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Caught between hope and reality: how citizens reconcile ambitious dominant energy imaginaries with everyday service shortfalls

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ABSTRACT

Anchored by ambitions of economic growth and energy security, governments in developing countries are building large-scale energy infrastructures at a fast pace. While committed to making modern energy accessible to all, many are also reconfiguring their institutions to hasten the sector transformation into a market-oriented entity. In some cases, these ambitious agendas are also being pursued in the context of deteriorating infrastructure and supply shortfalls. The paper uses the Grand Ethiopian Renaissance Dam (GERD) to explore how political elites and citizens construct visions of the desirable future to be realised through large scale energy projects. After documenting how dominant accounts align with and diverge from citizens expectations, the paper explores how urban households reconcile the energy abundance large-scale projects promise with their experience of inadequate and increasingly expensive access to electricity. Furthermore, noting the absence of a meaningful and effective citizens engagement in the sector governance, the paper highlights the inherent risks of large-scale projects from an energy justice perspective.

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1. Introduction

In developing countries context, modern energy projects aim to achieve multiple objectives, including widening access, improving social well-being, attaining economic growth, and contributing to the global effort to mitigate climate change. Although different countries take different routes, the sociotechnical aspects of such projects involve the reconfigurations of landscapes with technology, infrastructure, policy, and social practices (Geels & Schot, 2007; Healy & Barry, 2017; Newell & Mulvaney, 2013). Hence, such projects are subject to political contestation. On the one hand, the question of whether developing countries can meet their economic development goals while responding to climate change highlights the contestations on nature and the pace of transition and the policies necessary (Delina, 2018b). On the other hand, the material, institutional, and policy reconfigurations considered necessary for delivering such projects raise concerns about distributive equity and social justice (Newell & Mulvaney, 2013). These sectoral restructurings, aided by technological advancements, impact how energy is generated and governed and have implications for distributional politics. For instance, where energy subsidies are part of an implicit social contract between citizens and the state, any change to such arrangements without adequate social welfare measures could have a destabilising effect (Varigonda, 2013), give rise to political instability (Fattouh & El-Katiri, 2015), and contribute to the rise of energy poverty (Bouzarovski et al., 2016).

Social justice is increasingly viewed as an important dimension of energy transitions to mitigate and address the risks of unequal distribution of costs and risks. The literature on energy justice draws attention

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to the institutional and structural reforms necessary to ensure distributive and procedural fairness (Jenkins et al., 2016) and highlights the importance of citizen participation (McCauley et al., 2019). Studies warn of the risks of energy poverty where citizens are poorly informed or involved (Thompson & Bazilian, 2014) and demonstrate a positive association between good governance and improved service provision (Ahlborg et al., 2015). However, although participation is seen as important for realising energy futures that are just, practices of participation are shaped by context-specific factors such as the driving forces of the energy system; the prevailing constitutional relations between citizens, the state and science; hegemonic imaginaries of progress; and other technopolitical priorities (Chilvers & Longhurst, 2016). Building on the notion of co-production and 'technopolitical cultures' (Felt et al., 2010), Longhurst and Chilvers (2019) argue that citizens participation also depends on how participants are drawn in (the process of enrolment) and how participation is organised (the process of mediation). For instance, in liberal societies, this may take the form of citizens' forums and grassroots movements. Or, as in the case study this paper presents, in highly centralised and non-democratic societies, participants are enrolled and the consensus is achieved through the manoeuvring of political-administrative apparatuses (Vaughan, 2011), while legitimacy is established through discursive process of interweaving the preferred technology into social structures, value systems and hegemonic imaginaries of progress (Felt et al., 2010).

