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# Layering and Perpetuating: The Logics of Conservative Reforms in Morocco's Irrigation Policies

Pierre-Louis Mayaux<sup>1</sup>

## Abstract

Since the 1980s, Morocco's irrigation policies have displayed a puzzling combination of multiple reforms and of deep policy continuity. To make sense of these contradictory patterns, we start by reconceptualizing four decades of change as the successive layering of three distinct policy regimes (laissez-faire, delegation, and integration) on top of the older modernization regime dating back to the colonial era. We show that layering had the –partly unexpected– effect of sustaining the legitimacy of modernization policies in the face of multiple pressures for change. It did so through three distinct mechanisms: the co-optation of international donors; the blurring of responsibility for socially harmful outcomes; and the opportunistic re-legitimization of modernization policies enabled by this blurring. Our case study thus contributes to emerging theorizations of the conservative effects of policy layering. It also has implications for broader understandings of regime-wide transformism, of which sector-specific conservative layering might well be a key modality.

**Keywords:** Morocco; irrigation; layering; continuity; policy regime; transformism

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## Introduction

The concept of policy layering has attracted growing scholarly attention in the last two decades<sup>2</sup>. It was largely popularized by Kathleen Thelen's pioneering work on gradual institutional change, of which she considered layering to be a key mechanism (e.g. Thelen 1999; Mahoney and Thelen 2010). Thelen defined layering as a process whereby, instead of replacing existing institutions and policies, governing actors modify them by attaching new elements to them – these might for instance be rules, policy processes, or actors –. In other words, through layering, the new does not so much replace the old as it is superimposed upon it.

From the beginning, layering was considered an important mechanism of policy change. The fact that new rules were attached to existing ones was deemed important precisely insofar as this addition eventually “changed the ways in which the original rules structure behaviour” (Mahoney and Thelen 2010, 16). The endogenous logics of “differential growth”, whereby the effects of the newer layers gradually trump older ones, was counterpoised to other approaches to policy change, especially those who interpreted it as the result of exogenous pressures such as economic crises, broader political realignments or social protests. By contrast, Thelen and her followers sought to show that far-reaching transformative processes could be the result of cumulative, and often much less visible, incremental changes (Van der Heijden 2011).

More recently, however, a growing understanding of layering as a mechanism of policy *continuity* has taken hold (Carey, Kay and Nevile 2017; Capano, 2019). Another pioneer of the concept, Wolfgang Streeck, had pointed out early on that “while gradual change may have transformative effects, nowhere is it implied that all gradual change is of this kind” (Streeck 2009, 10). Gilberto Capano (2019) followed through on this insight, arguing that layering should best be conceptualized as a mode of institutional design that can be activated to pursue either change or stability. In the latter case, policy makers layer in order to maintain, stabilize or preserve actual policy outcome in the face of exogenous pressures such as economic recessions, social protests, or environmental degradation. However, the specific mechanisms through which layering can generate such conservative effects have yet to be properly inventoried and theorized<sup>3</sup>. Here, we advance this agenda by specifying and discussing some of these mechanisms, without any claim to exhaustiveness. In our view, conservative layering is a phenomenon that is sufficiently far-reaching to warrant a systematic comparative agenda both across and within political systems.

Morocco's irrigation policies are a promising ground to undertake such an exploration. The Moroccan political regime in general has been described as quite adept at enacting “reforms without change” (Tozy 1999, 34). During the protests that punctuated the “Arab spring”, for example, the King and his inner circle moved quickly to present a reform plan that was

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<sup>2</sup> We are grateful to the “Transformations to Groundwater Sustainability” (T2SGS) project for sponsoring the writing of the present article (funding: Belmont Forum & French National Research Agency). Our special thanks go to the “governance and public action” research team of the UMR G-EAU, to Amal Ennabih, as well as to anonymous reviewer(s) from the journal, for their valuable comments and input on an earlier version of this work.

<sup>3</sup> A stimulating exception is Erbaugh and Nirrochmat's work on forest policy in Indonesia, where they show how the layering process has allowed for so much interpretable flexibility that it enabled forest cover loss to continue unabated (Erbaugh and Nirrochmat, 2019).

effective in redirecting protestors toward institutionalized political channels and gradually defusing their grievances (Daadaoui, 2017). The overall mixture of change and continuity often displayed by the *Makhzen*<sup>4</sup> is particularly clear in the kingdom's irrigation policies, which have left many observers puzzled. On the one hand, many describe a far-reaching process of State restructuring. Thus, according to Anne-Marie Jouve (2006), the large-scale proliferation of individual (tube)wells to access groundwater from the 1980s on amounted to a massive process of State retrenchment whereby "State water" would have ceded ground to "private water". Others consider that the diffusion of water users' associations for irrigation (WUA) throughout the 1990s, signaled a "fundamental re-orientation of water policies" that "sounded the death knell" on the former hierarchical mode of coordination (Bekkar, Errahj, and Mahdi 2011, 194). However, many analysts simultaneously emphasize the remarkable perpetuation of the traditional irrigation policy, especially the prevailing objective of maximal extension of irrigated area, the building of large dams and canal networks to do so and the promotion of water-intensive crops for export (Akesbi 2011; Molle, Tanouti, and Faysse 2019). How, then, can we make sense of these contradictory observations?

In this article, instead of viewing reforms and continuity as mere contradictory trends, we argue that the former have sustained the latter. Rather than a particularly tense layering, the new layers proved to be, in important respects, *auxiliary* to the older one. More specifically, over the last four decades, the successive layering of three distinct policy regimes (*laissez-faire*, delegation, and integration) on top of the older regime of modernization dating back to the colonial era, has ended up upholding the political legitimacy of the latter. It did so through three distinct mechanisms: the co-optation of international donors; the blurring of responsibility for socially harmful outcomes; and the opportunistic re-legitimization of modernization policies enabled by this blurring. These mechanisms were hardly the application of a comprehensive, well thought-out strategy from the outset. Rather, they were the emergent result of complex interactions unfolding over time, defined more by the opportunistic initiatives of a multiplicity of actors than by well-developed, centrally coordinated strategies.

By taking policy regimes as our main unit of analysis, we highlight the fact that what was layered in this case was not a few isolated instruments, but whole packages of governing arrangements with interconnected sets of ideas, dominant institutions, and support coalitions (Orren and Skowronek 1998). Indeed, following Peter May and Ashley Jochim (2013, 428) we define policy regimes as "the governing arrangements for addressing policy problems [insofar as they] include mutually reinforcing institutional arrangements, interest alignments, and shared ideas". Therefore, Morocco's irrigation policies may be considered a "least-likely" case for conservative layering, as it appears that even these wholly new regimes did not, in fact, lead to commensurate policy changes.

The rest of the article is organized in three sections. First, we briefly trace the emergence of a policy regime of modernization and summarize its main features. Second, we trace the successive emergence of three distinct policy regimes and show that this did not prevent the remarkable continuity of modernization policies up to this day. Third, we describe the key

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<sup>4</sup> Derived from an Arabic word originally meaning "warehouse", nowadays it loosely refers to the extensive networks of patronage, allegiance and social control surrounding the Moroccan monarchy (see Sater, 2016).

mechanisms through which layering contributed to the perpetuation of modernization policies. Finally, we conclude by pointing to how conservative layering might be a key modality of a broader phenomenon of neutralization through pre-emptive reforms that the political theorist Antonio Gramsci labeled “transformism”. As a policy-centered concept, conservative layering should invite observers of regime-wide transformism to pay more attention to the sectoral specificities of this process, and thus to its overall composite character. This particular case study should also encourage researchers to be more attuned to the unintentional dimension of transformism.

