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### Evolving property rights in water and their impact on water allocation and reallocation

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## Chapter 6

# Water property rights in investor-state contracts on extractive activities, affects water allocation and reallocation: An empirical assessment of 80 contracts in Africa and Asia

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## 6.1 Introduction

Chapter 4 has shown that states have taken back control over water by putting the water in the public domain and using permits as the main instrument to allocate water. Chapter 5 builds on this by showing that through the granting of water use permits states allocate 13 different ‘property’ elements, clustered in 5 quasi-property rights to actors. The literature review (see Chapter 3) has shown that water rights are also created (indirectly) through investor-state contracts. Yet, relatively little research has been done on how private water ‘property’ rights are embedded in investor-state contracts, especially in the Global South – the focus of this chapter.

In most countries, resources such as minerals, petroleum and water are generally state controlled. To exploit these resources, especially technology-poor developing countries often sign contracts with foreign companies-‘investor-state’ contracts. With globalization<sup>280</sup> and neoliberal capitalism,<sup>281</sup> investor-state contracts have increased tremendously. These contracts often include water, as it is essential in all industrial and agricultural undertakings (Gupta & Bosch, 2021). Water rights can be created (indirectly) through contracts (e.g. supply, investment and service contracts) between an (inter) national actor and a state (Cotula, 2011; Hodgson, 2006; Scott & Coustalin, 1995), as the “rights to the use of water can ... be transferred by the state via permit and subsequent state delivery contracts to end users” (see 3.3.3) (Saxer, 2010: 79).

These contracts are protected by a global network of about 3,000 BITs (see Figure 6.1). For foreign investors, BITs create a “sound, secure, and predictable investment climate” which protects their investments (Jandhyala et al., 2011: 1054). The literature assesses case studies and theories, however, there is little comparative analysis on property rights in water and the role of contracts in them, especially in the Global South. Hence, I ask: How have property rights in water evolved through investor-state contracts on minerals, petroleum and land in Africa and Asia, and what are the implications for water allocation and reallocation? This chapter adds to the gaps in knowledge, by analysing the *de facto* development of ‘property’ rights in water through investor-state contracts (to address knowledge gap 1), and how this affects water allocation and reallocation (to address knowledge gap 2).

<sup>280</sup> Globalization refers to the ‘significant increase in the movement of goods, services, capital, and money across national boundaries, resulting in a capitalism that is more globally integrated than before, including the creation of global production and distribution chains’ (Kotz, 2015: 35).

<sup>281</sup> The dominance of neoliberal capitalism postulates a ‘form in which market relations and forces predominate, [which] has promoted the increasing power of capital over labour’ (Kotz, 2015: 44).

**Figure 6.1** Global network of BITs in force.



Source: Author, based on data from UNCTAD, 'International Investment Agreements Navigator' (2022), <https://investmentpolicy.unctad.org/international-investment-agreements/iiia-mapping>

An investor-state contract is a contractual agreement by a state (or state entity) and a foreign investor (UNCTAD, 2004), which can be seen as a “tenure relationship whereby rights to use water resources are created on the basis of investment contracts” (Hodgson, 2016: x). Contracts have reciprocity: the exchange of goods, services, and values, in which there is a correlation between the obligations of the parties. The transfer or allocation of rights may be unilateral depending on the contract.

Applying a qualitative content analysis method to investor-state contracts (see 2.3.2.2), allowed me to identify 13 key property ‘elements’ that I clustered into six issues indicating quasi-property rights, including:

- (i) The right to use and operate, including the right to: (i) operate an economic activity; (ii) use water in the operation, through a water use permit, right or authorization; and (iii) use the land on which the operation takes place.
- (ii) The temporal dimension: (i) the period for which the contracts are valid, and (ii) the possibility to extend this period.
- (iii) Dispute settlement and litigation: (i) the amicable settlement within a relatively short period; (ii) the settlement of purely technical matters by an expert; and (iii) arbitration to settle the dispute under international arbitration rules.
- (iv) Compensation: in case of (i) expropriation; and (ii) indirect expropriation.
- (v) Stability: (i) the continuing support of the host state regarding the right to operate; and (ii) protection against changing laws and policies.
- (vi) Alienation: the possibility to transfer rights.

Sections 6.2 to 6.7 analyses what quasi-property rights are allocated by States through concluding mineral (see Appendix J), petroleum (see Appendix K), and land (see Appendix L) investor-state contracts. Section 6.8 draws the inferences. Below I first explain how I arrived at the various elements, before discussing the results of the analysis and how they affect water allocation and reallocation.

## **6.2 Right to use and operate**

The right operate determines the economic activity and the boundaries in respect to an exploitable resource. States grant foreign investors a ‘right to operate’, which enables them to perform a specified economic activity (e.g. mining, extracting, and farming) subject to specific conditions within a certain timeframe. Together with the right to operate, states can also grant companies a ‘right to use’, which for example includes the right to use land and the right to use water – the focus of section.

I consider the inclusion of water use rights in investor-state contracts as key in the development of quasi-property rights, because the right to use water is inextricably linked to the right to use land and the right to operate, when taking away the right to use water this infringes on the right to operate. This can in turn result in litigation (see 6.4), and claims for compensation (see 6.5). The clearer and stronger the individual rights are formulated, the more they add to the ‘strength’ and creation of quasi-property rights in water.

### **6.2.1 Right to operate**

The analysis of constitutions, mining and petroleum laws show that all studied states have put minerals and petroleum deposits in the public domain, subject to state allocation. An exploitation right is granted through a permit following a prescribed application process. The permit and the ensuing rights are subsequently included in investor-state contracts. Companies can apply for an exploration (reconnaissance, prospecting, or research) permit, which, if successful, confers priority in accessing a mining right for the exclusive exploitation of the discovered deposits. An exclusive exploration permit means the state authorizes the contractor to exclusively work in the designated area to discover minerals or petroleum, subject to specified rights, obligations, and timeframe.

#### **6.2.1.1 Mineral contracts**

In all 22 mineral contracts, investors are given the exclusive right to explore or exploit minerals. Depending on the contract, states either grant: (i) an exploitation permit or

license (18 out of 22 contracts) for the exclusive right<sup>282</sup> to exploit mineral deposits covered by the permit, or (ii) an exclusive exploration permit for the right of priority for obtaining an exploitation permit if economically exploitable deposits within the perimeter of the permit area are found (4 out of 22 contracts).<sup>283</sup> The national mining laws often specify the legal status of the granted mining right. For example, some contracts<sup>284</sup> state that an exploitation and mining permit constitutes a real property right that may be mortgaged.<sup>285</sup> Similarly, the mining laws of Congo, Côte d'Ivoire, and Gabon state that the exploitation permit constitutes an indivisible property right that may be mortgaged subject to the prior approval of the Minister controlling mines.<sup>286</sup> Gabon, Mali, Morocco and Senegal state that the property right is distinct from land ownership. Cameroon and Mauritania grant investors a real indivisible and non-modifiable right of limited duration.

