**Chapter 13**

# Ethiopia's 'Blue Oil'? Hydropower, Irrigation and Development in the Omo-Turkana Basin

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Published in: E.C. Gabbert, F. Gebresenbet, J.G. Galaty, and G. Schlee, eds. (2021) Lands of the Future: Anthropological perspectives on pastoralism, land deals and tropes of modernity in Eastern Africa. Oxford: Berghahn, pp. 292-308 [NB pagination differs in published version]

## Introduction

In debates about the politics of large dams in the twenty-first century, Ethiopia has secured itself a prominent place. Since the year 2000 multiple mega-dam projects have been launched, and the ideas that 'water is Ethiopia's oil' and that 'hydropower can end poverty' are frequently invoked by government representatives and water resources experts in Addis Ababa. These discourses, however, fly in the face of a large literature showing that mega-dams have massive, unaccounted costs (e.g. Ansar et al. 2014; Richter et al. 2010). Negative outcomes include loss of prime riverside farmland, collapse of fisheries, extirpation of endemic wildlife, and impoverishment and displacement of peoples reliant on the ecosystems that are transformed by dams (cf. Scudder 2005; Kirchherr and Charles 2016).

How is it then that large dams and poverty reduction remain so tightly connected in so many people's minds? One answer is a utilitarian one. Classically, utilitarians argue that the suffering of a minority is justified if it is instrumental to providing the greatest good for the greatest number of people. On these grounds, people who believe that dams generate wealth for the nation might not be concerned that they also impoverish certain groups, for instance populations downstream, so long as the net benefits outweigh the costs. Although this utilitarian calculus is not always stated explicitly, it is common in the Environmental and Social Impact Assessments (ESIAs) that are supposed to guide planners in the identification of worthy projects (see McCully 2001: 54ff.).

Official impact assessments, however, play a relatively small part in the drama of large dams. Prior to ESIAs, and informing their commissioning, are narratives about dams and development. In this chapter we review some of these narratives and their pragmatic implications. Metaphors such as 'blue oil', we demonstrate, illuminate some aspects of the issues but render other aspects invisible.[1]

The empirical material on which the chapter is based relate to hydro-agricultural development (i.e., hydropower and large-scale irrigation) in the Omo-Turkana basin, a region encompassing parts of southern Ethiopia and northern Kenya.[2] In this context, the most troublesome and least visible facts (those which planners have been most resistant to acknowledging) concern the physical hydrology of the Omo-Turkana basin, and the hydrosocial systems – the connections between hydrological rhythms and indigenous livelihood systems – that large dams and plantations serve to interrupt. After a brief review of the politics of land and water in Ethiopia, we appraise the strengths and weaknesses of the 'blue oil' narrative in relation to the Gilgel-Gibe III dam (referred to as Gibe III in the remainder of this chapter) on the Omo River, and the irrigated sugar cane estates that have been established downstream of the dam. This appraisal involves accounting for the fiscal costs of the dam and plantation schemes and the revenues they are expected to generate. It also requires consideration of the livelihood systems of people downstream, and the implications of these interventions for them.

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[1] This observation derives from Lakoff and Johnson's (1980) book, *Metaphors we live by*.

[2] We use the phrase 'hydro-agricultural development' to refer to the development of irrigated commercial farming schemes as well as hydropower dams, both being contingent upon the same resource, i.e., fresh water flowing through major rivers.

In the latter part of the chapter, we consider alternative narratives that critics have deployed in relation to the hydro-agricultural projects in the Omo-Turkana basin: framings that portray them as variously an ecological disaster, an abuse of human rights, and an instance of development-forced displacement. These alternative narratives represent the Gibe III dam and associated plantation schemes as part of an elaborate, costly and violent process of incorporating a peripheral region and population. Which set of narratives one endorses depends largely on whether one focuses on how the projects use water to produce commodities, or how, in doing so, they deprive certain people of food, water and homes.