## 1. The “old regime” of modernization in Morocco’s irrigation policies

Modern irrigation policy in Morocco was gradually forged during the second half of the French Protectorate. From the 1930s on, the French set out to legitimize their rule as a developmentalist intervention that aimed to modernize Morocco without, however, erasing its political structures (Wyrzten, 2015). A new agricultural policy was designed that rested on three mutually reinforcing sets of objectives. First was a goal of maximum expansion of irrigated area, requiring the building of large dams and canal networks, and comparative neglect of (or outright contempt for) rain-fed agriculture<sup>5</sup>. Second, the protectorate sought to promote water-intensive, export-oriented crops and value chains in order to maximize irrigators’ income, with the main focus on citrus, dairy products and vegetables (Swearingen 1987). Third, French authorities preferentially channeled irrigation projects toward rural elites and large landholders, which, at the time, also included most French settlers.

These three objectives were firmly taken up in the aftermath of Independence. After a decade of political wrangling with rival political forces, on September 18, 1967, the Monarchy officially relaunched a nationwide irrigation policy, with a famous speech made by King Hassan II. The ambitious objective of one million hectares of irrigated land was to be achieved by the year 2000. From then on, the set of agricultural policies that were developed can be appropriately characterized as a comprehensive policy regime of modernization. The three broad dimensions of institutional arrangements, shared ideas and support coalitions were indeed strongly mutually reinforcing throughout the 1960s and the 1970s.

First, institutional arrangements rested on a clear administrative dichotomy between large-scale, State-led irrigation on the one hand (*grande hydraulique*, hereafter GH), which had to be supported as a priority, and small-scale irrigation on the other hand (*petite et moyenne hydraulique*, hereafter PMH) mostly financed and managed by water users’ themselves. Two main organizations specifically supported GH. First, the Office of Commercialization and Exports (OCE) that prospected foreign markets and sought advantageous customs tariffs for –comparatively well off– exporters. Second, nine Regional Agricultural Development Offices (*Offices régionaux de mise en valeur agricole*, ORMVA) that distributed irrigation water and provided extension services in GH areas. Investments in irrigation –mostly in GH schemes– represented no less than 50% of total public investments between 1968 and 1972, and

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<sup>5</sup> Public spending on irrigation increased from 2.20% of total spending between 1914 and 1927 to 10.84 % between 1928 and 1936.

around 35% between 1968 and 1990 (Belghiti 2005). Total irrigated area increased from 130,000 ha in 1956 to more than 400,000 ha in 1975, of which large State-managed schemes accounted for 295,000 ha (Akesbi and Guerraoui, 1991).

Underpinning these institutional arrangements, and themselves reinforced by the visible transformations that public policies were enacting on the ground, were shared modernist beliefs. These had three core features. First, confidence that even markedly arid environments (for example in the Haouz region around Marrakech, the Souss south of Agadir or in the northeastern region of Moulouya) could be productively harnessed through science, (irrigation) technology and infrastructure to become an orchard (Swearingen 1987). Second, the belief that efficiency derived from the standardization of cropping patterns and agricultural practices (Popp 1984). Finally, a horizon of unlimited growth and plenty, anchored in the belief that there would always be a way to secure more vital resources such as water and fertile land. Technological control over nature, standardization and resource optimism, all key ingredients of modernity (Hörl, 2015) helped legitimize the concentration of public expenditures on GH schemes. They also conferred wider legitimacy on a political regime that was then vigorously contested, and had to resort to the repressive arsenal of the "lead years" to survive (Sater 2016).

Finally, modernization policies were sustained by a powerful support coalition. Hassan II himself had stated that they would be instrumental in stabilizing a loyal base of support throughout the countryside, asserting that "when I have one million hectares of irrigated land, then you will see that my throne will be defended"<sup>6</sup>. Several hundred thousand households ultimately benefited from these policies, either directly as farmers, or indirectly through upstream activities (public works, sale of seeds, irrigation equipment, etc.) or downstream opportunities (marketing, processing, etc.). However, the local elites were able to reap significant benefits, as a mutually beneficial exchange was forged between them and the Monarchy, through which they gained easy access to public resources in exchange for ensuring political consent to the Monarchy's rule across rural areas (Leveau 1985). In fact, modernization policies did not merely strengthen traditional elites; they also produced new ones. Important Moroccan families expanded their estates and gained prominence as efficient irrigators in the 1970s including the Nejjaï, Gueddari and Dlimi in the Gharb, the Bekkaï in the Triffas and the Kabbaj south of Agadir, as well as many traditional *Marrakshi* families (Waterbury 1970). Modernization helped them gain social legitimacy, stabilizing them not as mere social elites but as respected *notables*. Alongside this strengthened rural elite, irrigation policy was also the domain of powerful techno-political networks encompassing hydraulic bureaucracies in the Ministry of Public Works and the Ministry of Agriculture, and regional officials in the Ministry of the Interior. The latter played an important role in making sure that dominance of the elites did not stretch too far. Indeed, modernization policies were the scene of a delicate balancing act. As small-scale farmers would not be allowed to emigrate to cities *en masse*, the task of the "agents of authority" under the governor (*moqqadem* and *chioukh*) was to advantage rural elites without, however, threatening the passive consent of the larger rural world (Benhadi, 1976).

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<sup>6</sup> As reported by Yassine Benargane in Yabiladi, « Le 18 septembre 1967, le roi Hassan II lançait le grand projet d'irrigation d'1 million d'hectares », January 18, 2017. Accessible at : <https://www.yabiladi.com/articles/details/57533/septembre-1967-hassan-lancait-grand.html>.

This policy regime of elite-centered modernization was hit by multiple crises in the early 1980s. In 1983, faced with the severe deterioration of its balance of payments, Morocco turned to the IMF for financial support and a structural adjustment program was implemented in the agricultural sector (1985-1990). Meanwhile a severe, multi-year drought struck the country, and in 1983-1984 hunger riots erupted across the northern part of the kingdom. Irrigation reforms were clearly called for. They would follow markedly distinct logics over the following decade, forming various layers that would be added on top of the existing policy regime.

## **2. Much ado about not that much? Laissez-faire, delegation, and integration in Morocco's irrigation policies**

### **2.1. A laissez-faire regime shaping access to groundwater**

To compensate for dwindling surface water resources, a far-reaching turn toward groundwater, accessed individually by farmers through (tube)wells, was actively promoted by Moroccan authorities from the beginning of the 1980s. Drilling equipment was exempted from customs duties in 1983<sup>7</sup>. Subsequently, public subsidies for well drilling were gradually put in place and expanded.

In exchange for these incentives, the 1995 water law required a license for groundwater abstraction, granted by newly created water basin agencies (WBAs). In theory, farmers now had to follow complex bureaucratic procedures to obtain water permits that specified the authorized depth of their well, the annual volume of extraction allowed, and that were supposed to be completed by the installation of water meters. Compliance with these regulations was to be enforced by a dedicated body of civil servants within the WBAs.