### 6.2.1.2 *Petroleum contracts*

Similar to mineral contracts, petroleum contracts either confer on the contractor the sole and exclusive right<sup>287</sup> to carry out all petroleum operations in the exploration contract area for the duration of the contract (33 out of 40), or appoint the contractor as the exclusive entity to conduct petroleum operations in the contract area (7 out of 40). The petroleum laws of these states show that several states specify the legal status of the granted exclusive petroleum right. For example, the petroleum law of Burundi and Central African Republic state that the concession constitutes a property right of limited duration, distinct from land ownership. The petroleum laws of Cameroon, Côte d'Ivoire

<sup>282</sup> The following laws are cited because some contracts do not specify issues regarding exclusivity, and the laws do. The contracting parties can cite the law to strengthen their claim in case of a dispute. Loi No. 036-2015/CNT Portant Code Minier du Burkina Faso art 45; Loi No. 1-21 du 15 Octobre 2013 Portant Code Minier du Burundi art 59 and 75; Loi No. 2016-17 du 14 Décembre 2016 Portant Code Minier Cameroun art 4; Loi No. 007/2002 du 11 Juillet 2002 Portant Code Minier CDR art 64; Minerals and Mining Law 2000 (Liberia) art 5.2(c) and 6.3; Mines and Minerals Act 1981 (Malawi) art 43; Ordonnance No. 2019-022/ P-RM du 27 Septembre 2019 Portant Code Minier en République du Mali art 69; Ordonnance No. 93-16 Portant Loi Manière 1993 (Niger) art 32; The Mines and Minerals Act 2009 (Sierra Leone) art 114; Loi No. 2003-30 du 28 Avril 2003, Portant Promulgation du Code Minier (Tunisia) art 54; Chapter 213 Mines and Minerals Act 1995 (Zambia) art 23; Minerals Law of Mongolia 2006 art 21; Mining Act 1992 Papua New Guinea art 41; Philippine Mining Act of 1995 art 26.

<sup>283</sup> Afghanistan, Chad, Egypt, Togo.

<sup>284</sup> Burkina Faso, CAR, DRC, Guinea, Mali, Morocco, Senegal.

<sup>285</sup> The laws are cited because they specify the legal status of the granted mining right, which some contracts do not. The contracting parties can cite the mining laws to strengthen their claim in case of a dispute. See Loi No. 036-2015/CNT Portant Code Minier du Burkina Faso art 47; Dahir No. 1-15-76 of 14 Ramadan 1436 (1 July 2015) Promulgating Law No. 33-13 Relating to Mines (Morocco) arts 3 and 51.

<sup>286</sup> Loi No. 2014-138 du 24 Mars 2014 Portant Code Minier (Côte d'Ivoire) art 31; Loi No. 04-2005 Portant Code Minier art 29; Loi No. 037/2018 du 11 Juin 2019 Portant Réglementation du Secteur Minier en République Gabonaise art 91.

<sup>287</sup> Law No. 15/012 of 1 August 2015 on the General Regime for Hydrocarbons (DRC) art 59; Petroleum Act 1969 (Nigeria) art 11.

and Liberia state that granting an exploitation authorization does not confer ownership of the deposits but a right of limited duration which is not mortgageable and is distinct from land surface ownership.

### **6.2.1.3 Agricultural contracts**

As with mining rights, through selling or leasing land, states grant contractors a right to operate and a land right. However, these rights are less homogeneous as states lease the allocated land to contractors for exclusive use for palm oil production,<sup>288</sup> agriculture, livestock,<sup>289</sup> cotton,<sup>290</sup> and so on, and sometimes for production plants, such as ethanol plants, processing facilities or oil extraction mills.<sup>291</sup>

## **6.2.2 Land use rights**

A land right implies defining the area in coordinates and hectares. Some contracts elaborate on the land rights, which is an indication of how ‘strong’ the rights are. For a contractor to exercise the right to operate, a right to occupy and use the land surface is needed. The right to operate is included in the contract to enable the contractor to carry out the operation on the land.

### **6.2.2.1 Mineral contracts**

Mineral contracts grant the contractor a ‘basic’ and implicit land right, by allowing the contractor to operate in a specified area. Most studied contracts (19 out of 22) elaborate on the rights in relation to the land: the right to undertake specified mining activities,<sup>292</sup> or to operate and to have undisputed use of the land.<sup>293</sup> In some contracts, the state guarantees to the investor the occupation and use of land necessary for exploiting the deposit(s) covered by the exploitation permit within the contract, inside and outside the perimeter.<sup>294</sup> A Cameroonian contract restricts the use to the land in the exploitation area, while a Malawian contract allows access to land reasonably required for mining.<sup>295</sup> Sometimes, land use is subject to state authorization as in the studied Philippines and Mongolian contracts.

Moreover, half the contracts (11 out of 22) provide for eviction and resettlement of the local population or rightful occupier if deemed necessary, subject to the payment of

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<sup>288</sup> Cameroon, Gabon, Sierra Leone.

<sup>289</sup> DRC, Mozambique.

<sup>290</sup> Malaysia, Mali.

<sup>291</sup> Philippines, Sierra Leone, Timor-Leste.

<sup>292</sup> Afghanistan, Ghana, Liberia.

<sup>293</sup> Mauritania.

<sup>294</sup> Burkina Faso, Burundi, Mali, Niger, Senegal.

<sup>295</sup> Malawi, Sierra Leone.



fair or reasonable compensation.<sup>296</sup> Some contracts state that at 'the investor's request, the state should resettle inhabitants whose presence could hinder the exploitation works,<sup>297</sup> other contracts state that the government can exercise its powers of eminent domain to acquire the land rights.<sup>298</sup> A land Malawian contract reads, '[i]n the event the proposed disturbance ... requires the resettlement of any owner or occupier to some alternative location, then the Company shall meet the reasonable costs of resettlement and any associated compensation. In the 11 contracts that do not have a provision on the eviction and resettlement of people, it is unclear what is permitted and what actually happens, requiring further research.

#### **6.2.2.2 Petroleum contracts**

As with mineral mining, petroleum contracts grant the contractor a 'basic' and implicit land right, by allowing the contractor to operate in a specified area. In most contracts (25 out of 40), the states allow the contractor to occupy the land necessary for the petroleum operations and connected activities. A Kenyan contract states that "[t]he Government may at the request of the Contractor, make available to the Contractor such land as the Contractor may reasonably require for the conduct of Petroleum Operations"; and a Senegalese contract states that "[s]ubject to the Minister's approval, which shall not be withheld without a reason, the Contractor shall have the right to construct at its own expense any and all installation(s) which may be required to be built in the area necessary for Petroleum Operations". According to a Liberian contract, when the contractor cannot reach an agreement with the landowners, the state must expropriate the land against compensation. An Ethiopian contract requires the contractor to negotiate a compensation settlement if executing the contract involves displacing people. In case residents refuse to resettle, the Minister can evict them and determine the payment of reasonable compensation.<sup>299</sup>

#### **6.2.2.3 Agricultural contracts**

The right to operate farmland is linked to a specified land on which the contractor can operate. The contract area ranges from less than 10,000<sup>300</sup> to 100,000 ha,<sup>301</sup> to even

<sup>296</sup> Afghanistan, Burkina Faso, Burundi, Cameroon, Guinea, Liberia, Mali, Mongolia, Papua New Guinea, Senegal, Sierra Leone.

<sup>297</sup> Burkina Faso, Mali, Senegal.

