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Privatised Hydropower Development in Turkey: A Case of Water Grabbing?

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ABSTRACT: This paper investigates how river privatisation in Turkey is deployed to expand renewable energy production and the implications this has for issues of ownership, rights to water and community life. Recent neoliberal reforms in Turkey have enabled the private sector to lease the rights to rivers for 49 years for the sole purpose of electricity production. The paper focuses on the re-scaling and reallocation of control over rivers through technical-legal redefinition of productive use, access and rights; and on discursive practices that marginalise rural communities and undermine alternative framings of nature. In order to actuate hydropower projects, what previously constituted legitimate water use and access is being contested and redefined. This process involves redefining what is legal (and therefore also what is illegal) such that state regulatory mechanisms favour private-sector interests by the easement of rights on property, government incentives and regulation of use rights to water. Through this lens, in some cases this particular privatisation in Turkey can be understood as an instance of 'water grabbing', where powerful actors gain control over use and increase their own benefits by diverting water and profit away from local communities living along these rivers despite their resistance. The analysis is based on empirical evidence derived from semi-structured interviews, newspapers, governmental and NGO reports, and observations during 3 months of fieldwork in Ankara and several villages in North and South Anatolia.

KEYWORDS: Hydropower, water use rights, neoliberalism, privatisation, Turkey

INTRODUCTION

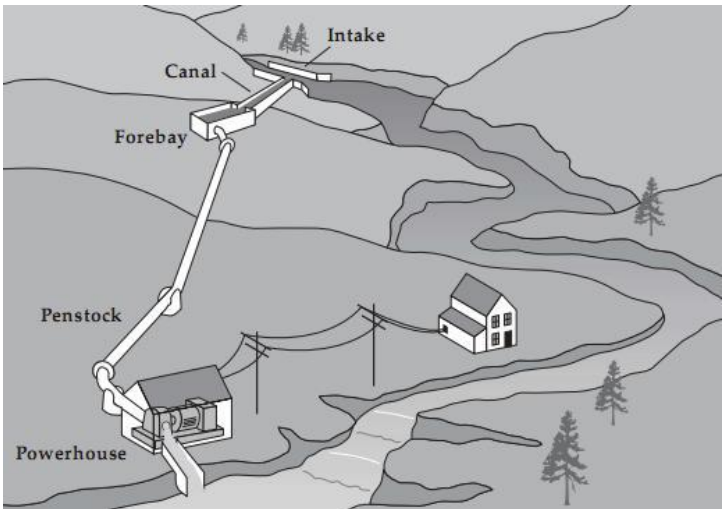
As a part of the Great March of Anatolia, hundreds of people from the five corners of Turkey walked from their villages towards Ankara to protect their water rights and keep their roots alive. After a week-long stand-off with riot police, they were prevented from entering the capital Ankara (Guardian, 2011). Consequently, many went back to their villages and continued their struggle against the private security guards, gendarme and company workers at the construction sites of hydropower. These struggles have emerged over the past decade as a response to private hydropower development. In 2001, an amendment to the Turkish Electricity Market Act allowed private companies to lease the rights of use[1] to rivers for the production of hydroelectricity. Disputes concerning the amendment revolve around the fact that the use rights for rivers are transferred to private companies for a half century (49 years). Such a change, critics argue, constitutes a loss in the public use of these waters, given that the rights of people and nature are dismissed with the private transfers. There are approximately 2000 licensed projects, or projects that are in the process of gaining licences. Some of these are run-of-river hydropower plants (see figure 1). Run-of-river hydropower[2] is intended to be more environmentally

[1] It is known as 'su kullanim haklari' in Turkish.

[2] According to the IPCC report (2011) on renewable energy resources, run-of-river hydropower has fewer impacts compared to the storage type hydropower. Nevertheless, it affects river's ecology by changing the direction of flow, decreasing the quality and quantity of water in parts where water is diverted. In some run-of-river plants of Turkey, ineffective environmental assessment and monitoring, poor project designs and their implementation have created serious environmental and social

friendly, but even better solutions generate their own problems. As it is argued in the IPCC report (2011), the extent to which run-of-river hydropower projects have adverse effects is highly site-specific (e.g. geographical, seasonal and demographical differences) and dependent on what resources are invested into mitigation of these impacts. In Turkey, some of these hydropower plants nevertheless lead to environmental destruction and social conflicts since water is diverted from its bed for kilometres without sufficient flow being released to the river bed. In these instances, the connection between downstream and upstream parts of the river is being blocked and this affects the river ecosystems, impeding fish migrations and ultimately the livelihoods of people living along rivers (Sekercioglu et al., 2011).

Figure 1. Run-of-river scheme (Source: National Renewable Energy Laboratory, 2001).



Use rights on water do not grant freehold, but rather resemble leasehold. Although limited, they are privately owned rights, and thus entail privatisation as defined by Swyngedouw (2005): "processes through which activities, resources, and the like, which had not been formally privately owned, managed or organised, are taken away from whoever or whatever owned them before – and transferred to a new property configuration that is based on some form of 'private' ownership or control". It is important to note the multiplicity and variety of property regimes, since a narrow definition of privatisation in the water sector suggests wholesale freehold ownership of water systems by the private sector. For instance, unlike land, water in the rural context is an exclusive commodity that is mobile, difficult to capture and can be reused. Water is also variable in time, space and quality, meaning that its privatisation is only possible in combination with a variety of methods, and various degrees of privatisation (see Haughton, 2002).