**The Politics of Land and Water in Ethiopia**

In agrarian societies, including Ethiopia, land tenure and the exercise of power are closely intertwined. Over the course of the twentieth century, successive regimes were accompanied by changing modes of land ownership (Tafesse 2006; Dessalegn 1999). The framers of the constitution of the Federal Democratic Republic of Ethiopia wrote that 'ownership of land is vested in the state and the people' (FDRE 1995: Art. 40.3), but they also recognized the rights of 'nations, nationalities, and peoples' in the plural, establishing a political contract with the diverse groups that make up the Ethiopian polity. While the Ethiopian People's Revolutionary Democratic Front (EPRDF) has not changed the constitution since it assumed power in the early 1990s, a decisive shift in agricultural policy took place in the early 2000s when, alongside the previous policy of supporting small-holders, the government began to promote large-scale commercial farming as a means of modernizing the agricultural sector (cf. Dorosh and Rashid 2012; Dessalegn 2011, 2014). This initiative gained momentum in the wake of the so-called global 'land rush' that occurred after 2008, as investors sought to capitalize on the potential for commodity production in the global South (Hall 2011).

One of the most important assets that Ethiopia offered in the global marketplace for land and agriculture was its freshwater endowment, due to abundant rainfall in the temperate highland regions (Yacob and Imeru 2005; Matthews et al. 2013; Mehta et al. 2012).[3] Occasionally referred to as one of the 'water towers' of East Africa (UNEP 2010), the country possesses twelve primary river basins, which form four major drainage systems, namely the Nile Basin, Rift Valley, Shebelli-Juba and North-East Coast. A key feature of most river basins is extreme fluctuation in river flow caused by the seasonality of rainfall in the highlands.[4] The outward inclination of the highlands also creates steep river profiles – in the case of the Omo River, dropping from more than 2,500 metres in altitude to just a few hundred meters in the lowlands (Avery 2012). Estimates of national hydropower capacity range from 30,000 to 45,000 megawatts, ranking Ethiopia second on the continent after the Democratic Republic of Congo (Block and Goddard 2012; UNEP 2010).

This claim – that Ethiopia's rivers are convertible to a certain number of megawatts of electricity – is central to the 'blue oil' narrative. It is the hydrological equivalent of seeing land as simply a resource to be exploited, as opposed to a place or a home with its own history and significance (Turton 2011; Girke 2013). Large dams, as they are usually planned and built, are incompatible with the livelihood systems of the downstream river valleys,

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[3] Agricultural water use generally refers to water resources abstracted from groundwater and surface water for irrigation uses (blue water), but excludes green water resources such as precipitation onto farmland and soil moisture as part of crop water consumption (cf. Falkenmark and Rockström 2006).

[4] Mean annual rainfall on a countrywide basis is around 848 mm, with a peak precipitation amount of 2,000 mm in the southwestern lowlands, and fewer than 100 mm in the western Afar Triangle (FAO Aquastat 2005).

which in the Horn of Africa tend to be semi-arid regions, where river flooding provides water and nutrients that are vital for farming and herding (Kloos et al. 2010). This feature of the mega-dam model – the destruction that it visits on pre-existing systems of land use and farming in the lowlands – means that it is inevitably controversial as a development option. To the extent that they ignore this controversy, government narratives that represent the building of mega-dams as a national priority are based on a narrow interpretation of national identity, which privileges highlanders over lowlanders, and permanently settled agricultural populations over nomadic pastoralists or agro-pastoralists (cf. Schlee 2013). These dynamics are clearly illustrated in the case of the Gibe III dam in the Omo-Turkana basin.

**The Gibe III Dam and the End of the Annual Flooding of the Omo**

We use the term Omo-Turkana basin to refer to the Lake Turkana drainage basin (Butzer 1971; Avery 2010), a closed transboundary river basin comprising the lake (located almost entirely in Kenya) and its major tributary, the Omo River (located in Ethiopia).[5] The Gibe dam cascade on the Omo River comprises Gibe III (1,870 MW), together with Gibe IV (aka Koysha, 1,470 MW), currently under construction, and Gibe V (660 MW), currently in the planning stage.[6] The Gibe III dam, the centrepiece of this cascade, was officially inaugurated

[5] The term Omo River basin (or Omo-Gibe River basin), by contrast, refers to the catchment of the Omo River from its source in the Shewa highlands to its terminus in Lake Turkana. Lake Turkana was formerly referred to as Lake Rudolf.