<sup>298</sup> Liberia.

<sup>299</sup> Côte d'Ivoire, Ethiopia.

<sup>300</sup> DRC: 193 ha; Mozambique: 1,000 ha; Malaysia: 3,880 ha; Madagascar: 6,558 ha; Cambodia: 8,959 ha.

<sup>301</sup> Ethiopia and Mali: 10,000 ha; Sierra Leone: 12,000 ha; Sudan: 12,504 ha; Ghana: 18,880; Philippines: 50,000 ha; Gabon: 67,154 ha; Cameroon: 73,086 ha.

beyond.<sup>302</sup> Moreover, most contracts<sup>303</sup> specify what the land should be used for, implying water use to produce palm oil,<sup>304</sup> forest resource exploitation,<sup>305</sup> cotton farming,<sup>306</sup> agricultural activities<sup>307</sup> and/or cattle industry.<sup>308</sup> Most contracts do not have provisions on the displacement of people. Only two contracts<sup>309</sup> address the resettlement of people. A Liberian contract states that an investor “may by Notice to Government request that certain settlements reallocated if ... such existing settlements and its inhabitants would impede Investor’s development of the Concession Area”.

### 6.2.3 Water use rights

States may entitle foreign investors to abstract a specified volume or percentage of water subject to specified conditions (e.g. time, obligation not to pollute, taking into account the rights of others). The studied contracts show that different language is used to denote this entitlement – water is included either as a right to use water or subject to state authorization, for instance via a water use permit or authorization. Moreover, one contract may grant multiple water use rights. The legal status of the water use entitlements would have to be confirmed by courts. Whether as a right in a contract, by law, under a permit, and/or to construct infrastructure, most studied contracts (mineral 16 out of 22; petroleum 24 out of 40, land 8 out of 10) contain a provision on water. In case a permit is required, most contracts required that the government support the contractor in application or even guarantees the permit (thus making the granting of the permit just a formality).

#### 6.2.3.1 Mineral contracts

##### Right to use water

In some mineral contracts, the contractor has the right to take and use water needed for the agreed activities in accordance with the regulations<sup>310</sup> and subject to the rights of third parties.<sup>311</sup> A Liberian contract grants the contractor the right to abstract water if it is reasonable in relation to its activities and does not affect the surrounding population or if the population is compensated by providing water from an alternative source.

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<sup>302</sup> Timor-Leste: 100,000 ha; CAR: 187,856 ha; Liberia: 220,000 ha; Congo: 470,000 ha; South Sudan: 600,000 ha – extendable to 1,000,000 ha.

<sup>303</sup> Except Madagascar.

<sup>304</sup> Cameroon, Congo, Sierra Leone, South Sudan.

<sup>305</sup> CAR, Ghana, Liberia, South Sudan.

<sup>306</sup> Ethiopia.

<sup>307</sup> DRC, Mali, Mozambique, South Sudan, Sudan, Cambodia, Malaysia, Philippines, Timor-Leste.

<sup>308</sup> Mozambique, Sudan.

<sup>309</sup> Cambodia, Liberia.

<sup>310</sup> Burundi.

<sup>311</sup> Philippines.

Two countries guarantee a contractor a water right: a Nigerian contract guarantees the contractor the use of groundwater reserves, within and outside the perimeter, and a Sierra Leonean contract allows the contractor to use the water from any natural water course, within or outside the mining area. A Mauritanian contract guarantees the contractor all rights to extract, convey and use sufficient quantities of water from sources discovered and developed. In Senegal, a contractor is authorized to use water, and in Mali, the contractor has a right (in accordance with legislation) to use unused or reserved waterfalls for mining works. A Mongolian contract states that “[t]he Investor is granted the right to access and use its self-discovered water resources for purposes connected with the project”. A Burkina Faso contract refers to the Mining Code, which states that land occupation allows the right to water from waterfalls, surface- and groundwater within the perimeter.<sup>312</sup>

### **Right to water subject to permit application**

Other contracts require mining contractors to acquire state authorization to exploit, or enable exploitation on its behalf, of water resources in the project area pursuant to a water usage agreement in compliance with the legislation.<sup>313</sup> According to a Guinean contract, the contractor must obtain approval from the competent authority for exploiting unused waterfalls that are not reserved for mining activities. Based on a Papua New Guinea contract, the state must grant the contractor water use permits allowing water extraction to enable mining. A Mongolian contract states that the state “shall ensure that a contract [30 years, extendable for 20 years] on water utilization is awarded upon request of the Investor in accordance with the Water Law, the Law on Fees for Use of Water and Mineral Water and other laws and regulations”. According to a Malawian contract, the contractor can take the necessary water subject to a permit from the relevant minister.

### **Right to use water from public water provision**

A Cameroonian contract allows the contractor to either negotiate drawing from the water facilities available in the relevant project area or negotiate to receive running water supplies through a contract with any entity entitled to distribute water. A Tunisian contract states that the licensing authority shall “facilitate to the Licensee, if it so requests, the subscription to temporary or permanent subscription policies to the public drinking or industrial water distribution networks, within the limit of its legitimate needs, and within the limit of the flows available to these networks, in accordance with the provisions of the

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<sup>312</sup> Loi No. 036-2015/CNT Portant Code Minier du Burkina Faso, art 124.

<sup>313</sup> e.g., Cameroon.

Water Code”. A Zambian contract states that the government “will procure the provision of municipal water infrastructure the areas in which the contractor will operate”.

### **Right to develop infrastructure**

A Sierra Leonean contract grants a company the right to construct and operate, within or outside the contract area, infrastructures or facilities needed for the mining operations, including for example water supply systems, subject to state approval. A Senegalese contract authorizes the contractor to carry out work required for the supply of water to works and facilities.

#### **6.2.3.2 Petroleum contracts**

##### **Right to use water**

Some petroleum contracts have provisions in place that state that contractors can use water for petroleum operations,<sup>314</sup> or have a right to use water,<sup>315</sup> subject to the provision that people, livestock watering places, homes and/or flora and fauna are not deprived from water and/or that water is adversely affected,<sup>316</sup> that existing irrigation or navigation is not disturbed<sup>317</sup> or efforts are taken to minimize adverse effects.<sup>318</sup>

##### **Right to use water subject to approval or permit application**

Some contracts state that the water use is subject to state approval or authorization.<sup>319</sup> In other contracts, water use is subject to obtaining a water use permit. For example, a Kenyan and Malawian contract state that the Minister or Ministry “shall facilitate on behalf of the Contractor any permit necessary to enable the Contractor to use the water in the Contract Area for the purpose of the Petroleum Operations”. This is subject to other water uses not unreasonably being deprived of their supply of water. Similarly, a contract in Jordan states that the government will assist in obtaining the permission to use water. According to contracts in Azerbaijan, Cameroon, and Nigeria, although not specifically mentioning water, the contractor shall acquire the authorization required for or in connection with the petroleum operations.

Other contracts describe the facilitating role of the state. For example, a Mozambican contract states that the government must authorize the contractor the right to use, drill for

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<sup>314</sup> Chad, Côte d’Ivoire, Georgia, Guinea, Iraq, Liberia, Tajikistan.

