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## **IWRM and the legacies of large-scale agriculture in the Peruvian Amazon<sup>2</sup>**

Agribusiness in Latin America have expanded noticeably during the last couple of decades. By 2014, the LAC region held a 13% share of the world trade in agriculture, 5% more than the share held in the mid 1990's (Chaherli & Nash, 2014). As this growth translated into economic benefits for shareholders, it also accounted for 70% of the deforestation in LAC between 2000 – 2010 (FAO, 2016) and led to increasing conflicts with local based economies dependent on small scale agriculture (Deere & Royce, 2009). Among the efforts to halt these negative impacts new models of resource governance emerged aiming at integrating stakeholders and users into accountable organisations.

Integrated water resources management (IWRM) is framed under this rationale. Following the worldwide accepted definition provided by the Global Water Partnership (2009), "IWRM is a process which promotes the co-ordinated 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". This approach was thought to face the now outdated paradigm of managing water according to different sectoral

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needs. Water scarcity, competing uses and economic growth compelled water decision makers to think in a coordinated manner (Allouche, 2016).

In practice, however, IWRM has been found as a vague nirvana discourse (Molle, 2008) and a highly contingent approach (Mehta et al, 2016) that still holds certain sectors (for example, agriculture) as central in decision making. Evidence points out to the local governance arrangements that resist the imposition of IWRM models (Jones, 2015) whereas through its absolute rejection or through the subtle imbrication of governance logics (Sehring, 2009). These findings have been comprised under the lenses of institutional bricolage (Cleaver, 2012) and policy translation (Mukhtarov 2014). In these literature water is not managed as an isolated resource, rather, it is understood as an embedded fluid in social relationships, such as kinship, that is connected to other nature beings, such as land and forest.

This article reviews the attempt to impose IWRM over the water governance arrangements of a native community in the Peruvian Amazon that faces an increasing intervention of rice agribusiness in their lands. The resulting dynamic can be understood as an *altered* arrangement: it doesn't lead to the creation of an IWRM institution, nor does it reject new governance architectures. The rescaling of water governance, the interpretation of IWRM meanings and the contingency of the results, all within the frame of a history of agricultural development interventions in indigenous lands, helps us understand this phenomenon.

### **Translation and Bricolage**

The differences between the proposed policy outputs and the real outcomes have been addressed under the policy translation analysis, which proposes that policies rarely remain unchanged when they travel across different scales, jurisdictions and social groups (Mukhtarov, 2014). Focusing on the everyday actions of the social groups that experience those changes, the institutional bricolage concept sustains

that the new arrangements are highly dependent on previous ones, including social organization, cosmologies and, in general, the “right to do things that people find unquestionable” (Cleaver, 2012: 65). Under this understanding, institutions are in constant transformation and the results do not exclusively depend on the participants control, rather, they are understood as a tension between agency and structure (Benouniche et al, 2014; Sehring, 2009).

Institutional bricolage is a pivotal dynamic in the actualization and renovation of institutions. It is the adaptive process through which repertoires (rules, traditions and social relations), from already existent institutional arrangements are drawn to answer new circumstances (Cleaver & De Koning, 2015; Cleaver, 2012,). These arrangements include moral – ecological rationale that link natural and supernatural worlds to shape rules of coexistence, conflict management and authority principles (Boelens, 2008). As these arrangements come from existing formulae, they legitimate the new shapes they take when mixed and adapted to new circumstances. For example, the elders counsel in Nkayi (Zimbabwe) becomes a communal assembly to allocate water rights (Cleaver, 2012), or the assembly of a peasant organization in Peru is adapted to create a water users’ association (Verzija & Dominguez, 2015).

The policy transfer literature has highlighted three dimensions in the process of creating new meanings. First, the politics of scale, which refers to the actors’ mobility through different hierarchies but also to their ability to produce them and frame their discourses accordingly (Budds and Hinojosa, 2012). Second, the creation of meanings, which highlights the role of ideology, symbols and identity in the transformation of policy ideas (Gerlak & Mukhtarov, 2015). Finally, the contingency of results, which sustains that alteration is not only a possibility but an inherent attribute of any policy translation process (Mukhtarov, 2014). The three dimensions will be reviewed for this case.