The government and business sector view this privatisation as a progressive solution to Turkey's energy deficit securing its geopolitical position as an energy corridor between Europe and Asia (Coskun, 2011). Turkey meets 75% of its energy demand from imported natural gas, petrol and coal and this accounts for a sizeable share of Turkey's current economic deficit. Accordingly, renewable energy is seen as a solution to Turkey's energy dependency on other countries (Baskaya et al., 2011). In line with EU ideals on renewable energy as an alternative to natural gas and fossil fuel, the Turkish government has initiated a reform package to promote electricity generation from renewable energy sources, and hydropower is considered a crucial source of energy production. In addition, the Turkish government

problems (for more information on negative environmental impacts of small hydropower plants in Turkey, see Baskaya et al., 2011).

also offers other reasons for privatising hydropower. One reason is that water which flows 'in vain' should instead be used to produce energy and decrease Turkey's dependence on external energy. Another reason given is that cheap energy is essential for the industrial sector thereby boosting Turkish competitiveness (Uzlu et al., 2011).

There are, however, opposition groups critical of current Turkish water policies.[3] These are composed of people ranging from local businessmen, lawyers, and doctors, to affected rural communities and villagers, to environmental groups and political parties. For instance, some lawyers question the arbitrary legal procedures in leasing hydroelectricity power plant projects and the ambiguities about who has duties and responsibilities in water management. Similarly, affected rural local communities and some environmental groups oppose the idea of privatisation because the water rights of local villagers and of the environment are neglected and transferred to private companies (Islar, 2012; RHDSN, 2011; TMMOB, 2011; Anadolu'yu vermeyecegiz, 2011). More than 10,000 km of Turkish river systems are being diverted into hydraulic structures used for electricity production as a result of these policies (RHDSN, 2011; Sekercioglu et al., 2011). Another argument voiced by critics of water privatisation is that if not designed properly, both the construction of the plants and the diversion of surface water into tunnels can have a decisive impact leading to forest destruction, loss of biodiversity and limited livelihood opportunities and even displacement of people (IPCC, 2011). Furthermore, the private control of use and access to rivers for 49 years raises issues of accountability, responsibility and inter-generational justice. Business secrecy and unclear rules of accountability for local and international companies make it difficult to keep track of the legitimate use of water (Mehta, 2006). It has been claimed, for instance, that water use rights agreements transfer risks and responsibilities to the private entities. In practice, however, the lack of competent monitoring by the state enables the private sector to implement environmentally and socially destructive projects.

Despite the controversies, the Turkish government's goal to "utilise all domestic renewable energy resources by 2023, which is the 100th anniversary of the republic", is galvanising this rush to reallocate water and land for the construction of hydropower plants (Ministry of Energy and Natural Resources strategic plan 2010; Islar, 2012). I argue that this rush to reallocate – through the state's regulatory mechanisms favouring private sector interests, the easement of rights on property and the allowance of environmentally destructive projects – can be considered 'water grabbing'. To clarify, the examples given in the paper are from initial stages of hydropower projects including licence and construction. A crucial point of the article is then that the effects and social conflicts surrounding water grabbing should not be reduced to the final stage of hydropower energy production because the licence and construction process in itself reconfigure water and land allocation and rights.

As a point of departure I consider and rephrase certain questions from the literature on land grabbing (in relation to the biofuel energy sector) and then apply these to the study of water grabbing for hydropower development in Turkey. I ask, for instance, whether the new rush to allocate water and land for hydropower fundamentally changes political, socio-economic and ecological relations around land and water. Moreover, I inquire into the actors and networks driving private investments in order to identify the centres of power. Furthermore, I examine the consequences for rural communities and the forms of resistance (Bernstein, 2010; Borras et al., 2011). The paper aims to find answers to these questions and broadly engage with debates deriving from the neo-liberal experience of Turkish politics, in relation to natural resource governance.

The paper starts with a brief discussion of the concept of water grabbing in relation to hydropower development. I then review Turkish hydropower development and discuss to what extent privatisation has changed the state's hydraulic mission. In this section, I also analyse the impact of neoliberalism on the role of the state and practices of water governance. Next I focus on global connections and financial aspects of privatised hydropower. Finally, I discuss the ecological and socio-economic implications of hydropower projects but only those that led to water use and land tenure conflicts in rural areas. The

[3] It is important to note that there is no homogenous opposition in terms of political stand, ideology, strategy, and tactics.

empirical evidence is derived from semi-structured interviews, newspapers, NGO reports and observations during 3 months of fieldwork in Ankara and various villages in North and South Anatolia.

WATER GRABBING

'Natural resource grabbing' is an old phenomenon that has since 2009 received renewed attention in debates over the 'global land grab'. Global land grab is a catch-all framework to explore large-scale (trans)national commercial land transactions for production, sale, and export of food and biofuels (Borras and Franco, 2010). Although there is a general recognition of the problem in the literature the responses vary. For instance, on the one hand, mainstream development circles like World Bank, FAO, UNCTAD perceive 'land grabbing' as a problem of investment to be solved by better land management providing opportunities for rural development. On the other hand, the international movement of poor peasant groups, Via Campesina, sees land grabbing as a threat to food sovereignty of, and food production by, small farmers in the developing world (ibid). Most studies on resource grabbing focus extensively on these debates on land reallocation, with far less attention given to the reallocation of water through hydropower development (for an exception see Bakker, 1999).