However, these formal regulations have not prevented the proliferation of individual drilling and pumping throughout the country, at first mostly through shadow wells, later through deeper boreholes. Local surveys in any given region find that more than half the wells equipped with motor pumps are unauthorized (HCP 2007). Crucially, this general lack of enforcement cannot be attributed to resource constraints, or to inadequate control of street-level bureaucrats by the upper echelons of the State hierarchy. The numerous local agents from the Ministry of the Interior (*moqqadem*, *qaids*, *chioukhs*) tend to have a fine-grained knowledge of withdrawal points in their area and would control them at any time if they were instructed to do so. The Moroccan State is certainly not lacking any "infrastructural power", that is, the capacity to actually penetrate civil society, and to implement logistically political decisions (Mann 1984). Rather, the proliferation of individual (tube)wells should be seen as the manifestation of a consistent policy regime of laissez-faire, or what Alisha Holland (2016: 235) has called "forbearance", that is, the "intentional and revocable government leniency toward violations of the law".

Institutionally, the Ministry of the Interior is the central actor of this regime. It possesses the most exhaustive and up-to-date information on water withdrawals. Only its agents, once informed by WBA enforcement agents, can establish official reports that have legal validity and can lead to formal punishment. Ethnographic studies have shown that such official

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<sup>7</sup> Decree n° 2-84-835, December 28, 1983.

reports are rarely filed, causing considerable frustration among the WBA agents (Del Vecchio and Mayaux 2017). Likewise, the agents of authority could crack down on drillers of illegal boreholes should they wish to do so, but in practice, drills have only been seized on rare occasions (Faysse, El Amrani, Soufiane and Lahlou 2012). Meanwhile, WBAs lack an adequate budget, human resources, and broader institutional legitimacy, so that they have little choice but to leave their water “police” chronically understaffed, with typically only one or two full-time agents dedicated to law enforcement in an entire river basin.

In terms of the ideas underlying this institutional arrangement, ethnographic studies have also pointed to the important normative belief in a tolerant State, that is, in a State knowing how to demonstrate indulgence and understanding towards the petty illegal acts committed by its farmers (Bennouniche, Kuper, Hammani, and Boesveld 2014). This paradigm of indulgence is anchored in the vision of farmers as a “deserving” target population that should not be unduly harassed by the administration (see Schneider, Ingram and deLeon 2014). Such an image is different from, and can create tensions with, the conception of a largely passive mass of farmers embedded in modernization policies, a mass defined as an “object of development” (Mitchell, 2002) to be modernized by an activist State.

Finally, the *laissez-faire* regime allows for the cultivation of a broader social base than the irrigators benefiting from the major development projects promoted by the State. It benefits all irrigators, whether large or small, comparatively equally. Although it may eventually generate significant socio-economic inequalities (as small irrigators are generally harder hit by the drop in the water tables that *laissez-faire* ultimately entails), these inequalities tend to be obscured by the fact that they only develop slowly and indirectly. In the short term, and in contrast to modernization policies, *laissez-faire* benefits all irrigators. It echoes the call by current King Mohammed VI for the emergence of a large “agricultural middle class”<sup>8</sup>. In this regime, every irrigator has the –tacit– right to be left free to mobilize as much water as possible and to try to succeed on its own in the agricultural markets.

However, this *laissez-faire* regime was not the Moroccan authorities' only opportunistic response to the severe crisis of the early 1980s. Alongside the systematic tolerance of individual access to groundwater, a large-scale transfer of formal prerogatives to water users' associations also took place.

## **2.2. Delegating water management: between State retrenchment and a rhetoric of empowerment**

Throughout the economic crisis of the 1980s, adequate maintenance of irrigation infrastructure became increasingly challenging for the State budget. In 1995, 30% of all hydro-agricultural expenditure was devoted to energy and maintenance, even though the resulting maintenance was still widely viewed as inadequate (El Alaoui 2004, 2). In this context, a major devolution of formal prerogatives to water users took place. It was directly inspired by the principles of Participatory Irrigation Management (PIM), which in the 1980s and the 1990s, emerged as a powerful new paradigm actively promoted by international donors (FAO 1995).

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<sup>8</sup> Discourse at the Parliament, October 12, 2018.



On paper at least, PIM principles entailed a sharp break from State-directed modernization, and a shift to a distinct policy regime with different dominant institutions, ideas, and support coalitions. Institutionally, in 1990, the kingdom enacted a law that mandated the creation of agricultural water users' associations in all irrigated areas (WUA). WUAs can be set up either at the initiative of the agricultural administration, or at the request of two-thirds of the farmers (whether owners or not) located in an existing or planned irrigation scheme (El Alaoui 2004). Once created, the WUA's general assembly elects a board of seven members, including the president. Associations must cover their operational expenses with their own financial resources (users' annual membership fees and water rates). They are responsible for devising and enforcing rules over access to and use of water. To fund their investments and non-routine maintenance, they must sign a formal "agreement" with the agricultural administration that specifies cost-sharing arrangements. WUAs are also encouraged to organize themselves in federations at a regional level.

Theoretically, again, the creation of WUAs could have led to far-reaching changes in both GH and PMH areas. In the former, the associations inherited new array of prerogatives from formerly all-powerful ORMVA: farmers had to organize themselves to undertake tasks they had never before performed. In the PMH areas, WUA represented, on paper, a shift from village-level organizations (*douar*) to inter-village structures of governance, and from customary organizations that relied largely on seniority (*jema'a*) to formal ones nominally more egalitarian. In 2004, 490 WUAs had been set in up in GH areas, bringing together some 160,000 users and covering an area of 384,260 ha; while in PMH areas, 1,032 WUAs had been created with some 120,000 members and covering an area of 218,000 ha (Gana and El Amrani 2004).

As for the underlying worldview, the international allure of PIM was based on a blending of two quite different streams of normative ideas: on the one hand, ideas of community empowerment and "ownership", whereby irrigation reforms were supposed to cause a clean break with top-down, authoritarian State management. On the other hand, were ideas of cost cutting and cost-effectiveness. In a highly ambiguous *mélange*, this form of "participatory neo-liberalism" (Yashar, 2005) valued both the irrigator's self-management as a political ideal in itself, and as a vehicle for State retrenchment and austerity.

Finally, the delegation policy was supported by a particular constellation of interests that differed both from elite-centered modernization and from the *laissez-faire* regime. For the recipients, delegation offered opportunities both to established notables and to a newer generation of ambitious rural youth, better trained than their elders and eager to use associations as vehicles for social promotion (Kadiri, Tozy and Mahdi 2015). Delegation was also actively supported by international donors who saw it as a way to circumvent State inefficiency and to directly empower farmers. The potential for cost cutting also pleased the Ministry of Economy and Finance, which actively upheld the reform process. Finally, the position of the agricultural administration was more ambiguous, oscillating between reluctance to relinquish traditional prerogatives and appreciation of the various opportunities for burden shifting and blame avoidance offered by the WUAs.

### **2.3. Integrating water management: a "nirvana" policy regime?**

The year 1992 marked an additional turning point in Moroccan irrigation policies. At the international level, the Dublin conference emphasized the scarcity of freshwater and the need to manage it in an integrated manner at the watershed level. The catchphrase of “Integrated water resources management” (IWRM) spread rapidly worldwide, becoming a “nirvana” concept that, much like sustainable development, hardly anyone could claim to oppose (Molle, 2008). Morocco was quick to appropriate this new paradigm. In 1995 it promulgated its first water law, an innovation in itself since water had, until then, merely been considered as a raw material for other sectors rather than as a unified resource worthy of comprehensive management. Accordingly, the law introduced what amounted to a new policy regime that promoted distinct institutions, ideas, and support coalitions.