<sup>315</sup> Bangladesh, DRC, Equatorial Guinea, Georgia, Kazakhstan, Mozambique, Senegal, Somalia, Yemen.

<sup>316</sup> Chad, Côte d’Ivoire, DRC, Ethiopia, Georgia, Guinea, Iraq, Liberia, Senegal, Somalia, Tajikistan, Yemen.

<sup>317</sup> Côte d’Ivoire, Liberia.

<sup>318</sup> Georgia, Tajikistan.

<sup>319</sup> Bangladesh, Chad, Ethiopia, Iraq, Jordan, Kazakhstan, Kenya, Madagascar, Malawi, Mauritania, Mozambique, Somalia, Yemen.

and/or impound water and establish water supply systems, for the petroleum operations. A Tunisian contract shall give the contractor the facilities that cover the supply of water.

### **Right to construct water infrastructure**

A few contracts grant the right to construct water works needed for their activities.<sup>320</sup> For example, a Ugandan contract states that the government shall assist the contractor in obtaining the right to contract facilities related to the operations, which includes water well drilling. A Chadian contract allows contractors to make the necessary boreholes and water works and/or divert watercourses provided that the water supply to people, livestock, fauna, and flora is not adversely affected. Similarly, a Mauritanian contract grants the contractor the right to carry out works for the supply of water for petroleum operations, subject to legislation.

#### **6.2.3.3 Agriculture contracts**

About half of land contracts (8 out of 18) include water provisions. Four contracts allow the construction of water infrastructure: an Ethiopia contract grants a contractor a right to build infrastructure including dams, boreholes, and water reservoirs subject to government approval; a Liberian contract grants a similar right ‘free of charge’, subject to legislation and approval which shall not be unreasonably withheld, and the water use shall not deprive others (tribes, villages, towns, houses or animals) from the reasonable supply of water. A Cambodian contract states that the contractor needs a permit to construct a dam on canals.

Based on a Liberian contract, a lease of 220,000 ha of government land includes bodies of water, streams, creeks, and rivers on such land. A Cameroonian contract states that the government grants a contractor the right to exclusively take and use water as necessary for the activities, without obtaining authorization. In Sierra Leone, a contract guarantees no restriction on the volume of water abstracted.

The analysis shows that water rights are explicitly included in most mineral (16 out of 22) and petroleum (26 out of 40) contracts and half of the land (8 out of 18) contracts. States grant contractors (i) a right to use water, (ii) a water right subject to state authorization, (iii) a right of the use of water service provision, and/or (iv) a right to develop water infrastructure. Including water use rights in contracts may have implications, since the right to use water is inextricably linked to the right to use land and the right to operate, taking away the right to use water infringes on the right to operate. With contracts possibly falling under BITs (see 6.4), this can be seen as indirect expropriation of the right to operate, which can be subject to compensation claims (see

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<sup>320</sup> Chad, Equatorial Guinea, Jordan, Mauritania, Mozambique, Senegal, Sudan, Uganda.

6.5). This implies that in addition to a state's water law, water allocations are implicitly also governed by contracts and international law (Folake, 2020), as water rights are embedded in the current existing policy instruments. This undermines and by passes a state's water law and water allocation regime, which requires water use to be subject to permits.

### 6.3 Temporal dimension

I identified the temporal element as part of investor-state contracts as key in the development of quasi-property rights, because the period for which a contract is valid specifies for how long the investor can enjoy and benefit from the allocated rights that are specified in the contract, which may include water use rights (see 6.2.3). The longer the contract period, the more it resembles real property, and the more security it gives to the investor to be able to recoup a return on investment and make a profit.

Most minerals, petroleum and land investor-state contracts mention the duration of contract validity (mineral: 16 out of 22; petroleum: 37 out of 40; land: 16 out of 18). This provides security, as it guarantees the investor the right to operate for the specified years, thereby earning back the investment and ensuring profit.

Mineral exploitation contracts are granted for 14,<sup>321</sup> 20,<sup>322</sup> 25,<sup>323</sup> 30<sup>324</sup> and 40 years.<sup>325</sup> Some contracts do not specify the period. For example, a contract by the Democratic Republic of the Congo reads, the “[d]evelopment period shall be the one selected by the Joint Committee”. In Malawi, a contract states the period is valid for the life of the proposed mining operation. Similarly, petroleum exploitation permits are granted ranging for up to 20,<sup>326</sup> 25,<sup>327</sup> or 30 years.<sup>328</sup> A Cameroonian contract states that it remains in effect until the contract is terminated. In most states, contracts can be extended for a maximum of 5<sup>329</sup> and 10 years<sup>330</sup> or extended twice for 5<sup>331</sup> or 10<sup>332</sup> years each. Some

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<sup>321</sup> Ghana.

<sup>322</sup> Mauritania, Niger.

<sup>323</sup> Burkina Faso, Burundi, Cameroon, Guinea, Liberia, Philippines, Senegal, Sierra Leone, Zambia.

<sup>324</sup> Afghanistan, Mali, Mongolia.

<sup>325</sup> Papua New Guinea.

<sup>326</sup> Bangladesh, China, DRC, Egypt, India, Iraq, Mongolia, Timor-Leste, Yemen.

<sup>327</sup> Afghanistan, Azerbaijan, Chad, Côte d'Ivoire, Equatorial Guinea, Ethiopia, Georgia, Guinea, Jordan, Kazakhstan, Kenya, Liberia, Libya, Madagascar, Malawi, Mauritania, Senegal, Sierra Leone, Tajikistan, Uganda.

<sup>328</sup> Cambodia, Indonesia, Ghana, Mozambique, Tunisia.

<sup>329</sup> Azerbaijan, Bangladesh, Equatorial Guinea, Georgia, India, Iraq, Jordan, Madagascar, Malawi, Tajikistan, Uganda, Yemen.

<sup>330</sup> Afghanistan, Chad, China, Côte d'Ivoire, Egypt, Liberia, Mauritania, Senegal, Afghanistan.

<sup>331</sup> Mongolia.

<sup>332</sup> Guinea.

contracts allow extension but do not specify the period.<sup>333</sup> In other contracts, extension is subject to negotiation,<sup>334</sup> extension is granted if commercial production remains possible and economically feasible,<sup>335</sup> or when a specified production level has been achieved.<sup>336</sup>

Unlike mining contracts, land contracts have less homogeneous temporal aspects. In Cameroon, a contract is granted for 99 years, extended as the parties may agree or due to force majeure. In the Democratic Republic of the Congo, land contracts are for 25 years, extendable by 25 years, and in Gabon for 50 years, renewable for 49 years. A Sierra Leonean contract is granted for 48 years, with a 25-year extension possibility; a Liberian contract for 65 years, extendable by 33 years, and a Timor-Leste contract for 50 years, extendable by 50 years. In Mozambique, the contract is for 25 years, renewable by 10-year periods, and a Malian contract leases land for 30 years, renewable indefinitely for periods of 30 years. Some countries grant land for a specified term,<sup>337</sup> but do not specify the extension period.