Jasanoff and Kim (2009) deploy the concept of 'sociotechnical imaginaries' to explicate how elites exercise power to articulate their visions in relation to scientific and technological development. Jasanoff (2015, p. 4) defines sociotechnical imaginaries as 'collectively held, institutionally stabilised, and publicly performed visions' animated by a shared understanding of desirable futures that can be attained through advances in science and technology. Studies show elites exercise discretion in policy prioritisation, political discourse, resource allocation and other societal norms and practices to normalise and amplify their visions of a desirable future (Ballo, 2015; Smallman, 2020; Tozer & Klenk, 2018). Recognising the need to account for and consider alternative visions of social order, researchers have also been paying attention to the emergence of narratives that counter elites account of normalised imaginaries. Scholarly work in this area extends to examining the relevance of counter-hegemonic visions and how different values and interests produce counter-narratives and imaginaries (Delina & Janetos, 2018; Eaton et al., 2014; Tidwell & Tidwell, 2018; Tozer & Klenk, 2018). Smith and Tidwell (2016, p. 238) use 'bounded imaginaries' to refer to non-experts' capacity to articulate alternative visions. Eaton et al. (2014, p. 228) document how top-down accounts of the desirable future 'run into conflict' with actors who have different visions (p. 228). Schelhas et al. (2018) demonstrate how communities draw on personal experiences and social values to present counter-narratives.

Building on this growing area of research, this paper uses the Grand Ethiopian Renaissance Dam (GERD), a 6,450 MW hydropower project on the Blue Nile, as a case study to examine how political elites and citizens construct imaginaries of the desirable energy future to be realised through large scale energy projects. To political elites, the GERD represents the materialisation of the ambition to transform Ethiopia into a clean energy export hub and achieve national economic and political ascendency. To citizens, the GERD is an object of imagination on which many construct a future of reliable and affordable supply of electricity. The study explores how these visions align and diverge and why these divergences are problematic from a just energy transition perspective. Parallel to the construction of the Dam, the energy sector in Ethiopia is also undergoing structural changes with an objective to transform the sector into a market-oriented entity. However, the mechanisms of the sector governance in Ethiopia remains hierarchical and non-participatory; thus, institutional reforms have not been followed by the emergence of opportunities for citizens meaningful deliberation.

The term 'caught between' in the title refers to the gap between the sophisticated dominant sociotechnical energy imaginaries and the everyday energy-related uncertainties citizens experience. Drawing on interviews with households in Addis Ababa, this paper explores how citizens draw on their lived experiences and sociopolitical values to articulate their visions on what role large scale energy projects like the GERD can play. I argue that although hopeful about the future energy infrastructures promise, changes in some areas (the rise of cost) and the lack of it in other areas (lack of transparency) heighten households energy insecurity and distrust in institutions (Tesfamichael et al., 2021).

The lack of opportunities for meaningful citizens engagement and participation is a concern from the energy justice perspective. Studies show that energy projects initiated through authoritarian decision-making tend to neglect the social impacts, widen energy inequalities, and further marginalise traditionally underrepresented voices (Huang & Liu, 2021; Lee & Byrne, 2019). Lee and Byrne (2019) argue for more analysis of how preferences for large-scale and centralised energy systems and the distancing of the decision-making process from citizens contribute to energy injustices. Similarly, Huang and Liu (2021) observe despite the apparent linkages between the absence of effective citizen participation and social injustice, energy transition under nondemocratic regimes is underexplored. This paper is one attempt to address this research gap.

The rest of this article is organised as follows. Section 2 offers an overview of the energy sector in Ethiopia. Section 3 discusses the research context and methods used. Section 4 outlines the ways in which the GERD is interwoven into national hegemonic imaginaries of progress. Section 5 draws on qualitative research carried out with urban households to discuss how citizens turn to their lived experiences and socio-political values to articulate alternative narratives about the role the GERD and what constitutes a desirable energy future. Section 6 concludes the paper with a discussion.

