first century, in Ambiente & Sociedade, vol.10, no.2, 97-118. Ciervo M., (2010) Geopolitca dell'acqua, Roma, Carocci editore.

Cosgrove and Rijsberman. (2000) World Water Vision. L'eau: l'affaire de tout le monde. London, Earthscan Publications Ltd. www.worldwatercouncil.org/index.php?id=961&L=0%2ffil

Courade G., (2006) (ed) L'Afrique des idées reçues. Paris, Belin.

Diop M., Dia H.A., (2011) Réformes des services d'eau en milieu rural africain : enjeux et limites du montage institutionnel de gestion, Une étude de cas au Sénégal, in Mondes en développement, vol.3 no.155, 37-58.

Dinar A., Saleth R.M., (2004) The Institutional Economics of Water A Cross-Country Analysis of Institutions and Performance, (Co-publication with World bank). Cheltenham, Northampton. Edward Elgar Publishing.

Dinar A., Saleth R.M., (2005) Water institutional reforms: theory and practice, in Water Policy no.7, 1–19

Eicher C.K., Staatz J.M., (1998) *International Agricultural Development*, London, The Johns Hopkins University Press.

Etienne J., (2003) Eau et assainissement: croyances, modes et modèles..., in Afrique contemporaine, 1 no 205, p. 103-117. http://www.cairn.info/revue-afrique-contemporaine-2003-1-page-103.htm

Gleick P.H., (2000) The Changing Water Paradigm. A look at twenty-first century water resources development. In Water International, vol.25, no.1, 127-138.

Guesnier B., (2010) L'eau et le développement durable: un couple en rupture sans gouvernance societale et coopération décentralisée. in Développement durable et territoires, vol.1, no.1

http://developpementdurable.revues.org/8376

Homer Dixon T. F., (1996) Environmental scarcity, mass violence, and the limits to ingenuity, in Current History, 359-365.

Howe J.A, Dixon, J.A., (1993) Inefficiencies in water project design and operation in the Third World: An economic perspective, in Water Resources Research, vol.29, no.7, 1889-1894.

Grillotti Di Giacomo M.G., Mastroberardino L., (2006) Geografie dell'acqua. La gestione di una risorsa fondamentale per la costruzione del territorio, Genova, Brigati.

Hartje V., (2008) The World Bank's Water Sector Policy Reforms, in Scheumann W., Neubert S., Kipping M. (Eds.) Water Politics, Policies and Development Cooperation: Local Power Plays and Global Governance. Berlin, Springer.

Jenkins R., (2001) Mistaking "governance" for "politics": Foreign aid, democracy and the construction of civil society, In Kaviraj S., Khilnani S., (Eds) Civil society: History and possibilities, Cambridge, Cambridge University Press. 250-268.

Lasserre F., Descroix L., (2005) Eaux et territoires. Tensions, cooperations et geopolitiques de l'eau, Quebec, Presses de l'Université du Quebec.

Le Moigne G., Barghouti S., Feder G., Garbus L., Xie M., (1992) (eds). Country Experiences with Water Resources Management: Economic, Institutional, Technological and Environmental Issues, World Bank Technical Paper No: 175, World Bank, Washington, DC.

Lewis D., Bebbington A.J., Batterbury S.P.J., Shah A., Olson E., Siddiqi M.S., Duvall S., (2003) *Practice, power and meaning: frameworks for studying organizational culture in multi-agency rural development projects*, in Journal of International Development, vol.15, 541-557. www.interscience.wiley.com



- Makkaoui R., Dubois J.L., (2010) Nouvelles formes de gouvernance dans le domaine de l'eau. Apports et limites de la coopération décentralisée dans les Pays en développement, in Développement durable et territoires, vol.1, no.1. http://developpementdurable.revues.org/8413
- Ministerial Declaration. (2000) Water Security in the 21st Century, The Hague, 2nd World Water Forum. http://www.worldwatercouncil.org/fileadmin/wwc/Library/Official_Declarations/The_Hague_Declaration.pdf
- Molle F., Mollinga P.P., Wester P. (2009) Hydraulic bureaucracies and the hydraulic mission: Flows of water, flows of power, in Water Alternatives, vol.2, no.3, 328-349.
- Mollinga P.P. (2008) Water, politics and development: framing a political sociology of water resources management, in Water Alternatives vol.1, no.1, 7-23.
- Ostrom, E. (1999) Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework, Working Paper, Workshop in Political Theory and Policy Analysis. Bloomington, Indiana University
- Sy O., Sauquet M., Vielajus M., (2007) (eds) Entre tradition et modernité, quelle gouvernance pour l'Afrique?, Actes du colloque de Bamako.
- Shiva V., (2003) Le guerre dell'acqua, Milano, Feltrinelli editore.
- Swyngedouw E.A., (2004) Social power and the urbanization of water. Flows of Power. Oxford, Oxford University Press.
- Turco A., (2010) Configurazioni della territorialità, Milano, Franco Angeli.
- UNESCO, (2006) World Water Assessment Programme. Water, a Shared Responsibility. The United Nations World Water Report 2. Paris and New York, UNESCO and Berghahn Books.
- Venot J.P., (2011) What Commons? Rethinking Participation in the sub-Saharan African Water Sector. CONFERENCE PAPER, 13th Biennial Conference of the International Association for the Study of the Commons (IASC); Hyderabad-India.
- Ward C., (2003) Acqua e comunità. Crisi idrica e responsabilità sociale. Milano, Elèuthera editrice.
- Wehr K., (2004) America's fight over water: The environmental and political effects of large-scale water systems, New York and London, Routledge.
- Wittfogel K.A., (1957) Oriental despotism: A comparative study of total power. New Haven, Yale University Press.
- World Water Council, (2012) Time for solutions. Global Water Framework. Forum synthesis of 6th World Water Forum, Marseille.
- Worster D., (1982) Hydraulic society in California: An ecological interpretation, in Agricultural History vol.56, no.3, 503-515

Web site

www.worldbank.org

http://www.johannesburgsummit.org/html/basic_info/unced.html