Contracts are granted for long periods, including the possibility to extend the period. The contract period determines for how long the rights that are included in the contract are valid. However, it can pose challenges for the host states. For example, the length of a contract determines for how long states 'lose' control over the rights to water that are included in the contract. Once granted, these water rights cannot easily be reallocated. Thus, the longer the contract period, the longer certain rights are granted, and the more states are impaired in reallocating water. Moreover, states are reluctant to breach contracts because of the implications that may have (Guzman, 2005). Breaking a contract before it ends may result in compensation claims (see 6.5) (Aisbett et al., 2018), which can affect 'host state's reputation (Jensen, 2008) and future foreign direct investment (Allee & Peinhardt, 2011).

## 6.4 Dispute resolution mechanism

Dispute resolution and litigation allows investors to protect their rights and investment against state infringement, through for example suing the host state. I identified the right to dispute resolution and litigation as an important element of the protection and security an investor enjoys, and with water being inextricably linked to the right to operate, also

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<sup>333</sup> DRC, Kazakhstan. In a Somalian contract, the information is redacted from the contract as it constitutes sensitive business information.

<sup>334</sup> Sierra Leone. A Ghanaian contract states, the 'failure to enter any such further agreement shall give rise to arbitration'.

<sup>335</sup> Cambodia, Ethiopia, Liberia.

<sup>336</sup> Nigeria.

<sup>337</sup> An initial term of 49 years in South Sudan; Congo – 60 years; Ethiopia – 25 years; Central African Republic (CAR) – 30 years; Malaysia – 60 years; Cambodia – 70 years; Sudan – 50 years; and Madagascar – 30 years.

an element of quasi-property rights in water. For example, when a state takes back the water, this would infringe on the right to operate and imply an indirect expropriation of the right to operate and breach of a BIT, leading to litigation and compensation claims (see 6.5).

Contracts generally have a provision in place on dispute resolution, to solve a dispute, disagreement, controversy, claim or difference of whatsoever nature arising under, out of, in connection with, or relating (in any manner whatsoever) to the agreement. Investors are granted the right to dispute resolution, and the contracts specify the means that are available to them, including the: (i) amicable settlement of disputes within a specified timeframe, (ii) settlement of technical matters by an expert, and (iii) settlement of disputes through arbitration.

### 6.4.1 Mineral contracts

Most mineral contracts urge the contractors to settle the dispute amicably. Some countries specify that this should happen between 15 and 120 days.<sup>338</sup> Three states require mediation to be exhausted before going to arbitration.<sup>339</sup>

In all mining contracts, the disputes are finally resolved through arbitration, subject to specified rules, by one or three arbitrators selected by both parties. The arbitration decision is binding, final and without appeal. The contracts refer to the Arbitration Rules of the International Chamber of Commerce,<sup>340</sup> the Convention on the Settlement of Investment Disputes,<sup>341</sup> the Arbitration Rule of the United Nations Commission on International Trade Law,<sup>342</sup> the London Court of International Arbitration,<sup>343</sup> the Arbitration Rules of the Cairo Regional Centre for International Commercial Arbitration,<sup>344</sup> the Joint Court of Justice of Abidjan<sup>345</sup> and the Philippines Arbitration Act.<sup>346</sup> A few states explicitly waive any right or claim of (sovereign) immunity from jurisdiction made by an arbitral tribunal,<sup>347</sup> meaning a state cannot invoke its immunity

<sup>338</sup> 15 (Malawi), 30 (DRC, Liberia, Tunisia, Zambia), 45 (Afghanistan), 60 (DRC, Liberia, Tunisia, Zambia), 90 (Burkina Faso, Egypt, Niger, Senegal) and 120 (Guinea) days.

<sup>339</sup> Liberia, Malawi, Philippines.

<sup>340</sup> Cameroon, DRC, Guinea, Senegal.

<sup>341</sup> Afghanistan, Burkina Faso, Burundi, Malawi, Mali, Mauritania, Papua New Guinea, Zambia.

<sup>342</sup> Ghana, Liberia, Mongolia.

<sup>343</sup> Sierra Leone.

<sup>344</sup> Egypt.

<sup>345</sup> Niger.

<sup>346</sup> Philippines.

<sup>347</sup> Afghanistan, Cameroon, DRC, Guinea, Liberia, Malawi, Papua New Guinea, Sierra Leone, Zambia.



from jurisdiction to avoid arbitration.<sup>348</sup> This implies that in case of arbitration, a state can lose control over the water included in investor-state contracts.

Some states (8 out of 22) provide for technical dispute resolution,<sup>349</sup> for example, via an independent technical expert, chosen jointly by the parties, whose decision by expert opinion is binding, final and without appeal.

#### 6.4.2 Petroleum contracts

In most petroleum contracts, the parties agree to make a reasonable effort to solve disputes amicably. Failing such an amicable solution within specified days, the dispute can be submitted for formal settlement via an expertise procedure or arbitration.

Fifteen countries allow a ‘technical dispute’ to be submitted to an expertise procedure administered in accordance with the agreement or specified rules. This procedure includes appointing a sole qualified expert, or experts, jointly agreed, which is final and binding. Where a dispute persists, it has to be settled by arbitration.<sup>350</sup>

As with mining contracts, all petroleum contract-related disputes are finally and exclusively settled by arbitration, by three arbitrators appointed in accordance with the agreement or arbitration rules. Any party may submit such a dispute to arbitration by notice to the other parties. The tribunal’s award is final, irrevocable, binding, and enforceable in any court with appropriate jurisdiction. Some contracts follow the rules of the International Chamber of Commerce,<sup>351</sup> United Nations Commission on International Trade Law,<sup>352</sup> International Centre for Settlement of Investment Disputes,<sup>353</sup> Cairo Regional Centre for International Commercial Arbitration,<sup>354</sup> Chartered Institute of Arbitrators (Nigeria), the China International Economic and Trade Arbitration Commission,<sup>355</sup> the Arbitration and Conciliation Act, 1996,<sup>356</sup> or the London Court of International Arbitration.<sup>357</sup>

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<sup>348</sup> United Nations Convention on Jurisdictional Immunities of States and Their Property (adopted 2 December 2004, not yet in force) UN Doc A/RES/59/38 (2 December 2004) art 7.

<sup>349</sup> Burkina Faso, Cameroon, Malawi, Mali, Papua New Guinea, Senegal, Sierra Leone, Zambia.

<sup>350</sup> Bangladesh, Chad, Ghana, India, Mauritania, Sierra Leone, Tanzania.

<sup>351</sup> Chad, Congo, DRC, Equatorial Guinea, Côte d’Ivoire, Indonesia, Jordan, Liberia, Libya, Mauritania, Pakistan, Somalia, Tajikistan, Tanzania, Tunisia, Yemen.

<sup>352</sup> Azerbaijan, Bangladesh, Cambodia, Cameroon, China, Egypt, Ethiopia, Ghana, Kenya, Mongolia, Mozambique, Sierra Leone, Uganda.

<sup>353</sup> Afghanistan, Cameroon, Georgia, Guinea, Kazakhstan, Madagascar, Malawi, Pakistan, Senegal, Sierra Leone, Timor-Leste.

<sup>354</sup> Egypt.