2. An overview of energy governance in Ethiopia: change amidst continuity

Over the last three decades, Ethiopia's economy has been undergoing rapid transformation that is mainly driven by public investment in key infrastructures, including energy. This has resulted in a significant increase in installed power generation capacity; between 2000 and 2020, total capacity jumped from 500MW to 4500MW. Currently, the total capacity stands at 4500MW, with another 9000MW (including 6000MW from the GERD) under construction (Tsafos & Carey, 2020). The sector liberalisation reform started in the 1990s, under the supervision and support from the World Bank. Initially, the reform effort focused on restructuring the Ethiopian Electric Light and Power Authority (EELPA), a vertically integrated entity. In 1997, EELPA was split into a commercial entity (the Ethiopian Electric Power Company, or EEPCo) and a regulator (the Ethiopian Energy Authority). However, these reforms were soon deemed 'a little more than aesthetic' (Lavers et al., 2021, p. 21). In the early 2010s, with power distribution lagging behind generation and EEPCo heavily indebted and operating at a loss, the sector underwent another reform (Kojime & Trimble, 2016). EEPCo was split into two state-owned entities: one responsible for generation and transmission and another for distribution. Some operational aspects such as revenue collection and customer service were outsourced through public-private partnerships. In 2018, the government revised its tariff-setting system to reflect the full cost of service for the first time. The tariff reform included an incremental increase in tariff rates over four years, with a minor increase for the first 12 months followed by a progressively steeper annual increase until 2022. The policy changed how a tariff is calculated and removed subsidies for all domestic consumers, except for those consuming below 50kWh (Tesfamichael et al., 2021).

These reforms aimed to increase the private sector participation and untangle the state from its direct engagement in the sector financially, socially, and administratively. The removal of subsidies also represents a shift in the social contract between the state and (urban) households that had so far enjoyed access to electricity at a much lower rate. However, the reform measures are being adopted without substantial political liberalisation. The state continued to maintain control and ownership of the entire electricity sector and play a direct role in how citizens access and experience energy services. For example, although there is a regulatory authority (Ethiopian Energy Authority), it lacks operational and financial independence, and its decisions are influenced by political authorities (Eberhard et al., 2017). The sector governance follows the national political order that is highly centralised where a core elite at the top formulate and approve policies (Lavers et al., 2021). Top-down approach to planning and governance is underpinned by the belief that bureaucratic enclaves of excellence and large scale infrastructure projects can qualitatively reconfigure domestic–political-economic systems (Jones et al., 2013; Terrefe, 2020).

Institutional and policy reforms have not been followed by the emergence of opportunities for public deliberation and participation. Energy-related key decisions continued to be made at the highest level of government, and target setting, planning, and implementation are characterised by technocrats' subordination to

politicians (Lavers et al., 2021, p. 13). The centralised and top-down approach also defines the state relationship with citizens with a significant limit on what role civil society and non-state actors can play. For the most part, public demonstrations and grassroots mobilisation are either banned or tightly controlled (Schapper et al., 2020). High-investment projects like the GERD are defined and planned without a prior consultation with stakeholders and the public's participation (Shiferaw et al., 2012). At the same time, dissenting voices and views are systematically excluded through a range of laws (Di Nunzio, 2015; Labzaé & Planel, 2021; Woldesenbet, 2020). Although the rules have recently been eased, dissent is not tolerated, and direct accountability of service providers to citizens is in its infancy. Hence, Vaughan (2011) observes, the national development agenda is promoted and sustained by the political vanguard through administrative decentralisation and party membership drives at the grassroots level, which is also used to build consensus and public participation.

Ethiopia has the second-highest power-generation capacity in Africa (IRENA, 2020). However, only 33 per cent of the population has access to the grid, and per capita consumption is 100kWh per year (ESMAP, 2020). Where there is access to the national grid, the aggregated techno-economic approach to electrification masks inequalities at the local level (Trotter et al., 2017). Although the number of electrified towns has increased over the years, 38 per cent of the unelectrified households are located within seven kilometres of the national grid (Padam et al., 2018, p. 26). Less than 35 per cent of primary schools and health centres in the country have access to electricity, thus suggesting low utilisation of modern energy for social and economic developments (Ayele et al., 2021). Power outage due to poor physical conditions of networks, low capacity of the transmission and distribution lines or shortfall in supply is a critical challenge the sector faces (Meles, 2020; Tesfamichael et al., 2021). With over 90 per cent of the electricity sourced from hydropower plants, the sector is vulnerable to periodic droughts, which undermines power generation and the quality of electricity supply. Underinvestment in the maintenance and upgrading of the existing network has made access to electricity in urban areas unreliable (Lavers et al., 2021). According to a recent study, over 55 per cent of grid-connected households face service disruptions up to 14 times in a week (Padam et al., 2018).