[6] Gibe I and II are on the Gibe River, located further upstream and effectively a tributary of the Omo. Gibe IV and Gibe V would constitute two additional reservoirs and power stations envisaged in the lower catchment of the Omo River (Gibe III HEP 2015). For more information on the Gibe dam cascade, see Carr (2017).

in December 2016, ten years after the Italian engineering group Salini Impregilo had been awarded the contract by the Ethiopian Electric Power Corporation. Although the cost of the dam is hard to verify, the Ethiopian government reportedly allocated at least $572 million, and the Industrial and Commercial Bank of China provided $459 million (Verhoeven 2011).[7] The official cost of the major dam-building projects currently undertaken by Salini in Ethiopia (including the Grand Ethiopian Renaissance Dam, Gibe III, and Koysha) is more than €7.35 billion.[8]

In order to appraise the strengths and weaknesses of the 'blue oil' metaphor in the case of the Omo, we need to consider, in addition to the price tags attached to the dams, the ways Gibe III and associated projects have affected the lives of people in the region. We do so first by reviewing the immediate effects of the projects in terms of employment and infrastructure development, and second by examining the implications of the changes in hydrology brought about by the dam.

At its high point, the Gibe III project employed eight thousand people. While the dam itself is located in the middle Omo, new infrastructure was also installed downstream. The construction of bridges across the Omo established a permanent linkage between the eastern and western banks of the river in its lower catchment, and the expansion of roads and mobile phone networks provided unprecedented communication links between the lower Omo basin and the towns and cities of southern Ethiopia. With electric power generated by Gibe III

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[7] Several international banks (including the World Bank Group, European Investment Bank and African Development Bank) declined to fund the project (Carr 2017: chaps. 2, 10).

[8] This accounts for approximately 11 per cent of the total cost of all projects planned under the Growth and Transformation Plan (a five-year plan for national development) between 2010/11 and 2014/15.

transmitted across Ethiopia's borders, the project also established new transboundary links. Revenues from electricity export to Kenya were projected to reach $400 million by 2020; Sudan and Djibouti were also slated to receive electricity via transmission lines financed by the African Development Bank (African Development Fund 2012).

Hydrologically, the Gibe III dam created a novel division of the river basin: upstream of the reservoir, where the Omo and its major tributaries – the Gibe and Gojeb rivers – largely maintained their natural hydrological cycle, and downstream, where the power plants and water level of the reservoir determined the flow volume of the Omo River. The implications of this change in natural regime for the livelihoods of people downstream are far-reaching. By holding back waters in the reservoir, and releasing them continually to power turbines, the dam interrupts the prior pattern of annual flooding to which the natural and social systems of the lower Omo and Lake Turkana are adapted.

Considering the livelihood systems of one of the indigenous groups of the lower Omo helps to clarify the importance of the flood for the livelihoods of the region's peoples in general. The traditional livelihoods of the Mursi (Mun) rest on three pillars: (1) farming on land inundated by the annual rise of the river, sometimes referred to as 'flood recession agriculture' (a practice that provides highly predictable yields, including for the primary staple grains, sorghum and maize), (2) rain-fed farming on land that receives enough rain to grow crops (an unpredictable venture, sometimes providing valuable supplementary grain), and (3) cattle herding (a crucial source of dairy products, meat and blood) (Turton 1989; Carr 2012). As Turton (this volume) notes, 'each of these subsistence activities would be insufficient on its own, or even in combination with one of the other two, but the three together make possible a viable agro-pastoral economy.' Other groups of the region, who have less access to land suitable for rain-fed agriculture, depend even more on the flood – for example, the Kwegu, who rely on flood-retreat farming, fishing and small stock (as opposed

to cattle), and the Dassanech, who are unable to practice rain-fed farming due to lower rainfall in the vicinity of the Omo delta.