Institutionally, the law established WBAs for each of the nine river basins of the country. WBAs are semi-autonomous public agencies endowed with a legal status and financial autonomy. They are placed under the tutelage of the Water Department. They enjoy a wide range of formal prerogatives that include developing and implementing river basin masterplans that define objectives and investment programs; authorizing water abstraction and discharge; and monitoring both the quality and quantity of surface water and groundwater. The underlying rationale was clear enough: WBAs now had to make irrigated agriculture compatible with other water uses. The first WBA was set up in 1998. In the following decade, eight other agencies were created. To specifically remedy groundwater overexploitation, they were encouraged to set up aquifer contracts, committing groundwater users to specific targets for water withdrawals, and planning the necessary actions to meet these targets. The first contract was signed in 2006 (Faysse et al. 2012).

The ideas underpinning these new institutional arrangements also contrasted with other policy regimes. Internationally, integrated management was based on the belief that a permanent increase in water supply was less and less possible at an acceptable cost, and that the horizon of abundance was now facing unsurpassable limits in semi-arid countries like Morocco. Supply management had to give way to demand management in order to reduce consumption. As King Mohammed VI summed up in 2001, "the time has come for us to radically change our perception and attitude towards water by managing the demand for this resource and rationalizing its consumption"<sup>9</sup>.

Finally, the support coalition for this new public policy regime was no longer centered on farmers, whose national share of water consumption was expected to be capped. Instead, the imperative of sustainable development was supported by other consuming sectors such as drinking water operators, industry and tourism, as well as donors and environmental NGOs, most of them international. The table below summarizes the four overlapping policy regimes for irrigation currently operating in Morocco.

**Table I: Four layered policy regimes in Morocco’s irrigation policies**

	Modernization 1930s =>	Laissez-faire 1980s =>	Delegation 1990s =>	Integration 1995 =>
Main institutions/ instruments	▪ Hydraulic bureaucracies	▪ Intentional non-control	▪ Agricultural water users'	▪ River basin agencies

<sup>9</sup> Excerpt from the Royal Address at the 9th session of the Higher Council for Water and Climate (CSEC), 2001.

	<ul style="list-style-type: none"> <li>▪ Direct subsidies for water-intensive crops and irrigation equipment</li> <li>▪ Institutional dichotomy between GH and PMH</li> </ul>	<ul style="list-style-type: none"> <li>and non-sanction</li> <li>▪ Ex-post regularization of <i>de facto</i> use</li> </ul>	<ul style="list-style-type: none"> <li>associations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Water master plans and aquifer contracts</li> <li>▪ Authorizations for withdrawal</li> </ul>
Normative ideas	<ul style="list-style-type: none"> <li>▪ Irrigation as modernity</li> <li>▪ Farmers as objects of development for an activist State</li> <li>▪ Modernization as a trickle-down process from rural elites</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tolerant State</li> <li>▪ Farmers as a “deserving” social group</li> </ul>	<ul style="list-style-type: none"> <li>▪ Empowerment</li> <li>▪ Cost-cutting and cost effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sustainable development</li> <li>▪ Interest conciliation and consensus</li> </ul>
Support coalitions	<ul style="list-style-type: none"> <li>▪ Farmers in State-directed irrigation schemes, especially rural <i>notables</i></li> <li>▪ State civil and irrigation engineers</li> <li>▪ Monarchist political elite</li> </ul>	<ul style="list-style-type: none"> <li>▪ All irrigators</li> <li>▪ “Agents of authority” (<i>moqqadem, chioukh, qajids</i>)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ascendant (younger) rural elite</li> <li>▪ International donors</li> <li>▪ MEF</li> <li>▪ Consultancies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Non-agricultural users</li> <li>▪ International donors</li> <li>▪ Environmental NGOs.</li> </ul>

However, and contrary to what theories of gradual institutional change through layering would have predicted, these three policy regimes have not trumped the older regime of modernization. Rather, the latter has proved remarkably resilient and dynamic to this day.

#### 2.4. The resilience of modernization policies

Regarding policy institutions and instruments, massive public spending and subsidies to expand irrigated areas have been maintained and even amplified. Between 1992 and 2002, a National Irrigation Plan extended the irrigated areas at an average rate of 18,624 ha per year, a slower pace than in the 1970s but not by a wide margin (Agoumi and Debbagh 2006). In 2000, 20% of total public investments was still devoted to irrigation. The magnitude of direct public expenditures still increased in 2008 with the launching of the Green Morocco Plan. The green plan was based on massive subsidies for well drilling, drip irrigation and water-intensive crops. It included an irrigation extension program and aimed to quintuple the value of export-oriented, mostly water-intensive crops (citrus, olives, fruits, and vegetables), shifting land away from staple cereal crops (Akesbi 2011).

The following year, a national water strategy was announced by King Mohammed VI. It aimed to mobilize an additional 2.5 km<sup>3</sup> of water by 2030 through the construction of 60 large dams and 1,000 small dams. In 2020, Morocco officially numbered some 144 large dams and 909 small dams, covering between 1,500,000 and 1,700,000 hectares of irrigated area, while 14 additional large dams and 20 smaller ones were being built. The total storage capacity

should soon exceed, by far, the average annual volume of accessible surface water. These actions now take place within the framework of a new national plan, “Green Generation 2030” that, according to a well-informed observer, is in “pure continuity<sup>10</sup>” with the past.

Meanwhile, modernist beliefs have also been reproduced. Alongside traditional infrastructure projects, they reassert themselves in the policy of seawater desalination, presented “not as a choice, but as an obligation<sup>11</sup>”. Meanwhile, by promising “more crops per drop”, the promotion of drip irrigation feeds the belief in an “ecological modernization” whereby environmental problems stimulate efficiency gains (Venot 2017). Between 2008 and 2020, the Green Morocco Plan enabled the conversion of some 550,000 ha of land to drip irrigation, at the cost of 37 billion Moroccan dirhams (~4.1 billion dollars). Support for drip irrigation appears all the more in continuity with past modernization policies as it is not accompanied by any counterpart in terms of limits to overall water consumption at the plot level.

Finally, the long-standing political settlement between the monarchy and the rural elite has also been reproduced, while itself being modernized. The best illustration of this “modernization of the modernizing pact” is the aggregation policy advanced by the Green Morocco Plan. Through this policy, the Ministry of Agriculture supports farmers who have “strong managerial capacity” and large plots of land (at least 100 ha) provided they contract with surrounding smaller farmers to generate economies of scale in their production and marketing processes. Following the logic of modernizing trickle-down, these large farmers are called the “engines” (*locomotives*) of the countryside. Between 2008 and 2020, the Green Morocco Plan mobilized some 75 billion dirhams through 961 aggregation projects, involving 540,000 farmers. The political exchange between the Monarchy and rural elites, as long as the latter appear modern and enterprising, thus remains at the core of contemporary Moroccan irrigation policy.

How, then, to explain this puzzling mix of multiple, seemingly wide-ranging reforms, with remarkable continuity? Instead of dismissing the three waves of reforms as merely ineffective or cosmetic, we highlight their –largely unintentional– political functionality and key contribution to policy continuity.

### **3. Three mechanisms of conservative layering: co-optation, blurring of responsibility, re-legitimization**

#### **3.1. Co-opting international donors**

In the aftermath of Independence, international donors played a key role in promoting and sustaining modernization policies. The World Bank, in particular, “held one of the main sources of funding” and was in a position to “impose its successive visions of development policies”, while other –especially bilateral– donors largely followed its agenda (Lazarev 2011, 51). Even though it also reflected the Monarchy’s domestic priorities, the “dam policy” was launched in 1967 after a World Bank mission had strongly advocated it a few years earlier. In

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<sup>10</sup> Ecoactu, « Le Plan Maroc Vert sous la loupe de Najib Akesbi », March 9<sup>th</sup> 2020.