3. Methods

The paper is based on document analysis, and qualitative research carried out in Addis Ababa. Data was collected using qualitative methods and a questionnaire-based survey. The research was conducted in four of the ten sub-cities in Addis Ababa: Ledeta; Kirkos; Gulele; and Yeka. The sub-cities were selected indicators such as population density, housing conditions, location, employment status, and expenditure quintile were considered to capture the diversity the city residents represent. Participants were randomly picked from the utility company consumers' database. Of 100 households contacted, 53 agreed to participate. In total, eight FGDs were conducted. The FGDs lasted from 90 min to two hours and were carried out in the local language, Amharic, and translated into English for coding. Grounded theory coding, which consists two phases, was used (Strauss, 1987). The first level (descriptive coding) aimed to identify patterns and themes, while the second level (analytic coding) focused on identifying the logical linkages between themes. Documents reviewed for this study include national energy and climate change policies and strategies, national development plans, and government electricity sector reports and directives.

The participants represented households with a wide range of socioeconomic and demographic backgrounds. The youngest participant was 19 years old and the oldest 74. The average age was 42. Around 38 per cent of the participants were female. Approximately 34 per cent hold a first degree or diploma, and 44 per cent of them completed secondary school. Out of the 53 participants, 34 (64 per cent) were married. Except for three, all reported having at least one income earner in the house. The majority of the primary earners (52 per cent) are self-employed, while 30 per cent identified as government employees. The FGDs covered a range of topics about electricity service provision, the latest tariffs increase, and household energy-related daily routines. This paper primarily focuses on two specific questions participants were asked to discuss: (1) five years from now, what do you imagine the electricity service sector will be like? (2) Would you say private actors (investors) could provide the solution to the supply and service problems you face? These questions aimed to capture how citizens evaluate the electric sector, in general, and their own energy future, in particular.

The five years point within the first question is chosen for two reasons: First, if all goes as planned, within the five years, the GERD and other major energy projects that are currently under construction will be finished and in operation. Second, in five years, the ongoing incremental increase in tariffs rate would have come to an end, and the cost of electricity (per kWh) would have quadrupled to reflect the full cost of service.

Questions about the future were used to explore individuals' visions and hopes and shared societal forms of consciousness and orientation (Stoll, 2017; Verschraegen et al., 2018). Questions about one's imagination about the future are also useful to observe how the individual negotiates the present reality with the promised future and her place in it. Participants' responses were used to analyse how urban households negotiate the past and the present against the future large-scale energy projects like the GERD promise. Discourse and narrative analysis is used to identify the underlying ideologies embedded in participants responses and the broader cultural and social context that creates the narrative (Hajer, 2009). In doing so, the paper theorises about how people understand their place in the elite sociotechnical imagination and articulate counter-narratives.

4. The GERD and the desirable (energy) future

The National Climate Resilient Green Economy Strategy (CRGE) is one of the key documents that articulate Ethiopia's ambition to achieve middle-income status with a climate-resilient green economy. The document outlines a multisectoral approach to building a net-zero economy to mitigate climate change and build national climate resilience capacity (Federal Democratic Republic of Ethiopia, 2011). This ambition is also heavily featured in Ethiopia's five-year national development plans (Growth and Transformation Plan I and II). Developed with support from the Global Green Growth Institute (GGGI), a South Korea based organisation that advocates for economic growth and environmental sustainability as mutually reinforcing, the CRGE was championed by the late Prime Minister Meles Zenawi. Paul and Weinthal (2019) write that Zenawi 'actively overrode the advice of other technocrats' and 'took it upon himself to delve deep into the material on climate change' (p. 196). The CRGE was launched in 2011 during the 17th session of the Conference of the Parties (COP17) of the United Nations Framework Convention on Climate Change (UNFCCC) and was hailed as unusual in its plan to reduce future emissions while promoting economic development (Paul & Weinthal, 2019). The document presents hydropower as the backbone of this ambitious plan and 'an essential prerequisite for sustainable economic development' (Federal Democratic Republic of Ethiopia, 2011, p. 37).