The relationship between the annual flood and the food systems of the lower Omo may be usefully considered as part of a hydrosocial system, i.e., a set of cultural and economic practices adapted to a particular ecological niche, in which hydrology is a crucial component (cf. Bakker 2012; Linton and Budds 2013). In a remarkable misreading of this system, planners and engineers working on Gibe III had initially cast the annual flooding of the Omo as posing a hazard to downstream communities, and proposed that by eliminating it, the dam would improve conditions (see Turton, this volume). In the face of criticism, Salini subsequently acknowledged the negative implications of the end of the annual flooding and claimed the regulation of the river by the dam could be combined with 'artificial floods' released from the reservoir that would preserve the possibility of flood recession agriculture (Salini 2016). But evidence for the success of such floods, or rather of the flood recession farming they supported, has not been provided by Salini, and testimonies from independent sources suggests that they have fallen far short of what would be required for people to continue to practice flood recession agriculture. Releases of water from the Gibe III reservoir in September 2016 (at a time when the river would ordinarily have been at its height) were not sufficient to inundate the river banks (L. Buffavand, pers. comm.); and in 2017 the rise of the river was again negligible (W. Hurd, pers. comm.). Indeed, engineers familiar with the scheme acknowledged that the headworks of the irrigation system installed downstream (to serve new plantations, discussed further below) would reportedly not withstand releases of water anywhere near the volume of the prior flooding. All of this casts doubt on the viability of artificial floods as a mitigation measure.

To summarize, although the construction of the Gibe III dam and associated infrastructure offered tangible benefits to project employees and to road users in the region,

and although the dam has succeeded in supplying electricity to urban centres, it has also jeopardized the food security of people downstream. At issue in terms of the socio-economic outcomes of the dam is not only the electricity generated, or the volume or tempo of the pre- and post-dam floods, but also the environmental and cultural adaptations to the river system that the various peoples of the lower Omo developed over historical time. Rather than taking these hydrosocial systems seriously, the rhetoric of Salini regarding artificial floods reads like a smokescreen, providing distraction and allowing the frame of 'large dam as positive development' to remain in place. As we go on to show, similar misreadings and simplifications underlay the project of expanding plantation agriculture in the Omo.

**'We Can Change This Grassland to Sugar'**

In January 2011, the global price for refined sugar had reached a twenty-year high, selling for US $ 0.30 per pound (USDA 2016). It was against this backdrop that the Ethiopian government placed a bet on the expansion of the sugar industry in its first Growth and Transformation Plan (GTP-I, 2010/11–2014/15). According to planners, increased national sugar-processing capacities would ease the challenge of rising domestic demand for processed sugar, and allow the export of surpluses to boost foreign currency earnings. Moreover, the cultivation and processing industry would provide employment opportunities to both unskilled labourers and the increasing numbers of university graduates.[9]

[9] In 2015 the urban unemployment rate in Ethiopia was 17 per cent of whom college graduates constituted 14 per cent of the unemployed (World Bank 2016: 2, 29). The Ethiopian Sugar Corporation (ESC) estimates that four workers would be employed per hectare in the cultivation and processing industry; indirect employment – e.g., in the service sectors – might raise this figure substantially (Kamski 2016a).

The Kuraz Sugar Development Project (KSDP) was the flagship site for sugar production under GTP I. With a projected area of 175,000 hectares, it would dwarf any other plantation in East Africa (Avery 2012). The rhetoric that surrounded the KSDP, like that concerning Gibe III, was hyperbolic. 'We can change this grassland to sugar, which will become money, just as we can change the people and the whole country', said an ESC official in 2014.[10] Alongside the KSDP, a number of domestic and foreign investors took advantage of favourable investment conditions created by the Ethiopian government by reportedly leasing more than 90,000 hectares of land in Salamago, Nyangatom, Dassanech and Hamar Woreda (districts) in South Omo Zone, with leasehold areas ranging from less than 500 hectares to as many as 10,000 hectares.[11] Large-scale agriculture in the semi-arid climate of the lower Omo is possible only with artificial irrigation, and the public and private investments alike depended on a system of canals channelling water through the newly established estates. Extracting enough water from the Omo River to irrigate 200,000–300,000 hectares would have serious implications for Kenya.