The case of privatised hydropower development in Turkey illustrates water grabbing in three ways: massive scale privatisation of use rights of water; diversion of water from river beds in rural communities who have long used the water; and redefinition of policies and laws for the justification of privatised hydropower development (for instance, in relation to water rights, protected areas and land rights). In this case, water grabbing involves not only the physical entity of water that is captured in the transmission channels of hydropower plants but also the customary rights to water of people and environment, which are not registered in any legal framework. The legal gaps allow the state and private actors to reallocate water for their own interests without consent of the people living along these rivers. This is an example of how the state uses its power through legal measures to legitimise the privatisation process. There are several new aspects that differ from previous hydropower developments in Turkey in terms of its scale and the predominant involvement of private market actors, inducing the emergence of a hydropower market which I discuss later in the paper as the 'neo-liberal mission'.

There are significant similarities between water grabbing for privatised hydropower and land grabbing for biofuel production. In Turkey, hydropower, similar to biofuel, is portrayed as the solution to an emerging energy crisis. Driving forces such as climate change and the promotion of renewable energy create an opportunity for states and private actors to portray run-of-river hydropower as a win-win or 'nirvana' strategy, contributing to clean development as well as solving the energy crisis (Molle, 2008). Given Turkey's relatively undeveloped hydropower potential, energy companies and financial creditors have begun to invest heavily in small-scale run-of-river hydropower installations. In a few years, 25 river basins have become sites for private hydropower development. Also, both hydropower and biofuels are portrayed as strategies to mitigate climate change and are claimed to provide carbon savings. Another similarity is found in justifications. Land acquisitions for biofuel production, heavily concentrated in the Global South, are commonly justified by the assumption that these lands are underutilised or 'idle' (Borras et al., 2010). Such a narrative draws on Locke's labour theory of property, where property rights are legitimate only for those who use the land or resources efficiently in a narrow economic sense. The same narrative is used to justify the reallocation of water and land for hydropower production. Narratives from governmental and private sector officials consider water as wasted if it flows without being utilised as a resource for irrigation, energy or other purposes.

Furthermore, in both land and water grabbing the interactions between state actors, private companies and the finance sector are reconfigured. According to Dauvergne and Neville (2010) there is a blurring of the public and private spheres of natural resource governance due to a "surge in alliances between multinational companies and local firms and governments". Such a coalition makes it "more difficult for states and local communities to derive public benefits from production" (Borras et al., 2010).

In these configurations, land and water rights have been negotiated and transformed into exclusive rights. Increasing alliances of private and public actors in the hydropower sector are illustrated below.

In the literature on 'empowerment', scholars of irrigation and water rights frame property rights as reflecting prevailing social relations of power (see Zwarteveen and Meinzen-Dick, 2001; Boelens and Hoogendam, 2002; Mollinga, 2003). This approach regards power and control as central elements in relation to rights to property. It adopts a broader rural development agenda by linking the ways in which farmers' can increase their ability to put their claims forward. Although this approach pays little attention to the multiple normative legal frameworks, it is useful to show the importance of power in various perceptions of legal and legitimate rights. Deriving from social power or from their position in the society, different groups may hold conflicting conceptions of legitimate rights and forms of regulation (Boelens et al., 2005). In this article the empowerment approach is instructive for clarifying the difference between legal and legitimate rights. In this perspective, power structures embedded in social relations influence both the contents and the distribution of water rights and create differences in access to, and control of, resources (Boelens et al., 2005). For instance, state law commonly determines the legal rights. It is not only state officials who use it as a powerful tool to justify allocating water from rivers for non-agricultural purposes but also powerful outsiders who use state law "to claim resources in ways that are not recognised as locally legitimate" (ibid).

Modernisation combined with neo-liberalism constitutes the powerful discourse guiding and legitimating the Turkish state's development policies and regulations (Islar, 2012). In the context of water rights and use in Turkey, civil code articles 751 and 756 specify that "surface and groundwater resources cannot be owned but are subject to user rights which are granted for beneficial use only, such as domestic and agricultural use, fishing, hydropower generation, industry, mining, transportation, medicinal and thermal uses" (Kibaroglu and Baskan, 2011). There are, however, no clear criteria to determine this beneficial use. Neutral terms like 'appropriate practices' or 'efficient use' in the legal documents often serve to veil the normative assumptions and non-communicated motivations of policy makers (Boelens et al., 2005). There is no system in Turkey for allocation of water rights to users and this creates obstacles in relation to management, responsibility and legal issues (Kibaroglu and Baskan, 2011). For instance, while spring water can be considered a private good if it is a part of a private property, surface and groundwater under private property is considered public, i.e. property of the state. Traditional or customary rights of water users and environment are not explicitly addressed in Turkish legislation.

A doctrine of neoliberalism argues that the absence of clear property rights is one of the major barriers to economic development (Harvey, 2005). This market-oriented neoliberal paradigm has been increasingly influential in the state's strategies and approaches to defining what constitutes beneficial use and distributing water use rights in recent developments. Nevertheless, in the context of Turkish privatised hydropower development, water use rights agreements prepared by the state water agency not only prioritise water use for hydropower production but also hold the private sector accountable for risks and responsibilities associated with the use of water resources. This raises several issues in terms of control, management and overseeing of future risks and the protection of public goods (Interview with lawyer Fevzi Ozluer, 2012). Moreover, there are cases where private energy companies put their licensed hydropower projects on sale (see Enerda, 2012). Although water use agreements strictly forbid the transfer of rights to another user, a company can transfer its rights by simply selling the shares of their subsidiary company to which the licence is granted. In other words, although the name of the company in which the licence is granted remains – the owner, and thus the operator of the plant, can effectively change. In short, then, introducing market mechanisms to the management of a crucial resource like water has serious implications for the issues of distribution, legitimacy, transparency and responsibility in Turkish water policies.