Construction work on the GERD began in 2011 with an announcement that the Dam was an integral part of Ethiopia's journey towards an economy with zero net emissions (Zenawi, 2011). One key aspect of this strategy, which is prominently featured in the CRGE, is to make Ethiopia a major electricity exporter in East Africa. The vision, according to the late Prime Minister, is to export power to those that are 'less endowed in renewable sources of energy' (Zenawi, 2011). Or, as outlined in the CRGE, it is to 'de-carbonise the regional energy profile as well as contribute to Ethiopia's capital stock formation' (Federal Democratic Republic of Ethiopia, 2011, p. 64). As a landlocked country with limited industrial capacity and constrained access to the global market, the GERD is seen to represent new possibilities for integrating Ethiopia into the regional and global economy. According to the 'Power System Expansion Master Plan, 2012–2037', Ethiopia has ambitions to export electricity to Djibouti, Kenya, Somaliland, South Sudan, and Sudan as well as to markets as far away as Tanzania, Rwanda, and Yemen.

The construction of the Renaissance Dam also materially reaffirms the role of the state in economic development. Clapham (2018) refers to the GERD as 'the centrepiece' of the centralised developmental state model promoted by the late Prime Minister. For Zenawi, the developmental state model, which advocates the deployment of the state's administrative and political resources for the task of economic development, represented an alternative to the neoliberal prescription of the state and the market (Aalen & Tronvoll, 2009; Zenawi, 2012). Zenawi argues that government must take the lead in introducing technologies that have public value and that for the state to succeed, the development agenda must be hegemonic (Zenawi, 2012). Hence, the visions for the GERD are built within developmentalist thinking that views the market as a strategic instrument for promoting national goals (as articulated by an enclave of political elites) and the state with its capacity to construct large-scale infrastructures as central to the political economy.

Visions about desirable futures elevate infrastructures to the status of national treasures (Kuchler & Bridge, 2018). Inside Ethiopia, the GERD serves as a powerful symbol to advance particular visions about the future (Mains, 2019). Over the years, countless songs, slogans, speeches, public arts, and emblematic artefacts have been produced to construct narratives about the Dam and the prosperous future that awaits. Social media and online platforms are rife with images and merchandise depicting the Dam with messages of developmental visions. These speeches and artefacts tap into emotion (systems of emotional meaning) and symbolic (systems of cognitive meaning that appeal to logic) codes to build persuasive scenarios, plots, and morals (Loseke, 2013). Gebresenbet and Wondemagegnehu (2021) argue the word 'renaissance' is strategic and used to align the Dam with a prosperous future under a developmental state and a rejuvenation of a 'glorious past'. Images of the GERD are regularly placed alongside national historical icons (Mains, 2019; Mains & Kinfu, 2016). Political elites in public speeches often equate the Dam to the Adwa victory (the 1896 war where Ethiopians defeated an Italian colonial army) as an expression of the country's honour and sovereignty (Gebresenbet & Wondemagegnehu, 2021).

The other important and powerful force contributing to the cementing of the collective commitment and anticipation is finance. The construction of the Dam is financed by the Ethiopian government through resources mobilised from citizens. Citizens both inside and outside Ethiopia have been contributing through the donation of their one-month salary and purchase of GERD bonds. Other initiatives include a public procession of the 'GERD trophy' and SMS text campaigns. The 'GERD trophy' refers to a procession in each of the lowest administrative units and military bases across the country to collect donations from villages and towns (Gebresenbet & Wondemagegnehu, 2021). As Ethiopia enters negotiations with regional governments on overall water management and other technical details, online and offline activism, including trending hashtags like #itsmydam and #fillthedam on twitter, also play a key role in bridging the gap between elites and the public in collective anticipation.