***Transboundary Implications***

Before the construction of the Gibe III dam, the annual flood of the Omo – the main source of fresh water for Lake Turkana – provided a pulse of water and nutrients on which the

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[10] Personal interview with ESC Project Management conducted by BK on the KSDP project site, July 2014.

[11] These numbers were provided to BK by the South Omo Zone Investment Directorate (March 2017). Systematic inventories of land leased to investors and the status of these schemes are not available at present. On the processes and conditions of large-scale land deals, see Keeley et al. (2014) and Dessalegn (2011).

reproductive cycles of the lake's fish depended (Hopson 1982). Because of high evaporation rates, the lake is brackish, but the fresh water of the Omo, which provides more than 90 per cent of the lake's inflow, makes it habitable for a wide variety of aquatic life (Kolding 1995). According to fish biologists, the end of the flood alone would reduce the fish population of the lake by two-thirds (Gownaris et al. 2016). These fish constitute a valuable food source for pastoralists in regions bordering the lake, and produce fish traded as far afield as the Democratic Republic of Congo.

Despite the mobilization of civil society organizations in Turkana (e.g., Friends of Lake Turkana; cf. Leakey 2009), and a few dissenting voices in the Kenyan parliament (cf. Hansard 2008, 2010), the Gibe III and Kuraz schemes have been neither openly challenged nor obstructed by the government of Kenya. Only in 2018, more than two years after the completion of Gibe III, was a joint commission proposed to study the environmental and social implications of the dam and irrigation projects for Kenyans.[12] The silence of the Kenyan government on the Omo-Turkana issues contrasts strikingly with the state of affairs regarding the Blue Nile – site of the other major dam project underway, the 6,000 MW Grand Ethiopian Renaissance Dam (GERD) – which has been the subject of numerous treaties and covenants involving the downstream states, Sudan and Egypt.[13] This is all the more remarkable given that, unlike GERD, the Gibe dams are accompanied by massive irrigation

[12] At the time of writing the Ethiopian Sugar Corporation was seeking a consultant to carry out the study on behalf of the commission (ESC official, pers. comm. to EGJS, Addis Ababa, 2018/2/19).

[13] On treaties and covenants that have sought to regulate use of the Nile by riparian states, see for example Cascão (2009) and Khennache et al. (2017).

schemes that will abstract large quantities of water from the basin, at the expense of downstream users.

**Counternarratives**

Although the Kenyan government has been slow to act, a diverse range of other international actors is active in the region, including engineers and contractors (notably Salini), financiers (multilateral development banks and the Chinese state), foreign investors (e.g., those investing in cotton production), Western governmental aid organizations, and environmental and human rights activists. We have touched already on the role of Salini and the financiers; here we focus on international activists, as it is they who have most efficiently propagated counternarratives emphasizing the interests of local peoples and ecosystems. These counternarratives centre on the concepts of ecological disaster, human rights abuses and development-forced displacement. Although not necessarily conflicting with one another, each highlights different aspects of the situation. We consider each of these counternarratives in turn.