However, there remains persistence in the power of non-state customary law concerning water and environment that contribute to the rise of counter movements. Turkey's first water rights movements (e.g. Yuvarlakcay, Karadeniz Insurrection Platform, Turkish Water Assembly) have emerged to challenge

the massive privatisation drive concerning use rights of rivers for hydropower. For instance, Turkish Water Assembly declares in its water manifesto that "water belongs to nature and cannot be separated from its bed; a river exists as long as it flows and it should never be thought of as waste; a river is an entity not a resource; and further, rights of the environment, thus water rights, have to be considered as a part of human rights" (Water Manifesto, 2010). Although these struggles are diverse in nature, they are important to note since they shape the alternative discourses of 'legitimate' by emphasising the marginalised and the socially, politically and legally excluded (Islar, 2012). In the next section, I will discuss the hydropower development in relation to the neo-liberalisation of state to show the complexity of the motives characterising this type of 'grabbing'.

NEO-LIBERALISM AND THE TURKISH HYDROPOWER CONTEXT

> *Quite simply, the modern canal, unlike a river, is not an ecosystem. It is simplified, abstracted water, rigidly separated from the earth and firmly directed to raise food, fill pipes, and make money (Worster, 1985).*

Swyngedouw (2005) emphasises that "water has become one of the central testing grounds for the implementation of global and national neoliberal policies". In order to understand the shift in the role of the state it is necessary to distinguish neoliberalism from liberalism. Ferguson (2010) argues that the phase of liberalism meant that the state and market were distinct but related spheres. Accordingly, the liberal aim was to negotiate the right balance between the "state and market, public and private, the realm of the king and the proper domain of the merchant" (ibid). By contrast, neoliberalism provides governmental mechanisms in the private sphere to enable smooth relations with and within the state, and thus eventually blurs the distinction between private and public. Harvey (2005) also emphasises the changing role of the state and increasing collaborations between state and business actors in (re)setting regulatory frameworks and policy making. In the era of neo-liberalism "core functions of the state are either subcontracted out to private providers or run (as the saying has it) 'like a business'" (Ferguson, 2010).

According to Molle et al. (2008) there are three paradigms in water governance: the hydraulic mission, the neo-liberal mission and Integrated Water Resource Management.[4] Although the neoliberal mission has emerged to challenge the state hydraulic mission paradigm's traditional large-scale infrastructure-oriented, technocratic and bureaucratic approach, these two phases may coexist. The Turkish state's hydraulic mission goes back more than 50 years. Until the last decade, the hydraulic modernisation dreams[5] of Turkey centred on the multi-dam hydropower project, GAP (Southeast Anatolian project) with 22 dams and 17 hydroelectricity plants. As Carkoglu and Eder (2001) argue, the utilisation of two rivers, the Euphrates and Tigris, has been of special interest for Turkish state planners. Although this large-scale development has created tensions between Turkey and downstream countries like Syria and Iraq, Turkish politicians have always perceived of GAP as a symbol of Turkish national pride (ibid). The Turkish state embraced the role of a (large-scale) developer of water resources in the Middle East – and has established an efficient hydraulic bureaucracy, i.e. the main water agency, the DSI (State Hydraulic Affairs) (Molle et al., 2009). Before decentralisation[6] the DSI was in charge of domestic and industrial water supply, irrigation, groundwater and spring water. In the case of Turkey, the neoliberal transformation of the national energy sector and water management started in the 1980s as part of a structural adjustment programme (Baskan, 2011; Kibaroglu et al., 2009). For instance,

[4] IWRM is not going to be discussed in this paper.

[5] This term is used by Eric Swyngedouw (2006) in explaining Wittfogel's analysis on political power and the development of large-scale hydro structures at the national level (for detailed information see Wittfogel, 1957; Worster, 1985; Swyngedouw, 2006).

[6] Although the DSI had the policy of transferring duties to local administrations since the early 1960s, until 1993 the activity of transfer has been very slow and inefficient (Svendsen and Nott, 1999).

a series of reform packages were implemented in the electricity sector through Law No. 3096 (1984) and Electricity Market Law No. 4628 (2001), which established a competitive electricity market. As a result of these reforms, different mechanisms such as build-operate and transfer (BOT), build-own-operate (BOO) and transfer-of-operating-rights (TOOR) models were introduced, to allow the private sector to generate, transmit and distribute electricity (Baskan, 2011). The water sector was also opened up for the private sector, since these mechanisms allowed private actors to construct, operate and manage water infrastructure such as dams, water plants and irrigation channels. These models emerged as ways of ensuring public-private alliances. Such BOT contracts or concessions have enabled governments to implement new ownership regimes for resources such as water, where it is more difficult to establish fixed property rights than for land.

Water governance for hydropower has therefore moved beyond the traditional state hydraulic mission, where the state was the main actor in planning and financing these developments, and also acted as operator – to a neoliberal mission where state actors, like the DSI, are regulators of not only public but also private interests. The privatisation of small-scale hydropower can be considered as a part of the neoliberal mission in Turkish water governance, where water use rights are privatised by companies and the finance for, as well as the risks and responsibilities of, hydraulic infrastructure are transferred to market actors. However, the neoliberal mission coexists with the discourses of the state hydraulic mission, since state actors justify privatisation by affirming that it is their goal to utilise 100% of water resources by 2023, which is the 100-year anniversary of the Turkish Republic (Ministry of Energy and Natural Resources strategic plan, 2010).