Although the GERD has been constructed as a unifying project, the highly centralised top-down approach to decision-making means citizens are passive participants that are drawn in and engaged after the decisions have been made and at a later stage in the planning process. Hence, in Ethiopia, the financial sustainability, ecological consequences, social costs and geopolitical implications of the Dam are not at the centre of public discourse. The Blue Nile contributes up to 70 per cent of the water flow to the Nile River basin, a basin shared by ten other countries in the east and horn of Africa. Although beyond the remit of this paper, it is important to note that over the years, a number of studies have been carried out to investigate its impact on the environment (Aziz et al., 2019; El-Nashar & Elyamany, 2018; Liersch et al., 2017), transboundary water management (Wheeler et al., 2020; Yihdego et al., 2017), regional geopolitics (Gebreluel, 2014; Hussein & Grandi, 2017; Nasr & Neef, 2016), and the communities that live around the construction site (Abbink, 2012; Vaughan & Gebremichael, 2020; Veilleux, 2013).

The imaginary has also prevailed under a political context where the dominant narratives cannot be contested legitimately. When discussing the Dam, depending on the context, public officials often switch between political (national right, sovereignty, pride) and apolitical narratives to dismiss the notion of open and critical debate. In an interview with a local newspaper, the Executive Director of the agency responsible for the Dam construction has been quoted as saying: 'The dam is not a political issue. Rather, it is a developmental project which determines the bright future of Ethiopia' (Ethiopian Herald, 2011; as cited in Fantini & Puddu, 2016). Furthermore, framed as an embodiment of national pride, any criticism of the scheme is automatically equated with a lack of patriotism (Abbink, 2012; Cuesta-Fernandez, 2015).

However, the unchallenged framing of the GERD distracts from the uncertainties, long-term costs, and environmental risks that are inherently associated with such projects (Sovacool et al., 2014). For instance, details on how the benefits of the GERD will be redistributed are lacking. The government is committed to exporting electric power and expanding access to rural areas, but it is unclear how the two trajectories will be balanced (Tessema et al., 2014). Although the government has been awarding the construction of transmission lines to increase interconnections with neighbouring countries, investment in internal transmission and distribution networks is lagging. Less than 5 per cent of the annual finance for electricity goes towards transmission and distribution (Ebinger et al., 2017). In the past, insufficient sub-stations to transmit the

electricity generated by newly commissioned hydropower dams has been a problem (Woldegebrael, 2018). The viability of the export market depends on the roll-out of regional infrastructure and regional cooperation; hence, contingent on technical and political challenges yet to be resolved (Cuesta-Fernandez, 2015). The Eastern African Power Pool (EAPP), which is based in Addis Ababa, is an important part of the effort to promote energy trade in the region.

5. Looking into the future of energy abundance from a place of vulnerability

In Addis Ababa, where access to the grid network is at 99 per cent, electricity is deeply intertwined with the city residents' daily routines and their expectations about their social and economic welfare (Tesfamichael et al., 2021). People incorporate several interconnected meanings as to why and how they seek modern energy services. For the most part, this relates to achieving well-being and utilitarian goals and valuing technological advancement and gaining satisfaction from a sense of personal and social progression. There is also an economic aspect to accessing modern energy. Besides convenience and comfort, electricity is a lifeline to those that partake in the informal economy. People talk about the value of electricity from a perspective of what is at risk of being lost, either due to service interruptions or price increases. The grid connection statistics conceal chronic energy insecurity, such as deteriorating hazardous infrastructure, unreliable and insufficient supply, and other contingencies in the supply households face (Asfaw, 2012; Castán Broto et al., 2020; Meles, 2020).