The ecological disaster narrative is emblematized by the analogy between Lake Turkana and the Aral Sea in Central Asia. Once the world's fifth largest body of fresh water, the Aral Sea largely dried up in the 1980s when Soviet planners, with a focus on maximizing cotton production, neglected the implications of the massive abstractions of water that the irrigated plantations required. In relation to the Omo, this framing came to prominence in reports by the hydrologist Sean Avery (2010, 2012, 2013) and by the US-based NGO International Rivers (2013).[14] If the Ethiopian government's projections for the Kuraz

[14] The analogy between Lake Turkana and the Aral Sea is reviewed further by Stevenson (2018).

plantation scheme were realized, Avery (2013: 47) calculated, they would require the abstraction of up to 50 per cent of the Omo flow, which would cause a drop of approximately 20 metres in the level of Lake Turkana. The Aral Sea narrative was taken up by international media outlets such as the Guardian, and influenced UNESCO's (2018) decision to include the Lake Turkana National Parks in Kenya on its list of World Heritage Sites in danger.[15]

The second framing emphasized by advocacy groups in relation to the Omo focuses on human rights abuses. In 2011, the US-based NGO Human Rights Watch reported that 'local government and security forces had carried out arbitrary arrests and detentions, used physical violence, and seized or destroyed the property of indigenous communities' in the lower Omo (HRW 2012: 2). Mass arrests by the military forces of Ethiopia's southern region were also reported by the Oakland Institute (2013: 6). The strength of the human rights abuse narrative is that it produces litigable claims, which might provide leverage for the protection of community interests. The weakness of the approach is that it generally requires proof of specific criminal acts, by identifiable individuals or institutions, and a court that is willing to hear the case. In the Omo these components have been difficult to assemble. Attempts to hold the Ethiopian government accountable for the abuses suffered by local peoples – for example,

[15] For media reports, see for example Vidal (2014).

by the UK-based NGO Survival International, using the African Union as an arbiter – have so far failed to yield a judgment.[16]

The literature on Development-Forced Displacement and Resettlement (DFDR) offers another lens through which to view events. The DFDR narrative takes the phenomena reviewed above – including the end of annual flooding and the annexation of large territories for plantations – not so much as paradoxes to be explained, but as common features of actually existing development, which routinely lead to impoverishment for some people while at the same time generating wealth for others. As Turton (2015) has argued, the failures of development in the Omo, rather than being exceptional, reprise a catalogue of errors that have been made elsewhere since at least the twentieth century (cf. Cernea 2000; Mitchell 2002; Oliver-Smith 2015). Indeed, their recurrence suggests that they might be better understood not as errors but as deliberate sacrifices.

Although the narratives of ecological disaster, human rights abuse and DFDR have been summarily dismissed by the Ethiopian government, the chorus of criticism from international activists and scholars has not gone unnoticed by Ethiopia's aid partners in Europe and North America. One sign of this was the initiative of the Donor Assistance Group

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[16] Survival International submitted its petitions to the African Commission on Human and Peoples' Rights, an African Union body tasked with upholding the African Charter of 1986. The ACHPR passed judgment in 2009 against the government of Kenya for the eviction of the Endorois people from a game reserve in the Rift Valley in the 1970s (ACHPR 2009). Although the judgment is yet to be enforced, the Endorois case constitutes a legal precedent that might be leveraged on behalf of residents of the Omo-Turkana basin. On the AUC's involvement in the lower Omo, see United Nations Human Rights Council Periodic Review for Ethiopia April/May 2014 (UN-HRC 2014; cf. AUC-2013: Item 27).

(DAG) – a consortium including the World Bank, USAID and the European Union – to carry out a series of missions to the lower Omo, meeting with local government officials and residents, ostensibly to uncover the facts of the matter.[17] Rather than clarifying the situation, however, the mission reports themselves led to further controversy. In 2012 a translator employed by one of the DAG missions independently published the transcripts from conversations that had taken place between DAG staff and members of a Mursi community during a visit to the lower Omo. Allegations of beatings and rapes carried out by government soldiers had been omitted from the official report, suggesting that the DAG preferred to ignore these claims rather than to risk offending the Ethiopian government (Oakland Institute 2013). The hazards associated with the Gibe III dam and Kuraz had forced the aid community into a precarious 'balancing act' – criticizing enough to placate domestic constituencies, but not so much as to jeopardize their relationship with the Ethiopian government (Turton 2014).