### The Case of the Bajo Naranjillo Water Users Association (BN-WUA)

Peru entered the 2000's aiming at renewing democracy and bringing after the fall of a highly corrupted government. Aiming to enact a new Water Law that highlighted accountability and collaboration, the government invigorated its relationships with international cooperation agencies, such as GTZ<sup>3</sup> and FAO, water authorities from different countries and other institutions, seeking counsel about water management from a multisectoral and integrated perspective (Oré & Rap, 2009). As a result, in 2003 the Water Intendency<sup>4</sup> presented the National Policy and Strategy of Irrigation, a document that regarded water as an economic resource which could be managed with *efficiency, equity, and sustainability* from an integral and multisectoral approach (Oré & Rap, 2009: 54), presenting for the first time some of the principles of IWRM.

The Bajo Naranjillo Water Users Association (BN-WUA) was created in 2004 amidst this juncture. It manages the Bajo Naranjillo sub-basin, one of the 13 tributaries of the Alto Mayo Basin -which covers 7400 km<sup>2</sup>, an area known for its rice, coffee and cacao crops. Its creation was important because it was aimed to settle a successful experience with the new water governance model and also because it was the first water user association in the Peruvian Amazon. The challenge was particularly difficult because it had to integrate the needs and interests of different ethnic groups: awajún<sup>5</sup>, wampis and settlers - known as *mestizos*. The Native Community of Bajo Naranjillo was created in 1975. The community has fulfilled a crucial role in the economy and the politics of the Alto Mayo Valley (Brown,

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<sup>3</sup> Currently known as GIZ - German Cooperation Agency.

<sup>4</sup> The Water Intendency depended from the Ministry of Agriculture. With the enactment of the new Water Law in 2009, the Water Intendency was reshaped as the National Water Authority, although still ascribed to the Ministry of Agriculture (now named Ministry of Agriculture and Irrigation).

<sup>5</sup> Formerly known as "aguaruna".

2014). Here the Aguaruna Organization of Alto Mayo (OAAM)<sup>6</sup> was founded in the 70's, an organisation that promoted the political debate to improve indigenous lives. Bajo Naranjillo has also been known for its extensive rice crops and was, for a time, the place to settle rice trade with rice companies, as the result of development projects conducted by the State and development agencies to promote large-scale agriculture and credits (Works, 1984).

This became a tragic economic process for the Bajo Naranjillo community, as we will see in the next section, and became one of the reasons why the creation of the water users' association and the associated water tariff was a contested process. Nowadays, the awajún and wampi of Bajo Naranjillo depend on large-scale agriculture to live, but none of them work the land or sell the crops. They are now part of a complicated production chain that has led to the alienation of water rights.

### **Rescaling BN-WUA**

The IWRM approach understood the basin as the management unit. Therefore, it involved organising the users along it. This meant that the awajun and wampi people, who had been allocating water permits among each other under a kinship criteria<sup>7</sup>, had now to coordinate with the *mestizo* group as they were basin neighbours. The IWRM promoters<sup>8</sup> saw this as an accomplishment, for they had gathered all the users along the watershed to coordinate decisions on water allocation. But little they knew about the land use conflicts between the *mestizos* and the indigenous groups.

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<sup>6</sup> Today known as FERIAAM - Regional Federation of the Awajun of Alto Mayo.

<sup>7</sup> The elder family clans took the first water shifts. Under the new regime, the proximity to the water canals defined the shifts.

<sup>8</sup> The Local Water authority (Rioja ATDR), GTZ, San Martin Regional Government and the Ministry of Agriculture.

In 1981, the Peruvian government launched PEAM – Alto Mayo Special Project, one of the most important agricultural developments for the Amazon which had the objective to increase agricultural productivity and rise income levels for 12 800 families (Ocampo, 1994). To meet the challenge, PEAM granted 3 800 agricultural credits through the Agrarian Bank. Due to these efforts, by 1982 rice crops in Bajo Naranjillo increased four times more than in the previous year and at a faster pace than in other native communities -a phenomena credited to the existence of OAAM in Bajo Naranjillo.

Albeit this growth, the awajún were not capable of meeting future crop expectations. They failed to become experts in large scale agriculture because PEAM targeted men in order to train them as farmers and entrepreneurs, while in awajun culture women are the ones responsible of the things that grow under a careful understanding of the links of *yumi* (water) and *nugkui* (land). Also, the awajún faced labor shortage to conduct a coordinated cropping dynamic. To pay the increasing debt they acquired with the Agrarian Bank, the awajún chose to rent their lands to the *mestizos*.

When the *mestizos* came, most of them complied with the awajún way to do things, nevertheless, a short time later they stopped abiding by the awajún law. They even stopped paying for the rented land because this was an informal arrangement. They refused to leave, forming families with the awajún daughters. Several years of trials and agreements followed and the animosity between both groups strengthened.