<sup>11</sup> H24, « Fouad Amraoui: Le dessalement de l’eau de mer n’est plus un choix, mais une obligation désormais », November 15<sup>th</sup> 2020.

accordance with modernization policies, the numerous large-scale projects supported by the World Bank “often ended up benefitting local economic leaders” (Lazarev 2011, 52). At the same time, poor farmers in non-irrigated areas tended to be supported by a distinct international organization, the International Fund for Agricultural Development (IFAD) that enjoyed considerably less resources.

In the 1980s, however, international donors’ official stance rapidly shifted and State-managed irrigated schemes came under heavy criticism. First, modernist bureaucracies were targeted for being both wasteful and authoritarian, a two-fold shortcoming whose single remedy was to be found in a more participatory irrigation management (World Bank 1979). Then, a decade later, the *grande hydraulique* was accused of being environmentally unsustainable, as it fostered farming systems in which the demand for water was both too high, and too rigid relative to available resources. This time, the solution was to be found in more integrated water resource management (World Bank 1993). Throughout the 1990s, the World Bank addressed strongly worded calls for more participatory and more integrated water management in Morocco (World Bank 1995; 1997). One report stated bluntly that “the Government’s objectives of expanding irrigated areas, in the context of increasingly scarce water supplies, rising costs and less protected output prices, poses a severe challenge for irrigated agriculture” (World Bank 1995, 8). Meanwhile, a new generation of projects was funded, especially in the mountainous hinterland, under the strict condition of being “participatory”<sup>12</sup>.

As the Moroccan State was going through an acute debt crisis, and as the Cold War geopolitical rent it had long enjoyed was coming to an end, this international norm diffusion was strongly felt by Moroccan authorities. The five-year span during which water users’ associations were operationally set up (in 1990) and the IWRM-inspired water law was passed (in 1995) was also a period of broader political liberalization –albeit a carefully controlled one – that was largely motivated by the need to show compliance with international pressures in a new, post-Cold war era (Bennani-Chraïbi 1997). Thus, as is often the case when international organizations promote new norms, Moroccan authorities perceived a high return on institutional reforms associated with both PIM and IWRM (Dobbin, Simons & Garrett, 2007). This is consonant with the “good pupil” strategy whereby the Moroccan regime communicates skilfully on its dutiful compliance with international standards and best practices (Hibou & Tozy, 2020). Three decades later, cultivating its international reputation is still an ongoing concern at the Water Department. For instance, an internal directive on aquifer contracts underlined the urgent need to “sign and activate [these contracts] by the end of 2016” by reminding low-level bureaucrats of “Morocco’s international commitments”<sup>13</sup>.

Overall, however, formal compliance never involved any serious plan to embark on a different policy path, whether more participatory, less productivist, or more integrated. This

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<sup>12</sup> For example, the “Central Plateau and Western Middle Atlas” project (bilateral project involving the German development agency, GIZ); the “Central Middle Atlas” project (multilateral: UNDP/WB/Min. of Agriculture); and the “Central High Atlas” pilot project.

<sup>13</sup> “Methodology for the elaboration of groundwater contracts” (in Arabic), Joint Circular from the Minister of the Interior, the Minister of Energy, Mines, Water and Environment, the Minister of Agriculture and Maritime Fisheries, n°5338, December 19, 2013. Accessed at : <http://www.abhloukkos.ma/abhl/index.php/fr/gouvernance/preparation-des-contrats-de-nappes>

does not mean that the creation of window dressing institutions was the straightforward product of a deliberate strategy. Rather, the handful of technocrats behind the drafting of the 1995 water law were sincerely convinced of the law's merits. In accordance with a strategy of intentional reform through layering, one of them stated that the Act was a "horizon"<sup>14</sup>, serving to articulate principles that were deemed desirable even if only achievable in the long run. This corresponds to what Htun & Jensenius (2020) labeled "aspirational laws", that is, laws that are passed with the full knowledge of their supporters that enforcement will initially be weak, but with the expectation that it will subsequently grow through investments in enforcement resources or changes in social norms. Thus, the conservative effects of these institutional reforms were less intentional than a consequence of the structural robustness of the political settlement embedded in modernization policies.

Overall, the co-optation was remarkably successful. By the beginning of the 2000s, the World Bank lauded Morocco as a 'success story' for its economic reforms (Zemni and Bogaert 2006). A few years later, it supported the –decidedly modernist- Green Morocco Plan through two loans worth US\$205 million –in 2011– and US\$203 million –in 2013–, while the Bank's total funding of Morocco from 2011 to 2014 amounted to US\$2.2 billion (Hanieh 2014). For its part, the African Development Bank supported the Green Morocco Plan to the tune of US\$105 million. Meanwhile, the amounts involved in supporting "participatory" approaches were negligible compared to those channeled toward modernization policies. For example, the World Bank is currently supporting a participatory approach for the development of an aquifer contract in the Tadla region for 4.8 million dirhams (about 530,000 dollars). At the same time, it is supporting the conversion of the large Tadla scheme to drip irrigation to the tune of 1.5 billion dirhams (about 167 million dollars). Similarly, the building of the M'dez dam, in the Middle Atlas region, is benefiting from a loan of nearly 1.3 billion dirhams (about 150 million dollars) from the European Bank for Reconstruction and Development, and from a grant by the Green Climate Fund of nearly 325 million dirhams, adding up to about a third of the total amount of the project. The dam, however, is justified by its promoters as a means of "safeguarding" the over-exploited Saïss aquifer. Integrated water management thus helps legitimize international financial support for the dam (Del Vecchio & Mayaux, 2017).

Conversely, the fact that international donors have been willfully co-opted can be explained by a combination of ideational and material factors. Ideationally, most development agencies never saw insurmountable contradictions between the old policy regime and the newer ones in the first place. Rather, they tended to see the new regimes as mere *correctives* that were to allow desirable modernization policies to proceed without their damaging excesses. Indeed, the World Bank had been calling for more farmers' participation in the GH for a very long time. In the Sebou project, a large-scale regional development plan that started in the 1960s, it had called for traditional Moroccan villages (*douar*) to collectively manage the plots of land that had been retrieved from French settlers, a proposal firmly rejected by the Ministry of the Interior at the time (Waterbury 1970, 167). For the Bank, then, modernism and farmers' participation were never a contradiction in terms.

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<sup>14</sup> Interview, Rabat, September 27th, 2019.

Materially, donors' inherent organizational interests have to be taken into account. Here, Philip Selznick's (1949) classic observations on the Tennessee Valley Authority still very much apply to the field of international cooperation. Donors are constantly looking for projects that can be funded, monitored, and evaluated at limited management costs. As such, they have an inherent incentive to prioritize large-scale projects (Easterly 2006). While they do need to accommodate popular concerns over their funding of "white elephants", they also seek to maintain their budget in a highly competitive environment, which the funding of soft, participatory, or capacity-building projects alone, however desirable, cannot possibly allow. What they need, then, is a plausible narrative that the ongoing reforms will have some beneficial effects at some point in the future, and that things are -albeit slowly- moving in the right direction. Herein lies what Béatrice Hibou (2009) describes as the political logics of "reformism", whereby the very process of reforming serves to defuse discontent, to provide political cover for key stakeholders and, in so doing, to perpetuate consent to existing policies and modes of rule, irrespective of the ultimate results of the reforms.