In line with the neo-liberalisation of the economy, hydropower has become an emerging market regulated by the state. Two main state actors in this process are the Energy Market Regulatory Authority (EMRA) and the DSI. The role of the DSI has been transformed into a government body in charge of implementing the initial steps of privatisation, in accordance with the water use rights contracts (Kibaroglu et al., 2009). For instance, the DSI initially examines the feasibility studies of hydropower projects and signs a contract with the company. After the approval of related environmental impact assessment by the Ministry of Environment and Urbanization (MoEU, EMRA grants a licence to the company obliging it to take responsibility for financial, technical, geological, design and hydrological matters related to hydropower plants (EMRA, 2010; Scheumann et al., 2011). These increasing public-private engagements illustrate the shift in hydropower development towards a more neoliberal system. However, global linkages and networks driving private hydropower investments are crucial in shaping the hydropower market and state-market relations. This will be discussed in the next section.

GLOBAL CONNECTIONS: THE FINANCING OF THE HYDROPOWER PLANTS

Hydropower development is closely linked to national, regional and global development strategies that often constitute political and administrative power. Combining the goals for climate change mitigation and the growing need for energy, the Turkish government implemented the 4628 Electricity Market Law in 2001, to privatise the energy sector in order to establish a financially strong and competitive electricity market. In relation to hydroelectric energy, additional regulation was prepared in 2003 to state the procedures and principles for the licensing and signing of the water usage rights acts (Uzlu et al., 2011). With these developments, the private sector's interest in hydropower has increased tremendously. Moreover, the Turkish government prepared an incentive package exclusively for the financing of small-scale hydropower development projects (Kucukali and Baris, 2009). Also, the private-owned Industrial Development Bank of Turkey (TSKB in Turkish) began to provide loans for 'renewable energy projects', which included hydropower plants. However, the main contribution to the finance of hydropower projects came after Turkey signed the United Nations Framework Convention on Climate Change (UNFCC) in 2004 and ratified the Kyoto Protocol in 2009 – though without any strict reduction targets. According to Eberlein and Heeb (2011), Turkey's main strategy to fight climate change is to

engage the private sector, as demonstrated in the Cancun Climate Change Conference, where the Turkish government was one of the founding members of the World Bank Partnership for Market Readiness Programme (World Bank, 2010; Eberlein and Heeb, 2011).

In line with these developments, Turkey received the first-ever loan given by the Clean Technology Fund (CTF) – which is a low-interest loan programme under the World Bank designed to finance the transformation of middle-income and fast-growing developing countries to low-carbon economies (World Bank, 2011b). One of the CTF's objectives is to "help increase privately owned and operated energy production from indigenous renewable energy sources within the market-based framework of the Turkish Electricity Market Law, enhance energy efficiency, and thereby reduce greenhouse gas emissions" (World Bank, 2011b). As a part of this, the Turkish government agreed to sign a US$600 million loan programme (a combination of loans given by the CTF and the International Bank for Reconstruction and Development (IBRD) for the promotion of energy efficiency and renewable energy projects in Turkey (Uzlu et al., 2011; Kucukali and Baris, 2009). Furthermore, the Private Sector Renewable Energy and Energy Efficiency Project, signed between Turkey and the World Bank, has the objectives of developing underutilised resources such as solar, geothermal, biomass, wind and small-scale hydropower, in order to save about one million tons of greenhouse emissions per year – and accelerating other investments in renewable energy development (Eberlein and Heeb, 2011). The majority of the loans are used to finance hydropower projects because there is an existing market, while no loan has been granted to solar and biomass energy projects. In fact, the massive amount of funds, which have been promised to expand renewable energy use and sustainable energy production in Turkey seem to target mostly hydropower development. Besides these financial mechanisms, numerous grants have flowed from the European Investment Bank, the German Bank of Reconstruction (KfW) and the Islamic Development Bank (World Bank, 2011b). Apart from the banking sector, foreign renewable energy companies are also attracted to hydropower projects due to the low investment and operating costs in Turkey. Some of these investors include the Norwegian company, Statkraft, the Finnish company, Pöyry, and the German company, RWE. One of the DSI officials illustrated this by saying: "[w]e prefer foreign companies since they have more expertise and better technology in the area of renewable energy development" (Interview with DSI, Ankara 2010).

Nevertheless, the Turkish government has also introduced special incentives to attract local entrepreneurs. Under the law on the utilisation of renewable energy resources for the purpose of generating electrical energy (RES Law No. 5346 and amendment law No. 6094 in 2010) land acquisition is regulated, so that during the investment period an 85% deduction is made available. This applies for the rent, the right of access and the use of property "under the possession of the Forestry, Treasury or under the sovereignty of the State". Moreover, government also guarantees the purchase of electricity from private entities, with a price of 7.3 US$ per kilowatt-hour for wind and hydroelectric power for a duration of 10 years (Kolcuoglu, 2011).

As a result, many local companies from the manufacturing, steel, construction and automotive sectors have entered the hydropower market, due to the availability of loans from international donors and banks and government incentives, to participate in the voluntary carbon market (Interview with a private company official, Ankara 2011). Accordingly, TSKB has declared that it will buy voluntary carbon loans provided by renewable energy projects that are implemented in Turkey. An official from TSKB calls this new trend in the financial sector as 'sustainable banking' (TSKB, 2010). The hydroelectricity sector therefore represents a significant opportunity for Turkish business to profit from the carbon market (Harris and Islar, 2011). By situating itself in the global climate change community and as a conduit for financial donors, the Turkish government is a main actor in facilitating and regulating this process. This illustrates the coexistence of the two paradigms and the blurring of public and private spheres in Turkish water governance. On the one hand, a realpolitik view on energy as a key factor in geostrategic competition continues to shape the state hydraulic mission of Turkey (Kaygusuz and Arsel, 2005). On the other hand, the emerging coalitions between state and the World Bank, new investment relationships between European and Turkish companies and increasing emphasis on climate change

mitigation and hydropower development constitute the new phase; the neo-liberal mission in the Turkish water governance.