But as part of the BN-WUA, awajún, wampi and mestizos had now to collaborate with each other. As the sub-basin crossed indigenous entitled land, the awajun and wampi held the first water shifts. The shifts were deemed as *safe* because they were shared between family members who had neighboring lands along the Bajo Naranjillo river and the water canal. This allowed them to find an opportunity to use the WUA creation process to negotiate with the mestizos the abandonment of indigenous lands, threatening to cut their access to water. Moreover, they used this position to stop marriages between indigenous women and *mestizos*, in order to secure family heritage and land tenure. The discussion process was harsh but

the *mestizos* eventually agreed. Water control offered the political grounds to define the allocation of other goods on the basis of social relationships.

While kinship defined the social limits to access water before, the scale was redefined with the arrival of IWRM principles. The community boundaries were readapted to the sub-basin scale to deal with a long-term problem. Here the architecture of the State, with the WUA, was adapted to the moral-ecological rationale of kinship to redefine the scale of indigenous lands. However, it did not lead to the incorporation of the sub-basin as the new management unit, as suggested by the international experience. Rather, it reshaped indigenous peoples' boundaries and rescaled the range of land governance. IWRM then was assumed as an arena to deal with pre-existent conflicts. To do this, IWRM had to be alienated from its original transnationally-defined meaning.

### **Redefining IWRM: Water Meanings**

One morning during the summer of 2003, a GIZ consultant<sup>9</sup> visited the awajún and wampi people to explain how IWRM principles lay the grounds for modern WUAs. He summarized his views asserting that water management should be efficient and sustainable if water is to be *delivered* to everyone. Noe Cahuaza<sup>10</sup>, leader of one of the older families of Bajo Naranjillo, felt uneasy with these terms. He remembers that during the meeting “efficiency” was defined as paying the right price for the water you need, avoiding wasting it. He did not follow. “Why paying for something that runs free? why water has to be delivered? It comes when it wants to come”. Noe would find out three years later the consequences of his refusal to pay.

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<sup>9</sup> Ing. Jorge Gonzales, now a consultant of the Alto Mayo Basin Organization. Interview held on January 12, 2014.

<sup>10</sup> Interview on February 1, 2014.



In 2006, the BN-WUA was enforced to pay for water by the local water authority, claiming that they were not abiding by the law.<sup>11</sup> Although the awajun and wampi people have entered into the dynamics of a market economy, the economic transactions with each other are limited. There is a reciprocity bond, a chain of favors, which characterizes the support among clans. Charging each other for water threatened that bond. This link refers to an extended version of kinship. “Awajun” derives from the word “awap”, which is translated as “friend” and “brother”. As one of the oldest woman in Bajo Naranjillo argued, “in a way, we are all one family and family does not charge to its members, you do what you have to do without expecting payment”. Under this logic, a payment could even be considered as an insult to the individual that freely and disinterestedly helped his brother.

On the other hand, the very nature of water was under question. According to the awajún and wampi cosmologies, *yumi*, or water, is understood as an entity with emotions that is characterized for connecting heaven, earth and the underworld; men and women; life and dead; humans and the forest, among other dualities (Brown, 2014; Reagan, 2003). A person cannot claim ownership over *yumi*, least charge for accessing it, because it has free will and intentions. *Yumi* is respected also as part of the extended kinship logic, as it is regarded as “one of the oldest relatives we have that goes in and out of the forests”, thus *Yumi* has agency because it not only reacts as part of the natural world, but could act according to kin.

The awajun and wampi were also dubious about the type of “development” presented by the IWRM promoters. Their previous experiences with development projects did not end well. After the dramatic experience with PEAM in the 1980’s which led to an economic crisis, in the 1990’s at least 21 development projects were conducted by NGOs, the government and international cooperation. Some of these organizations proposed conflicting resource use arrangements. This led many

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<sup>11</sup> A percentage of the water tariff goes to the government. Thus, the BN-WUA was not paying its “water taxes”, as one of the former awajun leaders says.

awajún and wampi to render development as a sheer adjective that came with any type of project. By the end of the 1990's Bajo Naranjillo installed a projects committee, devoted to assessing the suitability of any development project that knocked their doors. Slowly, they became expert "projectologists"<sup>12</sup> and learnt how to get investment from the government in the shape of development projects. They praise themselves as the first "developed" community in Peru, while laughing.