<sup>355</sup> China

<sup>356</sup> India

<sup>357</sup> Iraq

### 6.4.3 Agriculture contracts

In eight agricultural contracts, if an amicable solution is not reached within the specified period, the dispute can be settled by a court or by arbitration. In these eight countries, such contract-related disputes are settled by binding arbitration and are subject to the rules of the International Centre for Settlement of Investment Disputes,<sup>358</sup> United Nations Commission on International Trade Law,<sup>359</sup> International Chamber of Commerce<sup>360</sup> or the LCIA-MIAC Arbitration Centre.<sup>361</sup> In four countries,<sup>362</sup> national courts may resolve disputes: for example, the Ethiopian Federal Court<sup>363</sup> or courts in Bangui.<sup>364</sup>

The analysis shows that in the majority of mineral (22 out of 22), petroleum (40 out of 40) and land contracts (8 out of 18), disputes are ultimately solved through international arbitration. This can be problematic for the host state. In case the host state is part of one of the approximately 3,000 BITs, the investor is protected by these treaties and the applicable arbitration rules. States that have signed BITs are bound by the provisions of these agreements which create a favourable investment climate for and protect foreign investors' rights. Protection under contracts is substantively different from protection under BITs. Although the dispute settlement mechanisms may lead to the same arbitral institutions and arbitration rules, the applicable law is not the same. Under a contract, both the state and the investor have rights and obligations, while under a BIT the investor has rights, and the state only has obligations (to protect the investment). States may be reluctant to start arbitration proceedings since: (i) the costs of arbitration and possible payment of compensation can be enormous, placing a heavy burden on a state's national treasury (Trakman, 2012), (ii) the arbitration decision takes place behind closed doors (Lester, 2015), is final, and no appeal is possible and thus not reviewable by a domestic court, and (iii) the award is directly enforceable against the host state under the New York Convention,<sup>365</sup> which is ratified by most countries in this analysis.<sup>366</sup> Arbitration further reduces the national court's mandate to a supervisory role. National courts are thus side-lined in the dispute settlement process (Sattar, 2010). Thus, *de facto*, the position

<sup>358</sup> Cameroon, Liberia.

<sup>359</sup> Congo.

<sup>360</sup> Gabon, Sierra Leone, South Sudan.

<sup>361</sup> Ghana.

<sup>362</sup> Cambodia, CAR, Ethiopia, Mali.

<sup>363</sup> Ethiopia.

<sup>364</sup> CAR.

<sup>365</sup> United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards (adopted 10 June 1958, entered into force 7 June 1959) 330 UNTS 3; see New York Arbitration Convention, 'In Brief' (2022) <<https://www.newyorkconvention.org/in+brief>>.

<sup>366</sup> New York Arbitration Convention, 'Contracting States: New York Convention' (2022) <<https://www.newyorkconvention.org/countries>>. Chad, Congo, Togo, Libya, Somalia, South Sudan, Timor-Leste, and Yemen have not ratified the Convention.

of the state as the custodian of the natural resources is impaired. This implies that the responsible authority for water access, allocation and reallocation can lose control over the water included in investor-state contracts.

## 6.5 Compensation

Contractors can claim the right to compensation from the host state in case of direct or indirect expropriation. Direct expropriation occurs when an investment is nationalized, expropriated by physical seizure of assets or formal transfer of title. Indirect expropriation refers to state interference in the investment or benefits that have a similar effect to nationalization or expropriation (OECD, 2004).

I identified the right to compensation as a key element of quasi-property rights in water because it protects the investor against state infringement. When a state takes back the water, this would infringe (indirect expropriation) on the right to operate, leading to litigation and compensation claims. This gives the investor a degree of assurance regarding the right to operate, away as states may be reluctant to take water back in case of the payment of compensation.

### 6.5.1 Mineral contracts

Most mineral contracts (14 out of 22) protect the investor against expropriation without compensation. Two contracts explicitly mention indirect expropriation.<sup>367</sup> Two other contracts, by Liberia and Niger, assure the investor that it has no intention to expropriate, while contracts involving Mauritania and Senegal state that they shall not expropriate or nationalize. Some contracts suggest that a state is allowed to expropriate, for example, for public necessity, interest, utility, or purpose, for reasons of national or general interest, where permitted by the appropriation law, or if circumstances or a particular situation require such measures.<sup>368</sup> In these cases, the state promises to pay fair and equitable compensation to the injured parties.

### 6.5.2 Petroleum contracts

Unlike mineral contracts, only four petroleum contracts mention expropriation, nationalization or other taking, stating that the capital, property, assets, rights, or interests of a contractor shall not be expropriated. The exceptions are if this is for public or national purposes or interest, only in accordance with the due process of law, on a non-discriminatory basis and subject to the payment of compensation.

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<sup>367</sup> Liberia, Niger.

<sup>368</sup> Afghanistan, Burkina Faso, Cameroon, Egypt, Guinea, Liberia, Mali, Mauritania, Mongolia, Senegal, Zambia.

### 6.5.3 Agriculture contracts

Six land contracts have provisions on (in)direct expropriation. Four contracts state that expropriation in the public interest is subject to compensation<sup>369</sup> or that the government shall not expropriate or nationalize, except upon payment of compensation.<sup>370</sup> Regarding indirect expropriation, in the event that the Cameroonian government undertakes activities that adversely impact the (future) production of the contractor, the investor is to be compensated for the devaluation of their investment. In Madagascar, a breach of contract allows the investor to claim compensation for damage.

Of the 80 contracts, 24 have a provision in place on expropriation, which can be problematic, as it allows investors to claim compensation in case of expropriation (Marboe, 2018). Since there are approximately 3,000 BITs in place, contracts may possibly fall under one of the BITs. Moreover, about 97% of these BIT agreements mention indirect expropriation (UNCTAD, 2022), which gives more ground for possible claims. For example, if a host state interferes with the water use impairing the right to operate, foreign investors may claim a breach of a BIT (Chaisse & Polo, 2015). This may limit the state in governing the water resources. There are multiple examples where host states have been found liable for breaching the BIT against a foreign investor in which compensation had to be paid (see 3.3.3).

## 6.6 Stability

The right to stability guarantees investors a stable investment climate regarding commercial operations, including protection against legislative change after the agreement was signed, and state support to contractors regarding contract implementation.

The right of stability protects the investor against for example a change of legislation that would adversely affect the (economic) interest of the investor, adding to the protection and security of the investment. The right of stability is an element of the development of property rights in water, as it also affects water. For example, investors are protected against changes in water policy or water law that would affect their water use right, and therefore also their right to operate.

### 6.6.1 Change of legislation

#### 6.6.1.1 Mineral contracts

Most mining contracts (14 out of 22) have provisions that to some extent guarantee stability by protecting the investors against modifications in the applicable law, the adoption of new laws or provisions, conditions, regulations and/or administrative action,

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<sup>369</sup> Gabon, Mali.