**Denouement**

As the first decade of hydro-agricultural projects in the Omo draws to a close, the weakness of the 'blue oil' narrative is becoming ever more apparent. At the KSDP, delays in building the factories required for turning sugar cane into marketable products meant that, after at least four seasons of cultivation, the massive investments in sugar cane estates had failed to yield the anticipated economic results. From its high point in 2011, the global price for refined sugar fell by half to US $ 0.15 per pound in January 2018 (McConnell 2018: 29). To the astonishment of local people (both those employed by the sugar estates and those displaced to

[17] DAG supported the Ethiopian government to the tune of $4 billion in 2016. See http://dagethiopia.org/new/.

make way for the plantations), large parts of the first years' potential harvests of ripe sugar cane were either burned or left to rot in the fields (Kamski 2016b: 575).[18] Further, incomplete planning and capital shortages forced the ESC to downscale the projected cultivation area from 175,000 hectares to 100,000 hectares (Kamski 2016b: 574). Meanwhile, none of the private investors had successfully developed their entire leasehold areas. Investors claimed that, despite the low lease rates and generous fiscal incentives granted by the Ethiopian state, the high initial investment required for reclaiming land for large-scale irrigation had slowed progress.[19]

At the same time, the government of Ethiopia and its aid partners found themselves under fire from critics regarding the treatment of indigenous people in the context of the expanding plantations. The component of development planning in the Omo that has generated the most international controversy was the one designed most consciously with local populations in mind, namely the programme of 'villagization' (moving indigenous people into large, government-designed villages) (FDRE 2012).[20] Because the programme was implemented without meaningful consultation of locals regarding where they might resettle, or what kinds of livelihoods they might practice there, it bred resentment

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[18] As the quality of sugar cane deteriorates rapidly after cutting, transporting cane to other parts of the country for processing was unfeasible. While the Kuraz II factory, one of four processing plants under construction, started trial production in March 2017, the installed capacity remained too low to process the sugar cane thus far produced.

[19] Interviews with investors conducted by BK in South Omo in June 2014 and March 2017.

[20] Formally, villagization was implemented by the Regional and Zonal governments, whereas the construction of settlements and related infrastructure on the KSDP project site was the financial and administrative responsibility of the ESC (Kamski 2016a).

(Yidneckachew 2015; Tewolde and Fana 2014). And because, unlike the dam and plantation projects, villagization involved face-to-face engagement between officials and the people, it provided an opportunity for local resistance in a way that other interventions that affected them did not (Stevenson and Buffavand 2018). For advocacy groups, meanwhile, the fact that the villagization also implied eviction,[21] and was accompanied by the use of food aid as a bargaining chip, made it potentially litigable in a way that river basin engineering on its own was not.[22]

**Conclusion: Changing the Frames?**

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[21] The annexation of valuable riverside land for sugar estates deprived some communities among the Bodi and Kwegu (neighbours of the Mursi) of the opportunity to cultivate during the last floods, in 2014, while the clearing of 'bush' land earmarked for sugar also meant the loss of wild plants and game animals on which people relied as fallback options in previous droughts (Buffavand 2016; see also the chapters by LaTosky and Buffavand in this volume). (Bodi is the name used by most outsiders for the Mela and Chirim people, a territorial group of the Me'en who live on the eastern side of the Omo River [see Buffavand, this volume]. Mursi is the name used by most outsiders for the Mun [see LaTosky, this volume].)

[22] Litigation regarding villagization in Ethiopia's western province of Gambella provides a precedent here. In 2014, the High Court in London heard the case of an Ethiopian citizen known as Mr O., who alleged that British aid money was used for programmes that forced him from his home. This led the Department for International Development (DFID) to cancel its support of the Protection of Basic Services (PBS) fund, which lawyers argued was underwriting villagization (Rawlence 2016).

Whether the campaigns of advocacy groups, or grassroots resistance by locals, will succeed in changing the way development is pursued in the Omo-Turkana basin remains to be seen. What we have tried to do in this chapter is not to pick a winning horse, but to clarify the narratives that are commonly invoked to make sense of the situation, and to articulate the pragmatic possibilities and interpretive risks that each narrative implies.