### **3.2. Blurring responsibility: new policy layers as scapegoats**

In recent decades, the harmful consequences of Moroccan irrigation policies have been the target of regular criticisms, whether from academics (Akesbi 2011), think tanks (Ennabih 2020) or social movements (Attac Maroc 2019). In particular, irrigation policies have been routinely criticized for nurturing the overexploitation of water resources, threatening the country's food security, and aggravating socio-economic inequalities.

These phenomena are explicitly seen by their critics as a direct consequence of the policy regime of modernization which has increased water dependency, actively promoted export-oriented crops, and explicitly prioritized large-scale farmers. However, the addition of new policy layers has significantly obscured this causal link, thus preventing these criticisms from gaining wider currency and helping to shield modernization policies from a larger legitimacy crisis. The blurring of responsibility operates in two different ways depending on the regime under consideration.

As far as the *laissez-faire* regime is concerned, it is simply being blamed for the social harms that are deplored, instead of modernization policies. Thus, the unsustainability of irrigated agriculture is attributed to the anarchic development of boreholes, which is ultimately interpreted as the result of farmers' selfishness and short-termism. This was the logic behind the statement made in the National Water Strategy, according to which "overexploitation is the result of responsibility shared by all actors, [especially] water users who favor their immediate self-interest over the general interest and overall sustainability (Royaume du Maroc 2009, 33). Likewise, the Water Department laments that "the reality on the ground is unfortunately different from planning decisions", thereby largely exonerating the latter (MEMEE 2014).

The fact that this *laissez-faire* has merely been, historically, an adaptive informal institution that emerged to cope with the unintended effects of elite-centered modernization (namely, the over-allocation of surface water) is then glossed over. Once presumably selfish, myopic farmers have received the lion's share of the blame, the solutions put forward involve, for the most part, tightening State control over them: for example, by installing water meters,

inspecting the legality of existing wells and boreholes, and punishing illegal uses. They also involve raising farmers' "awareness" of the challenges of water scarcity and pollution, a key term that appears sixteen times in a 2013 report by the Moroccan Economic, Social and Environmental Council on water governance (EESC 2013).

Participatory and integrative policies, for their part, are criticized not for their harmfulness but for their lack of effectiveness. Here, the implicit assumption is that the modernization regime should be, in theory, perfectly capable of absorbing all the criticisms that are levelled at it, provided it is *corrected* by adequate participatory and integrative policies. Unfortunately, the reasoning goes, these policies, while eminently desirable, are still insufficiently enforced. Therefore, rather than questioning the modernization paradigm, the political priority should be making these needed correctives effective at last.

The above-mentioned EESC report is emblematic of this legitimization move. The report begins by taking stock of the extremely worrying situation of water resources in Morocco. However, rather than blaming the long-standing policies of increasing water supply and water consumption, most of the recommendations consist of demanding more effective application of the integrated management mechanisms that exist on paper. For example, the report recommends that the inter-agency Water Committee be operationalized through a decree; that any new project involving the development of additional water resources be drawn up using a more "integrated" approach; and that more resources be allocated to the WBAs, particularly for their mission of monitoring and controlling withdrawals. Likewise, in its 2018 annual report, the Moroccan Accounting Office called once again for more aquifer contracts as one of the main solutions to water stress in the country, even though after twenty years on the political agenda, only one has been ratified in the country -in 2006- due to political reluctance of many types (Del Vecchio and Mayaux 2017).

The poor functioning of the water users' associations (WUAs) is also a *leitmotif* among observers and practitioners of the Moroccan water sector (Belghiti 2005). Their "failure" is widely diagnosed and blamed for inefficient water management. Various explanations are given for the poor effectiveness of the WUAs, including financial constraints and their lack of acceptance at the grassroots level (Minoia 2012). The point, here, is that persistent frustration with the effectiveness of participatory approaches provides the opportunity for a large number of development projects aimed at "building the capacity" of WUAs at the local level (Gana and El Amrani 2004). In these projects, government institutions typically remain in the background, while outside, often foreign experts directly interact with farmers. The discussion is then kept at the local level, preventing the questioning of nation-wide agricultural policies (Minoia, 2012). Again, the assumption is that participatory management through WUAs could provide an effective corrective to modernization, even though no clear evidence of this corrective role can be provided.

Overall, these ongoing criticisms of harmfulness (with respect to the laissez-faire regime) and ineffectiveness (with respect to the participatory and integrative regimes) allow the blame to be shifted away from modernization as the root cause of water overexploitation. This blurring of responsibilities sustains, rather than weakens, modernization policies.



### **3.3. From the blurring of responsibilities to re-legitimization: a more extensive mechanism of conservative reform**

In itself, blame dilution operates in a defensive way: it merely mitigates the extent of the legitimacy crisis without overcoming it. However, under certain conditions, it may be the first building block of a more extensive mechanism, in which blame shifting feeds the re-legitimization of the older policy layer. In this case, modernization policies can be presented as a positive solution to the adverse effects allegedly provoked by the newer policy regimes.

The case of groundwater overdraft in the Saïss plain is a good illustration of how this mechanism works. Following a familiar pattern, overdraft tends to be attributed to the anarchic proliferation of (tube)wells across the plain, a proliferation in turn allowed by the State laissez-faire policy. However, rather than merely leading to a call for tougher controls, or for awareness raising activities, this blame shifting has served to legitimize the construction of a new large dam, the M'Dez, to supply water to some 2,850 farms. According to the current draft version of the Saïss aquifer contract, the dam is meant to reduce overall groundwater withdrawals by two thirds by 2030, an ostensible shift toward more “integrated” water policies. However, there is reason to doubt the reality of this shift. First, out of the 30,000 hectares to be irrigated, more than 15,000 are currently rain-fed. Instead of promoting resource substitution, then, the project significantly expands the irrigated area, putting additional pressure on surface water resources and most likely resulting in continuing reliance on groundwater as a necessary complement. Second, the mere prospect of the project has already been used to justify current groundwater (over)abstraction. For example, in 2011, the Ministry of agriculture and the Sebou WBA approved the drilling of boreholes for private investors on some 7,250 ha of land, on the ground that the future water transfer would eventually alleviate the pressure on groundwater (Faysse et al., 2012). In this case, focusing the blame on myopic, hard-to-control farmers has led to the renewed legitimization of large-scale, modernist water policies. This modernization is likely to have unequal effects, as it will mostly benefit farmers with the financial wherewithal to pay for the (comparatively high) full cost of water delivery. Cases where groundwater overexploitation has already been used to justify large-scale, supply-oriented projects abound, from water desalination in the Chtouka region (Heinz 2018) to the Ouljet Es Soltane dam in the Sebou region (Allioui, 2020), and the new Tiouiine dam near Ouarzazate.

The weakness of the WUAs is similarly used, opportunistically, to justify State-led modernization, with the Economic, Social and Environmental Council asserting that, left to their own devices, “farmers' associations are unable to remedy the insufficient level of water resource development observed in the agricultural sector” (ESEC 2013, 18). In short, the blurring of responsibility may only be the first step of a more significant re-legitimization mechanism by which the older policy layer finds itself actively re-justified and strengthened.