<sup>370</sup> Liberia, Sierra Leone.

which unfairly or adversely affect the interest, operations, economic or commercial position or rights of the investor.<sup>371</sup> In case the investor experiences an adverse impact, compensation can be claimed,<sup>372</sup> or the state must agree to amendments to the contract to maintain the economic or commercial position.<sup>373</sup> Some contracts even state that the change shall not be applicable to the investor.<sup>374</sup>

#### **6.6.1.2 Petroleum contracts**

Thirty petroleum contracts have a provision on stability that to some extent guarantees to the company stability regarding the legal regime. Most contracts guarantee to the contractor stability of the legal, economic, petroleum, fiscal, customs, financial and/or exchange control regime applicable to the contract and to the petroleum operations, by guaranteeing the maintenance of the general economic equilibrium for the contract's duration. Where a state modifies the relevant legal framework, or when there is a change in the interpretation by a judicial, arbitral, or administrative authority which significantly affects the general economic balance of the contract, the term of the contract may be renegotiated at the request of either of the parties to restore the balance (24 out of 40).<sup>375</sup>

#### **6.6.1.3 Agriculture contracts**

Four land contracts protect investors against a change of law, and provisions on restoring adverse impact. For example, a Cameroonian contract states that if any change of law impairs, conflicts with, or interferes with the implementation of the project, or limits, adversely affects the value of the production area, or the rights, indemnifications or protections granted under the contract, or imposes (directly or indirectly) any costs on the contractor, the government will compensate the contractor.

Most mining contracts (14 out of 22), petroleum contracts (28 out of 40), and land contracts (9 out of 18) have a stabilization clause in place protecting the investor against for example a change and adoption of laws, provisions, conditions, or regulations that would adversely affect the interest, operations, economic or commercial position or rights of the investor. This creates a more favourable investment climate, legitimate expectations for the foreign investors, and minimizes their risk, but it can cause problems for the host state. For example, it can limit a state in amending or modifying its legislation

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<sup>371</sup> Afghanistan, Cameroon, Ghana, Guinea, Liberia, Malawi, Mali, Mauritania, Mongolia, Niger, Papua New Guinea, Senegal, Sierra Leone, Zambia.

<sup>372</sup> Cameroon, Malawi, Senegal.

<sup>373</sup> Afghanistan, Ghana, Sierra Leone.

<sup>374</sup> Mali, Mauritania, Mongolia.

<sup>375</sup> Afghanistan, Azerbaijan, Cambodia, Chad, China, Congo, Côte d'Ivoire, DRC, Egypt, Equatorial Guinea, Ethiopia, Georgia, Ghana, Guinea, India, Iraq, Kenya, Liberia, Malawi, Mozambique, Pakistan, Senegal, Tajikistan, Uganda.

(the ‘freezing’ or ‘chilling’ effect) or can only do so if it restores the economic equilibrium – stabilizing the economic position of the investor (Frank, 2015). Moreover, it may hinder a state’s pursuit of sustainable development and the realization of human rights (Cotula, 2009). In case raising the environmental and social standards would affect the economic equilibrium, resulting in a breach of the stabilization clause, compensation can be claimed (Quak, 2018). This may result in the freezing of the “non-optimal balance between social, environmental and economic considerations” (Cotula, 2009: 70). When falling under the umbrella clauses of a BIT, not only is compensation more likely to be awarded, compensation is also likely to be higher (Maniruzzaman, 2007).

## 6.6.2 State support to investors

### 6.6.2.1 Mineral contracts

Sixteen contracts have provisions supporting contractors regarding contract implementation. For example, seven contracts specifically offer state facilitation in acquiring the necessary authorizations for mining operations.<sup>376</sup> A contract involving Niger requires the state to take all measures and grant all necessary authorizations for mining operations in accordance with the law. A Burkina Faso contract states that the government guarantees the investor the right to use all the rights arising from the exploitation permit during the contract’s validity. A Philippines contract commits the state to fully cooperate with the contractor in the exercise of its rights granted under the contract. In another contract, Mauritania guarantees the company stable conditions and advantages during the contract period.

### 6.6.2.2 Petroleum contracts

Twenty-eight petroleum contracts provide state support: 18 pertain to the state<sup>377</sup> (government, ministry, minister, state company or agency, president) taking reasonable steps in facilitating or assisting in, granting necessary permits, licenses, or authorizations for petroleum operations. Although there is no explicit reference to water, two contracts<sup>378</sup> explicitly ensure government support in securing water. Eleven other contracts have more general provisions on support, indicating that the state will take all reasonable measures in facilitating or assisting in the objectives or activities of the contractor.

### 6.6.2.3 Agriculture contracts

Half of the land contracts (9 out of 18) include state support provisions ranging from the government guaranteeing the investor the peaceful enjoyment and use of the land for

<sup>376</sup> Afghanistan, Burkina Faso, Burundi, Cameroon, DRC, Guinea, Niger.

<sup>377</sup> Cambodia, China, DRC, Ethiopia, Equatorial Guinea, Georgia, Guinea, Iraq, India, Jordan, Kenya, Liberia, Madagascar, Malawi, Mauritania, Pakistan, Tajikistan, Yemen.

<sup>378</sup> Jordan, Kenya.

the duration of the lease<sup>379</sup> to assisting in obtaining the necessary authorizations.<sup>380</sup> Two contracts<sup>381</sup> state that the government promises to facilitate, coordinate, or safeguard the investor's business operations, and support the development of the project by agreeing to the main incentives, exemptions and rights.

Most contracts explicitly state that countries must facilitate the investments of contractors including facilitating the relevant permits (which may include water permits). This may result in conflicting interests: for example, while the department mandated with the governance of water is responsible for sustainable water governance, ensuring access to water and granting water use permits, the departments mandated with managing the national treasury, and mineral, oil or land may focus only on revenue generation and economic growth, without considering the availability of water and ecosystems (Munnik, 2020b). Many developing countries depend financially on the large multinational investors, either sharing profits or receive royalties and/or taxes (Guj, 2018; UNCTAD, 2022). Economic gain tends to prevail over sustainable water governance for the benefit of the public (Pahl-Wostl et al., 2008).

## 6.7 Alienation

The right of alienation, as with property, allows the investor to transfer the rights it holds to another actor. The right to alienate includes the right to transfer assets or rights. When an investor decides to for example sell the operation, the right to use water is transferred as well. Thus, the right of alienation can be seen as an element of quasi-property right. Water that is included in investor-state contracts is not returned to the public domain and stays in the hands of the investor. The water right that is included in the contract holds value, land are mining operations without the right to use water are practically worthless.

Most mining and petroleum contracts (19 out of 22 and 40 out of 40, respectively) grant the investor the right to alienate. In some contracts, the contractor is given a mining license – the sole right to explore, develop and produce petroleum in the contract area and to exercise other rights granted by the agreement. The contractor is also granted the right to alienate (i.e., sell, assign, transfer, convey or otherwise dispose of all or any part of the rights, interests, and obligations under the agreement) subject to approval. In other contracts, the parties agree to establish a joint venture or operating company that is responsible for carrying out the exploitation works. The joint venture may be subject

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<sup>379</sup> Ethiopia, Gabon, Mali.

<sup>380</sup> Liberia, South Sudan, Timor-Leste.

<sup>381</sup> Cambodia, Cameroon.

to consent and/or assign its entire interest or an undivided proportionate share of its interest in the project assets or its rights and obligations under the contract.