UNDERMINING WATER AND LAND RIGHTS

We don't own the river, we are simply part of it (a villageman, Yuvarlakcay 2010).

Power is mobilised in order to enable hydropower projects in various ways. Political, administrative and discursive power is operationalised by legal regulations and international agreements mentioned above. However, local communities living along these rivers claim that the transfer of water use rights to private entities threatens their livelihoods. In Solakli valley in the Black sea region, there was a semi-violent case where affected villagers and company workers struggled in the hydropower sites to claim their rights. Police and gendarme evacuated and even arrested villagers on the grounds of intrusion (Caykara Gazette, 2011). Many local community members show their concerns to this changing ownership patterns by saying that: "the state sold us for 49 years"; "we don't need energy, it is our duty to protect this river for the future of our children"; "this is utterly a theft, water belongs here" (Interviews in Yuvarlakcay, 2010 and Ikizdere, 2010, Hamsici, 2010).

Mehta (2006) argues that governments have become violators of rights by enforcing policies in favour of market actors, thus eroding local communities' rights. Although sometimes legally regulated, water and land expropriation represents an act of dispossession with negative distributional consequences, since the citizens' rights to water and land are redefined in the name of the public good. Thus, hydropower projects do not "only radically change earlier flows of water (and their uses) but also produce new uses, new structures of access, and new forms of water and (land) distribution" (Swyngedouw, 2006). Konak's (2011) detailed case study demonstrates how the Turkish executive body, the MoEU, has favoured global financial and national interests for hydropower development, over local environmental protection. Although the Turkish constitution does not explicitly recognise the rights to water, environment and community-based rights, there are implicit clauses. For instance, article 17 and 56 affirm that everyone has the right to live in a healthy and balanced environment. By approving EIA reports for environmentally destructive projects, Konak (ibid) argues, the MoEU violates these articles of the Turkish constitution. By using regulatory and control mechanisms, such as an EIA, the executive body only utilises the river's hydroelectric potential, neglecting the current and future uses of river by people and nature. One villager from Yuvarlakcay (Southwest Anatolia) stated: "[e]lectricity is not the issue here. The main problem is that they are taking our river, they cannot be the owners of our water" (Interview in 2010). The affected communities have no clear legal or institutional framework on which they can base their claims to water rights and secure their drinking, irrigation and domestic use of rivers. Local struggles in these cases emerge not only to protect their environment and livelihoods, but also to gain recognition to legitimise their uses of water and to make their voices heard in the public realm (Islar, 2012).

The conflicts are exacerbated by water grabbing, which is also linked with land acquisition. Thus, certain lands have to be cleared for the construction of hydropower plants, transportation roads, and electric grids. After the legal changes, private entities with licensed hydropower projects can request for expropriation of real properties – and the Energy Market Regulatory Authority effects expropriations if requests are appropriate, sometimes giving "urgent expropriation" decisions (Ozeke, 2006). Legal reform states that easement rights, user rights or leases may be established over the state real property in favour of private entities carrying out electricity generation and/or distribution activities. Lawyer Okumuşoğlu argues that this reform is a clear violation of existing law since the necessary conditions for 'urgency' are defined in the law (No. 2942) as homeland security or state of exception but not hydropower development. In other words, the urgency clause is only possible when there is a war or the declaration of state of exception, neither of which is the case when it comes to water and land expropriation in relation to hydropower development (Interview with lawyer Yakup

Okumusoglu, 2012). According to one NGO report (RHDSN, 2011), especially during urgent expropriations, the local landowners have no legal right to question the hydropower-related constructions in their own lands. Another example is from the 'urgent expropriation' decision for construction of the Kozdere hydro plant in Alakir valley (South Anatolia). It is financed by the World Bank through TSKB, and has given rise to conflicts between local communities and the company. As a part of the run-of-river hydropower project, a significant amount of water is to be diverted from its bed through transmission channels – and there are eight other hydropower plants planned on the same river. The cumulative impacts of these projects are also not addressed in the company's report to the World Bank. The company's report for the World Bank argued that the economic and social impacts of land acquisition will only affect 12 persons, the majority of whom, it was said, also have agricultural lands elsewhere (World Bank, 2011a). Although the projects have not started to divert water and produce energy yet, the processes of construction and enclosures of land and water have begun. Yet the Alakir river is the only water source for a hundred thousand people living around the river. There is an active mobilisation in the Alakir valley against this particular company due to the destruction caused by construction of projects and its neglect of local people's concerns in their reports about their loss in agriculture and livelihoods (Akdeniz Manset, 2011; Bianet, 2010; Eberlein and Heeb, 2011). Consequently, there is an increasing need to hold state, private sector and global actors accountable for the effects of their policies.