### **Conclusion: transformism as a composite, sectorally differentiated process**

In this paper, along with an emergent body of works, we have shown that layering was not necessarily a mechanism of change, but could also be a powerful mechanism of policy reproduction. Using the case of Morocco's irrigation policies, we have identified three

mechanisms of conservative layering: the co-optation of international donors; the blurring of responsibility for socially harmful outcomes; and the ultimate re-legitimization of the older policy regime enabled by this blurring. We have emphasized that these mechanisms were less the product of deliberate strategies than the result of opportunistic moves made after the reforms, according to the new opportunities offered by circumstances. These mechanisms should be further analyzed and compared across States and policy sub-systems to better understand how they operate in different policy settings, and to assess their varied causal contribution to policy continuity.

We also have shown that conservative layering in Morocco's irrigation policies has had political effects that extend far beyond the confines of the agricultural sector. Indeed, the socially widely-recognized importance of irrigation (whether measured in terms of the public budget, direct and indirect employment, or the ability to obtain foreign currencies) is such that the political dynamics that shape the sector have direct and far-reaching implications for the dynamics of the Moroccan political system as a whole. Sustaining the legitimacy of the agricultural order helps sustain the legitimacy of the larger political order organized around the monarchy and its networks of influence and allegiance. As Houdret and Amichi (2020, 18) put it, the "rural social contract has repercussions at the national level".

This matters for how we understand the broader process of "transformism", of which conservative layering might well be a key modality. According to Antonio Gramsci's classical definition, transformism (*trasformismo*) is a form of non-confrontational politics aiming at preserving the established order by gradually absorbing –potentially– antagonist groups and ideologies into the agenda of the ruling class (Gramsci 1971, 58). In so doing, "it can serve as a strategy of assimilating and domesticating potentially dangerous ideas by adjusting them to the policies of the dominant coalition" (Cox 1993, 55). Along with the broader notion of "passive revolution", transformism has been regularly invoked to make sense of authoritarian resilience in the Arab world, particularly in the wake of the Arab spring (De Smet and Koenraad 2017). When doing so, however, it has been applied at the level of the political regime as a whole, without differentiating between distinct policy domains. The underlying assumption seems to be that in these regimes, the multi-positionality of the elites is such that paying too close attention to sectoral specificities is not warranted. Our findings, by contrast, suggest that *trasformismo* would best be conceptualized as a composite, sectorally differentiated political process. In our particular case, the new policy regimes introduced to deflect oppositional forces have involved institutions, ideas, and support coalitions that were highly specific to the agricultural sector, and it is through their very specificity that they have had a powerful effect on the legitimacy of the regime as a whole. Consequently, studies on transformism should not be limited to the transversal reorganization of political power, but should also analyze how these reorganizations operate in a differentiated and uneven way across distinct policy domains. They should also be more attuned to the fact that transformism may be more of a process marked by a series of opportunistic moves than a grand, pre-defined strategy. This argues for not separating policy analysis from the broader study of political regimes, but rather for building on the former to conduct the latter - and vice versa.

## REFERENCES

- Agoumi, A. & Debbagh, A. (2006). Ressources en eau et bassins versants du Maroc: 50 ans de développement (1955-2005). In Mouline, M.T., Lazrak, A. (Eds.) *50 ans de développement humain au Maroc, perspectives 2025*. Institut Royal des Etudes Stratégiques, Rapports thématiques, p. 13-62.
- Akesbi, N., Guerraoui, D. (1991). Enjeux agricoles: Evaluation de l'expérience marocaine. Casablanca, Maroc: Editions Le Fennec.
- Akesbi, N. (2011). La nouvelle stratégie agricole du Maroc annonce-t-elle l'insécurité alimentaire du pays ? *Confluences Méditerranée*, 78(3), 93–105.
- Allioui, H. (2020). Quelle sécurisation de l'eau potable dans un bassin surexploité - Cas d'étude : la ville de Meknès. Mémoire pour obtention du diplôme du Master, Université Moulay Ismaïl de Meknès, 102 p.
- Attac Maroc (2019), Pour la souveraineté alimentaire au Maroc. Etude de terrain sur les politiques agricoles et le pillage des ressources, Attac Maroc-CADTM, 191 p.
- Bekkar Y, Errahj M, Mahdi, M. (2011). Ahorro de agua y acción colectiva en Tadla y el Sus marroquíes. In H. Ayeb (Eds.), *El agua en el mundo árabe: percepciones globales y realidades locales* (pp. 191-220). Casa árabe –IEAM, España.
- Belghiti, M. (2005). Gestion de l'eau d'irrigation au Maroc. Séminaire de promotion du SEMIDE et sur l'utilisation des systèmes d'information géographique pour la gestion et la protection des ressources en eau, Rabat, April 27-28.
- Benhadi, A. (1976). La politique marocaine des barrages. *Annuaire de l'Afrique du Nord*, 14, 275-294.
- Bennani-Chraïbi, M. (1997). Le Maroc à l'épreuve du temps mondial. In Laïdi, Z. (Eds.), *Le temps mondial*, Bruxelles, Complexe, 105-141.
- Benouniche, M., Kuper, M., Hammani, A., & Boesveld, H. (2014). Making the user visible: Analysing irrigation practices and farmers' logic to explain actual drip irrigation performance. *Irrigation Science*, 32(6), 405–420. doi:10.1007/s00271-014-0438-0
- Carey, G., Kay, A., & Nevile, A. (2017). Institutional Legacies and 'Sticky Layers': What Happens in Cases of Transformative Policy Change? *Administration and Society*, 51(3), 491 – 509.
- Capano, G. (2019). Reconceptualizing layering—From Mode of Institutional Change to Mode of Institutional Design: Types and Outputs, *Public Administration*, 97 (3), 590-604.
- Cox, Robert W. 1993 [Originally published in 1983]. Gramsci, Hegemony and International Relations: An Essay in Method. In Gramsci, *Historical Materialism, and International Relations*, ed. Stephen Gill, pp. 49-66.
- Daadaoui, M. (2017). Of Monarchs and Islamists: The 'Refo-lutionary' Promise of the PJD Islamists and Regime Control in Morocco. *Middle East Critique*, 26(4), 355-371.
- Del Vecchio, K. & Mayaux, P.L. (2017). Gouverner les eaux souterraines au Maroc: l'Etat en aménageur libéral. *Gouvernement et Action Publique*, 6(1), 107-30.
- De Smet, B., Koenraad B. (2017). "Resistance and Passive Revolution in Egypt and Morocco." In *States of Discipline: Authoritarian Neoliberalism and the Contested Reproduction of Capitalist Order*, edited by C. B. Tansel, 211–233. London: Rowman & Littlefield International.
- Dobbin, F., Simons, B. & Garrett, G. (2007). "The Global Diffusion of Public Policies: Social Construction, Coercion, Competition, or Learning?" *Annual Review of Sociology*, 33, 449-72.
- Easterly, W. (2006). *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. Penguin.