More than half the land contracts (11 out of 18) grant investors the right to transfer (i.e., assign, mortgage, charge, pledge or otherwise encumber) any or all interests or rights and obligations subject to providing notice to the government or government consent. In some contracts, the transfer of land or land use rights (by transferring shares, setting up a new company or subletting the land) is subject to prior consent, and/or on the completed level of development as agreed in the contract, for example, a percentage of land developed ranging from 30%,<sup>382</sup> 75%<sup>383</sup> to 100%.<sup>384</sup> A contract by Congo allows the investor to partially subcontract the land subject to state approval, while a South Sudan contract grants the right to sublease any part of the land. A Gabonese contract states that the long leases constitute a real right for the lessee which is transferable and mortgageable.

Most mining, petroleum, and land contracts (19 out of 22, 40 out of 40, and 11 out of 18, respectively) have a provision in place on the right to alienate. This allows the contractor to transfer any part of the rights, interests, and obligations under the agreement before the contract period ends. For the contract period, the government no longer holds the granted rights and loses control over these rights. Since these rights can be alienated, the only way to get the rights back is to break up the contract, which is subject to compensation. Regarding water, this implies that when water rights are included in the contracts, these rights are *de facto* no longer part of the public domain and are only returned once the contract ends. With investors holding the right to alienate, water is thus not returned to the public domain when changing hands. This may impair water reallocation (Cotula, 2011; Gupta & Pahl-Wostl, 2013).

## 6.8 Inferences for water reallocation

This chapter assessed the development of quasi-property rights through 80 publicly available investor-state contracts (to address knowledge gap 1) in Africa and Asia, and how it affects water allocation and reallocation (to address knowledge gap 2). The analysis of these contracts is just the tip of the iceberg; the contracts that are not publicly available may have even more restrictive clauses.

The analysis shows that states through the granting of contracts allocate quasi-property rights, which may impair water allocation and reallocation (see Table 6.1). The reasons for this are highlighted below.

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<sup>382</sup> Sudan.

<sup>383</sup> Ethiopia.

<sup>384</sup> Mali.



First, water rights are explicitly included in most mineral (14 out of 22) and petroleum (26 out of 40) contracts, and half of the land (8 out of 18) contracts. They grant the contractor: (i) a right to use water, (ii) a water right subject to state authorization, (iii) a right of the use of water service provision, and/or (iv) the right to develop water infrastructure. The right to use water or develop water infrastructure undermines and bypasses a state's water law, which requires water use to be subject to permits (see Chapter 5). Even if a water use right is granted based on a permit, by being included in an investor-state contract, it is possible that the rules of the contract override the water law's provisions or require so much compensation that states cannot really withdraw such permits easily. This affects the ability of poorer countries to reallocate water based on new and changing circumstances (see 1.2.1 and 1.5.2). The right to develop infrastructure may result in exclusive claims to (stored) water.

Second, the right to water is inextricably linked to the right to operate, and the right to land – bound to each other by the contract and protected by a global network of BITs. No operation can take place without water. When a water right is taken away, the right to operate is directly or indirectly encroached on.

Third, contracts are granted for long periods, including the possibility to extend the period. Once granted, the rights that are included in a contract cannot easily be reallocated. The longer the contract period, the longer water rights are allocated, and the longer states lose control over these water rights.

Fourth, most contracts allow the investor to transfer any part of the rights before the contract period ends. With investors holding the right to alienate, water rights are not returned to the public domain when investors transfer such rights to others. Only when the contract ends, or when the contract is breached, can water be reallocated. This impairs water reallocation.

Fifth, contracts are protected by BITs and arbitration rules, which can be problematic for the host state. Dispute settlement most often involves international arbitration, which reduces the national court's mandate, and they are thus side-lined in the dispute settlement process. This affects the control over the water that is included in investor-state contracts. International arbitration courts are not concerned so much with national water governance issues and will generally arbitrate only on issues directly or indirectly related to the contract.

Sixth, and related to the above, in case of expropriation of the right to operate, compensation can be claimed. Few contracts mention indirect expropriation, but since most (97%) BITs mention the possibility to claim compensation in case of indirect expropriation, this empowers investors to claim compensation for indirect expropriation. States that have signed BITs are bound by the provisions of these agreements which

**Table 6.1** Quasi-property rights in water through investor-state contracts, affecting water reallocation

Quasi-property rights	Element	Affecting water reallocation
Temporal	The period for which the contracts are valid	The longer the contract period, the longer water rights are allocated, and the longer states lose control over these water rights – this may affect water reallocation. Mineral contracts are granted up to 40 years, petroleum contracts up to 30 years, and land contracts up to 99 years.
	Extension of contract period	Contracts can be extended for several years. Same argument as above applies.
The right to use and operate	Right to operate an economic activity; Right to use water in the operation, through a water use permit, right or authorization; Right to use the land on which the operation takes place	The right to water is inextricably linked to the right to operate, and the right to land – bound to each other by the contract. Taking the water right away encroaches on the right to operate, this may imply an indirect expropriation of the right to operate and breach of a BIT, which may lead to compensation claims. States may be reluctant to take the water right away, affecting water reallocation.
Dispute settlement and litigation	Settlement of purely technical matters by an expert	Dispute settlement most often involves international arbitration, which reduces the national courts mandate to a supervisory role. This affects the control over the water that is included in investor-state contracts.
	Arbitration to settle the dispute under international arbitration rules	
Compensation	Compensation in case of expropriation	The possibility to claim compensation in case of indirect or direct expropriation when the water right is taken away. This may result in states losing control over the water included in investor-state contracts, as they are reluctant to take the water right away.
	Compensation in case of indirect expropriation	
Stability	Continuing support of the host state regarding the right to operate	Contracts may have a stabilization clause in place. This protects the investor from any adverse impact on the economic equilibrium of the investment, but it may restrict the ability of the state to amend or modify their legislation, including legislation that allows for water reallocation.
	Protection against changing laws and policies	
Alienation	Possibility to transfer rights	With investors holding the right to alienate, water rights are not returned to the public domain when changing hands. Only when the contract ends, or when the contract is breached, can water be reallocated. This impairs water reallocation.

Source: Author

create a favourable investment climate for and protect' foreign investor" rights. Taking the right of water away indirectly encroaches on the right to operate as without water, no operation can take place. This may imply an indirect expropriation of the right to operate and breach of a BIT, which may lead to compensation claims. States may be reluctant to resolve matters through arbitration because of the high costs of arbitration and possible payment of compensation, reputation damage and loss of foreign direct investment. This may result in States losing control over the water included in investor-state contracts.

Seventh, most contracts have a stabilization clause in place. This protects the investor from any adverse impact on the economic equilibrium of the investment, however, it may restrict the ability of the state to amend or modify its legislation and hinder its pursuit of sustainable development. Compensation can be claimed if raising environmental and social standards would affect the economic equilibrium for the investor.

I conclude that in addition to a state's water law, water allocation is also implicitly governed by contracts and international investment treaties. Even though states have put all water in the public domain, states *de facto* privatize water by allocating quasi-property rights through the granting of contracts to foreign investors. Thus, waters exploited by virtue of contracts granted by states can be seen as being *de facto* excluded from the public domain. states further appear to have lost their regulatory power and control over the water resources, as investor" water use is protected by BITs, arbitration, and compensation claims, limiting the state's ability to reallocate water. Contracts can be incompatible with the aim of host country's development policy, and since contracts are in place for long periods, they will still be in place as the effects of climate change on water availability become more noticeable and require states increasingly to reallocate the water.