Social exclusion is manifested when social conflicts occur between those who see these projects as job opportunities, and those whose livelihoods are dependent upon the river, and thus oppose private control. These conflicts and the potential ensuing exclusion depend on the existing relations of wealth, land and power (Dauvergne and Neville, 2010). In the southwest of Anatolia, Yuvarlakcay, many women whose livelihoods are dependent on subsistence agriculture, take active part in the resistance movements after the large-scale loss of forest and water pollution caused by the initial construction of a hydropower plant. A 70-year-old village woman stated: "[w]e can live in the candle light but we can't live without water, water is already not enough for our animals and fields, as women of this village we will lay on the ground to stop the machines" (Interview with a villager, Yuvarlakcay 2010). In other words, socially differentiated implications come to light when business actors start to visit village café houses for consultation, negotiation and to offer new job opportunities. For instance, a young villager from the Black sea region, a recent graduate of an engineering department, does not understand why his neighbours and part of his family resist hydropower projects. He said that if he hadn't found a job in the hydropower construction, he would have had to migrate to a big city as his educational background made local job opportunities scarce (Interview, 2011). There are also cases where private companies have given money to local people in order to persuade those who are not supporting their projects, resulting in semi-violent domestic conflicts within families (Interview with a villager, Yuvarlakcay 2010). Private companies also provide some incentives to villagers, such as scholarships and the renovation of mosques in order to obtain the support of the village headman (RHDSN, 2011; see the Protocol between company and village headman in this report). However, these motivations often create social divisions and increase mistrust, not only between people and private companies, but also towards the village headmen, within families and between relatives. In short, multiple dimensions of power relations deriving from landownership, skilled labour, education, age, and gender, influence the degree of benefits gained from hydropower, as well as perceptions towards such developments.

Political and discursive power is manifested through conflicts between state and local struggles. Dryzek (2003) uses a matrix divided into passive/active and inclusive/exclusive dichotomies, to explain transformations in the state's approach to civil society. Following Dryzek's matrix, Cerit-Mazlum (2007) argues that the Turkish state's approach to civil society can be considered as 'passive exclusive', meaning that the state allows mobilisation, while at the same time not supporting and improving conditions for these organisations. Often national rhetoric emphasises the complementary role of environmental NGOs in education and awareness. By doing so, the state situates environmental NGOs outside of the political sphere (ibid). In other words, the state allows certain demands to be heard by

the public, while ignoring other ideas. She argues that environmental demands are often ignored – and cannot pass through this selective approach of the Turkish state. The state's reaction to local resistance by the affected groups shows similarities to its approach to environmental groups. The Turkish prime minister, Erdogan undermined people's efforts and demands by portraying them as a "bunch of environmentalists" or "people who are filling their free time" (NTVMSNBC, 2008). By doing that, he also framed the resistance as environmental rather than rights movements. This is important to show the discursive and political power involved to legitimise and enable government policies on hydropower. Nevertheless, villagers from different regions of Turkey have managed to mobilise against hydropower projects by sharing their common experiences. One activity that the people of Anatolia initiated is 'the Great March of Anatolia' – a 40-day walk from various villages towards the capital of the country, Ankara, to raise awareness and persuade the president "to keep the water, nature and their roots alive" (Anadolu'yu vermeyecegiz platform, 2011). However, when the demonstrators wanted to enter Ankara, 400 police officers blocked their route into the capital. As a response, they staged a sit-in protest, but were forced to disband when police prevented any services coming from outside, such as wood and mobile toilets (Atlas, 2011). After these protests, the Turkish state's implicit exclusionist approach to these movements was transformed to a more active exclusionist one. Apart from the collective march, in local struggles people have been questioned and arrested on the grounds of propagating terror organisations (Radikal Gazetesi, 2011). By linking security issues like terrorism with environmental groups by including affected communities' resistance, state actors explicitly try to dismiss and marginalise their demands.

UNDERMINING THE ECOLOGICAL IMPACTS

Using hydropower as a strategy to mitigate climate change is, though, not always in line with the goals of environmental conservation. Sekercioglu et al. (2011) argues that the extensive unmonitored dam and hydropower plant construction is the key conservation challenge of Turkey since many of these constructions have led to the degradation of the water quality, created barriers to native species movement and facilitated species invasions. Controversially, the recent amendment to the Renewable Energy Law No. 6094 in 2010 has extended the area of hydropower production by allowing for the construction of power plants in protected areas. This development is a prime example of 'accumulation by dispossession',[7] where common resources are enclosed and transformed into exclusive places. This also means that the ecological impacts of hydropower plants are extended to these protected areas. As it is stated in the law "permission shall be granted for the establishment of electrical energy production facilities based on Renewable Energy Resources in national parks, nature parks, nature monumental and nature preservation sites, preservation forests, wildlife promotion sites, and special environmental preservation sites provided that an affirmative opinion of the Ministry, or of the regional conservatory board in the case of natural conservation areas, is obtained" (RES, 2010).

Although small-scale hydropower systems are expected to have a relatively low environmental impact, there is considerable destruction of forest and loss of biodiversity due to the multiple plants, water transfers and the construction of electric grids (Komurcu and Akpinar, 2010). For instance, in the case of the Ikizdere valley in the Black sea region, 21 hydropower projects were licensed on one river, separated only by a distance of 100-200 metres (Interview with Ikizdere Association, 2010; Konak, 2011). In this case, these projects were still being licensed, although the environmental impact assessment (EIA) report neglected the cumulative impacts of all these facilities, as well as the needs of species and the local community (Konak, 2011). The MoEU is responsible for preparing the EIA reports

[7] Harvey (2005) has provided a clear account of the instruments of accumulation by dispossession under neo-liberalisation. The commodification and privatisation of land, the forceful eviction of peasant populations, and the conversion of various forms of property rights into exclusive private property rights, or the suppression of rights to the commons, are some of these mechanisms which lead to the redistribution of wealth (ibid.).

necessary for the approval of projects. According to the water use rights contracts, projects whose installed capacity is under 10MW do not need EIA-reports to be approved. However, as the Ikizdere valley shows, even small-scale projects may cumulatively lead to environmental destruction if constructed and operated irresponsibly. Also, in the case of the Yuvarlakcay river, the MoEU did not require an EIA-report in order to approve the project since its installed capacity was deemed under 10 MW (Governorship of Mugla, letter of court decision, 2009). Yet, hundreds of trees were felled in one night, leading to massive mobilisation and uprisings from the local community (Interview with Yuvarlakcay Protection Platform, 2010).