As we have seen, the metaphor of 'blue oil' implies that fresh water, like petroleum, constitutes a resource that might be tapped to raise the living standards of all Ethiopians. And to some extent, the policy of hydro-agricultural development pursued by the EPRDF in the Omo-Turkana basin does correspond to a petrochemical model: treating the river's water as a resource to be parcelled out and sold to foreign corporations or governments, investors or commodity traders. Water, however, is different from petroleum and other precious minerals, in that, while it is necessary for the production of other commodities, it is only exceptionally treated as a commodity in its own right (Bakker 2011). Crucially, it is convertible into other commodities such as crops or electricity only after extensive operations that are politically charged. As we have argued here, the ways in which water is tied up in hydrosocial systems makes its exploitation highly contentious.

The most prominent alternative framing employed in reference to the current historical conjuncture in the Omo-Turkana basin, namely the Aral Sea disaster, also carries interpretive risks. By focusing attention on likely future impacts on the water level of Lake Turkana, the Aral Sea analogy distracts attention from the real damages that the Gibe III dam has already done to people who depended on the Omo's annual flood for their livelihoods. The analogy with the Aral Sea also foregrounds transboundary and geopolitical dimensions of the situation – the indemnity that Ethiopia owes to Kenya – which, while important in their own right, distract from the costs incurred by the people of the lower Omo.

If the dominant narratives are misleading, what better alternatives are available? For answers to this question we might do well to listen to the people whose lives are threatened by these projects. In an important contribution to the debate, Buffavand (2016) relates how the Mela (known by outsiders as Bodi) have enlisted cosmological knowledge to the cause of preserving their homeland, including beliefs in the sacredness of the land and the power of Divinity to punish those who treat the land wrongly. Analogous models from other parts of Ethiopia include the Borana Oromo notion of *fidnaa*, or flourishing in place (a literal analogue of the Amharic *lïmat*), which in its original sense connotes fertility and natural growth (Dahl and Gemetchu 1992).[23] The great value of these concepts is that they orient us to the importance of the ecological and social systems that development operates upon, and which are commonly discounted by planners. The risk of these narratives is that they fall on deaf ears: to unsympathetic audiences, the ways of thinking and perceiving that they represent may be construed simply as baffling or quaint.

The narrative of Development-Forced Displacement and Resettlement, although it does not necessarily correspond to indigenous views, avoids the most obvious blind spots of the other narratives reviewed in this chapter. In the Omo-Turkana case, a DFDR lens foregrounds the impacts on people and ecosystems on both sides of the international border, and invites comparison with the many other cases in the historical record in which development projects have brought about unjustified suffering for already marginalized people (Oliver-Smith 2015). This narrative is (or ought to be) intelligible to planners and

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[23] The reappropriation of *lïmat* under the Derg and EPRDF, to refer to industrial as opposed to natural growth, constitutes a semantic shift that is parallel to the redefinition of the English word 'development' in the twentieth century (Sachs 2010). See also Lakoff (2005) on 'freedom'.

bureaucrats, and renders visible important aspects of development planning – including the tendency of many development projects to leave the 'beneficiaries' worse off – that are too often ignored. Coupled with an appreciation of the importance of hydrosocial systems, it draws attention to outcomes that, with foresight, might be prevented and, with hindsight, demand to be redressed.

**Acknowledgements**

We acknowledge with gratitude the openness of people in Ethiopia, notably including employees of the government and the Ethiopian Sugar Corporation, in sharing their knowledge with us. For feedback that helped to improve this chapter, we owe thanks to Gordon Bennett, Lydia Khennache, Kay Gilliland Stevenson, and the editors – especially Echi Gabbert, John Galaty and Fana Gebresenbet. We have also benefitted from many conversations over the years with David Turton. The opinions we express in this chapter are, however, ours alone, and it is we who bear responsibility for any errors the chapter may contain.

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