Albeit their mistrust with "efficiency" and "development", the awajun and wampi agreed to create a water tariff to remain in "the government's good records", as the now president of BN-WUA said, to keep receiving their investment. However, to accept the government's procedures does not imply a commitment with the values it portrays. The compliance with the water tariff, then, is not linked to the acceptance of the IWRM principles but to a conflicted history of interactions with the government, with the experience of development, and a reflection on indigenous values about water and how to relate with each other. Thus, the principles of efficiency and sustainability are rarely part of the awajún and wampi vocabulary, although frequently quoted in their projects.

Because, although the water tariff was created, the awajun and wamps did not pay for it, as will be explained in the next section.

### **On the Contingency of Results**

The entitled lands of the awajun and wampi are known for their rice and coffee crops. They, however, do not harvest nor commercialize rice by themselves, because they offer their lands for rent. Given their critical failure with modern agriculture, they decided to stop farming and start renting, looking for quick getaways from the debt they had fallen into. With time, renting land proved to be an income-making

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<sup>12</sup> "Proyectólogos" in Spanish.

activity with short-term returns. The creation of the BN-WUA was useful to claim back their lands and secure them. From 2005 until 2010, land renting was safe.

After the enactment of the new water law in 2009, a renewed interest was given to the creation of river basin counsels, to further the advancement of IWRM and include all users in decision-making. In 2010 the news arrived to San Martín, saying that Alto Mayo would be among the firsts to create a basin counsel in the Amazon. Invitations were sent to all stakeholders: farmers, rice companies, municipalities, NGOs, international cooperation agencies. An invitation came to the BN-WUA, attaching a list of all their members. They noticed that instead of the names of awajun and wampi families, the list presented the names of rice companies as water users. Since that day, the relationships within BN-WUA changed.

To get rid of the water tariff problem, the awajun and wampis decided to charge the payment to their tenants, who were deemed as responsible for being up to date in the local water authority books. As their tenants were individuals who represented rice companies, the water tariff's receipts had the name of one of Alto Mayo's richest companies: Induamerica. According to the water law, only those that are up to date with the water tariff payment are entitled to be called water users. As such, those are the ones invited to the decision-making processes.

Although the Bajo Naranjillo sub-basin crosses the awajun and wampi's entitled land, they are not acknowledged as water users. The *mestizos* seized the opportunity to reclaim control over the WUA, ignoring indigenous hierarchies, and control the WUA in coordination with the rice companies, who also appointed a representative. Up until 2014, the awajun and wampi fought to regain representation. Only in 2014, the National Water Authority gave them permission to participate in the discussion of the Alto Mayo Basin Counsel, but only as observers.

Under the eyes of the National Water Authority, Bajo Naranjillo is a successful case of *enforcing* IWRM principles in practice, having gathered farmers and private

companies in decision-making. The evidence, however, shows that beneath the formal water governance architecture deep inequalities become salient. The imperviousness of the law towards understanding indigenous water use rationale ends up obliterating any claim IWRM principles could have concerning equity.

### **Conclusions: Altered Arrangements**

What does IWRM mean for the *awajun* and *wampi* in the Peruvian Amazon? For a moment, an opportunity for indigenous groups to control *mestizo* activities and secure land tenure. The WUA, nevertheless, was not rendered as an operative representation of the IWRM principles. More likely, it was handled as the arena that could be shaped to serve the *awajun* and *wampi* needs. In this case, the translation across scales ended as a rescaling process to address specific needs.

Later the BN-WUA turned into a threat for indigenous people, as they were cleared from the decision-making instances. The *mestizo* group placed itself as the new directing body and used the WUA to contain indigenous actions to reclaim their control. Albeit the change in the governing body, the WUA keeps serving its original purpose: to provide a political arena where conflicted actors try to exert their dominance in the final outcomes. Little does this have to do with the IWRM principles of sustainability and efficiency that government officials expected to enhance.

Large-scale agriculture has a critical impact in this history. Even if indigenous people failed to incorporate the logic of the agribusiness to work their lands, the practice was entrenched through the axis of debt. The imposition of the IWRM model is understood only reflecting on this background, a model thought to maximize the utilities of rice in the Alto Mayo Valley. This logic questions the intersectoral nature that IWRM should have. Other uses different from irrigation for agriculture were not under question during the IWRM implementation, a process that reflects on the nature of the National Water Authority today: still

under the umbrella of the Ministry of Agriculture and Irrigation, besides its call to coordinate with all the sectors.