Furthermore, these problems seem to be exacerbated by the fact that there have also been discrepancies between the decisions given by the MoEU regarding EIAs, and independent reports prepared by civil society and universities. For instance, a report prepared jointly by the Nature Conservation Centre and the Middle East Technical University concerning the construction of a hydropower plant on Barhal river (Black sea region) found several problems. Firstly, significant impacts of these plants on the groundwater level, fauna and flora habitat and the quality of water had been underestimated in the EIA reports (Muluk et al., 2009). Due to water diversions, the connection between downstream and upstream parts of the river was blocked, with significant impact upon fish migration. Secondly, there have also been examples of ambiguous decisions made by the Ministry's EIA commission concerning how much water is necessary for sustaining the environment. According to the water use rights contracts, projects should leave 10% of the flow considered necessary for sustaining fish populations, biodiversity and water quality. However, such a standard level of a minimum in-stream (or, environmental) flow is problematic, since it neglects the diverse nature of rivers. According to the experts, 40-60% of water is needed for sustaining the ecosystems of rivers (Sekercioglu et al., 2011; TMMOB, 2011).

Moreover, there is a lack of monitoring of whether plant operators maintain the minimum environmental flow requirements, meaning that it is basically left under the companies' control. The official in the EIA commission agreed that there are weaknesses and some procedural problems in the process. She pointed out that they are trying to establish an online monitoring system where it will be possible to follow in their webpage the minimum flow levels in different parts of the rivers. However, as she also added, they cannot always track whether or not the plant owner turns off the flow meter (Interview with EIA department official, Ankara 2012). Scheumann et al. (2011) also argue that the EIA is not an instrument to assess the cumulative effects and impacts of multiple projects on a single river. Instead she suggests that Turkey align itself with the EU directive on Strategic Environmental Assessment (SEA). Accordingly, the SEA is considered as a better instrument to assess the additive, cumulative and synergistic effects of policies (ibid).

Rushing the feasibility, technical and environmental assessments of hydropower plants can lead to serious and potentially irreversible environmental problems. However, it is also important to note that not every project has the same level of destructive effects on ecology and livelihoods. Some companies promote environmentally friendly hydropower projects, as well as participatory approaches before the implementation of decisions. From their perspective, any local resistance means loss of money and time, and thus is not beneficial for their business. Statkraft explicitly stated that dialogue and consent are needed on Turkish hydropower construction (Turkish Daily News, 25/10/10). In many cases, the first time local communities heard about these projects was when they saw construction in their valley, as they had not been effectively included in any stage of the EIA process. Another official from a private company stated: "[n]ow there is resistance to all hydropower plants because some companies recklessly continued their environmentally destructive hydropower construction" (Interview, 2011).

CONCLUSION

This paper has argued that the recent privatised hydropower development in Turkey is an instance of 'water grabbing' and controversial in several ways. First, it represents an act of dispossession, by

changing the regimes of entitlements to the use and access to rivers. This connects to the paper's claim that Turkish water politics have been reconfigured along the lines of neoliberalism. By doing so, it generates a form of exclusion where legal frameworks regulate in a way that land and water under the property of state and rural communities are reallocated, despite leading to serious ecological and social impacts. The ambiguous EIA processes, renewable energy laws allowing construction on reserved and protected areas and urgent expropriation decisions are illustrations of how the legal rights are negotiated in a way that favours private interest. As a legitimate law-making body, the state produces a hegemonic understanding of rights through legality. In a neoliberal era, non-state actors are influential in determining government policies, and thus legal systems. Therefore, it is necessary to look at how rights are created, negotiated, contested and ignored at various levels in the decision-making processes. This will require a move from a legalistic exercise of creating laws and decrees, to a more rooted analysis of water rights, which include real-life challenges in implementing legal rights (Badenoch et al., 2011). In other words, a more inclusive approach to rights can mediate the interactions between people and environment, as well as between people who have different interests and share the same resource.

Second, new alliances between state and climate change community and the involvement of transnational companies imply "a more diffuse, opaque form of governance, with important political and technical consequences, namely a loss of transparency and accountability, and an incomplete assessment of the future economic returns and the environmental and social impacts of proposed projects" (Bakker, 1999). Nevertheless, profits derived from hydropower are transferred to the private entities. Rural communities have benefited from hydropower depending on the relations of social and material power. This has also shaped the perceptions to privatised hydropower, whether it is an opportunity or destruction.

Third, this article tries to show what it means to be dispossessed by describing the controversy from the perspective of rural communities, whose lives are dependent on rivers and their associated ecologies. Different understandings of water and various meanings attached to rivers are embedded in the discourses of resistance. Accordingly, in this case, hydropower projects signify that "the modern idea of water as objective, homogenous, ahistorical and 'devoid of cultural content' is complemented by its physical containment and isolation from people, and reinforced by modern techniques of management" (Linton, 2010). The resistance to hydropower emerged where this modern idea meets socio-nature, as local people consider themselves as part of the flow.

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