- El Alaoui M. (2004). Les pratiques participatives des associations d'usagers de l'eau dans la gestion de l'irrigation au Maroc : étude de cas en petite, moyenne et grande hydraulique. Actes du Séminaire Modernisation de l'Agriculture Irriguée, Projet INCO-WADEMED. Rabat, 19-23 avril.
- Erbaugh, J.T. & Nurrochmat, D.R. (2019). Paradigm Shift and Business as Usual Through Policy Layering: Forest-related Policy Change in Indonesia (1999-2016). *Land Use Policy*, 86, 236-46.
- FAO (1995). Water sector policy review and strategy formulation: A general framework. Rome: FAO Land and Water Bulletin, n°3.
- Faysse, N., El Amrani, M., Soufiane, E.A. & Lahlou, A. (2012). Formulation and Implementation of Policies to Deal with Groundwater Overuse in Morocco: Which Supporting Coalitions? *Irrigation And Drainage*, 61(1), 126-134.
- Gana, A. & El Amrani, M. (2006). Crise hydraulique au Maghreb : raréfaction de la ressource ou problèmes de gestion ? *Géocarrefour*, 81(1), 37-50.
- Hanieh, A. (2015). Shifting Priorities or Business as Usual? Continuity and Change in the post-2011 IMF and World Bank Engagement with Tunisia, Morocco and Egypt, *British Journal of Middle Eastern Studies*, 42, 1, 119-134, DOI: 10.1080/13530194.2015.973199
- HCP (2007). Agriculture 2030. Quels avenir pour le Maroc ? Étude dans le cadre de la réflexion prospective sur le Maroc 2030, Haut-Commissariat au Plan. Accessible online at : [https://www.hcp.ma/Agriculture-2030-quels-avenirs-pour-le-Maroc\\_a849.html](https://www.hcp.ma/Agriculture-2030-quels-avenirs-pour-le-Maroc_a849.html)
- Heinz, R. (2018). Participating in Groundwater Institutions: The Formal and Informal Interplay in Resource Access and Regulation: The Case of Chtouka, Southern Morocco. Master Thesis, Department of Geography, University of Bonn. May, 120 p.
- Hibou, B. (2009). Le réformisme, grand récit politique de la Tunisie contemporaine. *Revue d'histoire moderne & contemporaine*, 56(5), 14-39. <https://doi.org/10.3917/rhmc.565.0014>
- Holland, A. (2016). Forbearance. *American Political Science Review*, 110(2), 232-246. doi:10.1017/S0003055416000083
- Hörl, E. (2015). The Anthropocenic Illusion: Sustainability and the Fascination of Control. In C. Behnke, C. Kastelan, V. Knoll & U. Wuggenig (Eds.), *Art in the Periphery of the Center*, 352–367. Berlin: Sternberg. in exchange with Paul Feigelfeld and Cornelia Kastelan.
- Houdret, A. & Amichi, H. (2020). The Rural Social Contract in Morocco and Algeria: Reshaping through Economic Liberalisation and New Rules and Practices, *The Journal of North African Studies*, DOI: 10.1080/13629387.2020.1848560
- Htun, M. & Jensenius, F. (2020). Aspirational Laws as Weak Institutions: Legislation to Combat Violence against Women in Mexico. In D. M. Brinks, S. Levitsky & V. Murillo (Eds.). *The Politics of Institutional Weakness in Latin America*, Cambridge: Cambridge University Press.
- Jouve, A-M. (2006). Les trois temps de l'eau au Maroc : l'eau du ciel, l'eau d'Etat, l'eau privée. *Confluences Méditerranée*, 58(3), 51-61.
- Kadiri, Z., Tozy, M. & Mahdi, M. (2015). Jeunes fellahs en quête de leadership au Maroc. *Cahiers Agricultures* 24(6): 428-434.
- Lazarev, G. (2011). Politique de développement et gouvernamentalité au Maroc. *Critique économique*, 27, 43-62.
- Leveau, R. (1985). *Le fellah marocain: Défenseur du trône* (Vol. 12). Paris: Les Presses de Sciences Po.
- Mahoney, J. & Thelen, K. (2010). A Theory of Gradual Institutional Change. In J. Mahoney & K. Thelen (Eds.), *Explaining Institutional Change: Ambiguity, Agency, and Power* (pp. 1-37). New York: Cambridge University Press.
- Mann, M. (1984). The Autonomous Power of the State : Its Origins, Mechanisms and Results. *European Journal of Sociology*, 25(2), 185-213.

- May, P.J. & Jochim, A. (2013). Policy Regime Perspectives: Policies, Politics, and Governing. *The Policy Studies Journal*, 41 (3), 426-52.
- MEMEE (2014). Processus de Planification et Gestion des Eaux Souterraines au Maroc : Bilan & Perspectives. Skhirat Conference on Groundwater Management, March 26.
- Minoia, P. (2012). Mega-irrigation and Neoliberalism in Post-colonial States : Evolution and Crisis in the Gharb Plain, Morocco. *Geografiska Annaler : Series B, Human Geography*, 94 (3), 269-286.
- Mitchell, T. (2002). *Rule of Experts: Egypt, Techno-Politics, Modernity*. Berkeley: University of California Press
- Molle, F. (2008). Nirvana concepts, narratives and policy models: Insight from the water sector. *Water Alternatives* 1(1): 131-156.
- Molle, F, Tanouti, O. & Faysse, N. (2019). Chapter 3: Morocco. In F. Molle, L. Avellà-Reus & C. Sanchis-Ibor (Eds.), *Irrigation in the Mediterranean: Technologies, Institutions and Policies* (pp. 51-88), Springer Nature Switzerland.
- Orren, K. & Skowronek, S. (1998). Regimes and Regime Building in American Government: A Review of Literature on the 1940s. *Political Research Quarterly* 113 (3), 689–702.
- Popp, H. (1984). *La question hydraulique: effets socio-géographiques de la politique des barrages au Maroc*. Rabat : IAV Hassan II.
- Royaume du Maroc (2011). *Stratégie nationale de l'eau au Maroc [de 2009]*. 56p.
- Sater, J. (2016). *Morocco: Challenges to Tradition and Modernity*. London: Routledge.
- Schneider, A., Ingram, H., & deLeon, P. (2014). Social construction of target populations. In P. A. Sabatier & C. M. Weible (Eds.), *Theories of the policy process (Third Edition)*. Boulder: Westview Press.
- Streeck, W. (2009). *Institutions in History: Bringing Capitalism Back In*. MPIfG Discussion Paper, 09/8, Max Planck Institute for the Study of Societies, Cologne.
- Swearingen, W. D. (1987). *Moroccan mirages: Agrarian dreams and deceptions, 1912-1986*. Princeton: Princeton University Press.
- Thelen, K. (1999). Historical Institutionalism in Comparative Politics. *Annual Review of Political Science*, 2, 369-414.
- Tozy, M. (1999). *Monarchie et islam politique au Maroc*. Paris : Presses de Sciences Po.
- Van der Heijden, J. (2011). Institutional layering: A review of the use of the concept. *Politics*, 31 (1), 9-18.
- Venot, J.-P. (2017). From Obscurity to Prominence: How Drip Irrigation Conquered the World. In Venot J.-P.; Kuper, M. and Zwarteveen, M. (Eds). *Drip irrigation for agriculture: untold stories of efficiency, innovation and development*. Earthscan studies in water resource management, p. 16-37. London; New York: Routledge.
- Waterbury, J. (1970). *The Commander of the Faithful: the Moroccan political élite – a study in segmented politics*, New York, Columbia University Press.
- World Bank (1979). *Rapport sur le secteur agricole du Maroc; Problème du secteur et stratégie de la Banque* (unpublished document), Washington DC, décembre.
- World Bank (1995). *Royaume du Maroc : Document de Stratégie pour le secteur agricole*, Projet Rapport no 13421-MOR, May 15.
- World Bank (1997). *Royaume du Maroc : Stratégie de développement rural (1997-2010)*, No 16303 MOR, Rapport en trois volumes, Washington DC, March 28.
- Wyrzten, J. (2015). *Making Morocco: Colonial Intervention and the Politics of Identity*. Cornell University Press.
- Yashar, D. (2005). *Contesting Citizenship in Latin America: The Rise of Indigenous Movements and the Postliberal Challenge*. Cambridge, Cambridge University Press.