The resultant governance architecture, then, does not truly include the IWRM principles. The WUA is accepted only as it counterfeits and solves local power struggles. In this way, local stakeholders' rationales are interwoven with national frameworks to outline a new kind of organization. Reflecting on De Koning (2011), the WUA presents the characteristics of an altered arrangement, as it incorporates external constructions to nest unchanged local dynamics, logics and meanings. Altered arrangements are the result of readjustments rather than of the full incorporation of new institutional logics.

The changing trajectory of the BN-WUA demonstrates the way national level policies land over local realities and the dangers this may present when not properly addressing local histories, power relations and cosmologies. The final outcomes of the translation process could not be further from how IWRM is ideally proposed: inequality in access becomes legitimate, an important group is alienated from decision-making and no one truly believes in the promises of development.

## References

- Allouche, J. (2016). The birth and spread of IWRM –A case study of global policy diffusion and translation. *Water Alternatives*, 9(3): 412-433
- Boelens, R. (2008). Water rights arenas in the Andes: Upscaling the defence networks to localize water control. *Water Alternatives*, 1(1): 48-65
- Budds, J. and Hinojosa, L. (2012). Restructuring and rescaling water governance in mining contexts: The co-production of waterscapes in Peru. *Water Alternatives*, 5(1), 119-137
- Benouniche, Maya; Zwarteveen, Margreet & Kuper, Marcel. (2014). Bricolage as innovation: Opening the Blak Box of Drip Irrigation System. *Irrigation and Drainage*, 63 (5), 651 – 658.
- Brown, M.F. (2014 [1950]). *Upriver. The turbulent life and times of an Amazonian people*. Cambridge, MA: Harvard University Press.

Chaherli, N. & Nash, J. (2014). *Agricultural Exports from Latin America and the Caribbean: Harnessing Trade to Feed the World and Promote Development*. Washington DC: World Bank.

Cleaver, Frances. (2012). *Development through bricolage. Rethinking institutions for natural resource management*. Earthscan/Routledge: Londres.

Cleaver, Frances & De Koning, Jessica. (2015). Furthering critical institutionalism. *International Journal of the Commons*, 9 (1), 1 – 18.

Deere, C.D. & Royce, F. (2009). *Rural Social Movements in Latin America. Organizing for sustainable livelihoods*. Gainesville, FL: University of Florida Press.

De Koning, J. (2011). *Reshaping institutions: Bricolage processes in smallholder forestry in the Amazon*. Wageningen: Wageningen University Press.

Food and Agriculture Organization of the United Nations – FAO. (2016). *State of the World's Forests. Forests and agriculture: land-use challenges and opportunities*. Rome: FAO.

Gerlak, A. & Mukhtarov, F. (2015). ‘Ways of knowing’ water: integrated water resources management and water security as complementary discourses. *International Environmental Agreements*, 15, 257 – 272.

Greene, Shane (2009). *Caminos y carretera. Acostumbrando la indigeneidad en la selva peruana*. Lima: IEP.

Global Water Partnership – GWP. (2009). *Source Integrated Water Resources Management in Action*.

Jones, S. (2015). Bridging Political Economy Analysis and Critical Institutionalism: An Approach to Help Analyse Institutional Change for Rural Water Services. *International Journal of the Commons* 9(1), 65–86.

Mehta, L., Movik, S., Bolding, A., Derman, B. & Manzungu, E. (2016). Introduction to the Special Issue: Flows and practices – the politics of Integrated Water Resources Management (IWRM) in Southern Africa. *Water Alternatives*, 9 (3), pp. 389 – 411.

Molle, F. (2008) ‘Nirvana concepts, narratives and policy models: insights from the water sector’, *Water Alternatives*, 1 (1): 23–40.

Mukhtarov, F. (2014). Rethinking the travel of ideas: policy translation in the water sector. *Policy & Politics*, 42 (1), 71 – 88.

Oré, M.T. & Rap, E. (2009). Políticas neoliberales de agua en el Perú. Antecedentes y entretelones de la ley de recursos hídricos”. *Debates en Sociología*, 34, 32-66.

Ocampo, A. (1994). Sistematización de la experiencia en seguimiento y evaluación del proyecto especial Alto Mayo en Perú. Feinstein, O. (ed.). *Experiencias latinoamericanas en seguimiento y evaluación*. Quito: IICA & FIDA, pp. 151 – 205.

Reagan, J. (2003). *Valoración cultural de los pueblos awajún y wampis*. Lima: Conservación Internacional.

Sehring, J. (2009). *The Politics of Water Institutional Reform in Neopatrimonial States. A Comparative Analysis of Kyrgyzstan and Tajikistan*. La Haya: VS Verlag für Sozialwissenschaften.