Energy projects like the GERD appeal to the city residents desire for a reliable and abundant supply of electricity. Hence, many echo the dominant imaginaries regarding the energy future that can be achieved with the Dam. However, discussions also reveal that public non-expert visions diverge and are tempered by future concerns. In the following two subsections, the paper explores how people reconcile the dominant visions associated with the GERD and their lived experiences. This is done by analysing two questions FGD participants were asked to discuss (see Section 3): (1) five years from now, what do you imagine the electricity service sector will be like? (2) would you say private actors (investors) could provide the solution to the supply and service problems you face?

Discussions about what the electricity service sector might look like in five years reveal a broader consensus that the GERD would benefit the national economy and could mean an end to the electricity problem they face. As one young man notes: 'Power outage will no longer be an issue.' Or, as another observes: 'We could reach a point where we will have access to power for 24 h with no interruption.' A small group of participants expressed optimism that there could also be a positive spill-over effect on service provision and cost. Those with such views said they expect that once the utility starts to sell electricity, it would invest in improving service and lowering the cost of electricity for domestic consumers. Such expectations are not based on any government or the utility company stated plans but a reflection of participants' understanding of their social contract with the state.

Despite the broad stroke of optimism, participants also expressed reservations about the future of the governance of service provision. In this regard, discussions focused on the lack of transparency and accountability and the difficulties people face when navigating institutional procedures. Although there is some awareness of the reform the sector is undergoing, most failed to articulate the changes. The opacity of the institutions appears to exacerbate the frustration of those who experience power outages and service failure regularly. Hence, discussions about what the sector might be like in five years revolved around governance issues and the utility's ability to behave in a way that is consistent with citizens interests.

The cost of electricity is another area of concern raised by participants. Historically, heavily subsidised by the state, the cost of electricity in Ethiopia has been low. For instance, between 2005 and 2017, households were paying 0.02 USD/kWh. Under the revised tariff, by 2022, the cost per unit will have quadrupled from where it was in 2018. Given the gradual price rise, it is not surprising that affordability is a concern. Many of the study participants said they had changed their daily routines and consumption patterns. What this means depends on the household. For a family with three incomes, it meant using the washing machine every other week; for a self-employed single mother, the rising cost of electricity meant shelving the electric cookstove and relying on charcoal and firewood. Overall, changes appear to follow two patterns: cut down on

activities that are considered a luxury and revert to traditional polluting fuels. More importantly, with the rising cost in mind, participants see these changes in consumption not as temporary but as a way to cope with the new reality. Hence, despite the bright future the Dam (and other energy projects) promises, on a more personal level, discussion about what might happen in five years reveals the (energy) precarity many, particularly those socially and economically vulnerable, are experiencing.

Given the poor quality of electric service and considering the ongoing market-oriented sectoral reforms, groups were asked if the private sector could provide the solution. Discussions around this question appear to be based on a combination of factors, including participants' assessment of their lived experience, belief about the role of the state, and attitude towards the private sector. Almost all participants within the eight FGDs agree that service provision could improve as a result of private investment. However, most of them also expressed concerns about what privatisation might meanand their preference for any involvement of private entities to be regulated and kept under surveillance by the state. Participants misgivings about investors reflect two interrelated factors: decades of carefully manufactured anti-private sector political rhetoric promulgated by proponents of a more prominent role for the state; and public understanding of electricity as a citizenship right.

The preference for a curtailed and highly regulated private sector also has to do with concern about whose interest would be served and fear of investors 'for-profit' motives. When discussing the role of the state and their relationship to it, participants often use metaphors of kinship and guardianship. As one participant put it, the government is like the 'mother and father' of its citizens and thus has a duty to protect and look after them. Another participant said that keeping the cost of electricity down is the government's duty because 'government is born out of the people and therefore part of the people'. These views reflect the paternalistic approach of the state and the policies on which its legitimacy is built. Hence, although people do agree that an investor could provide a better service by defending the status quo, people also appear to be making a political case for being counted in and accounted for.

6. Discussion and conclusion

The GERD represents what Bridge et al. (2018) call an 'infrastructural moment' where a connection between material investments and broader improvement of social conditions are projected as vital and on which the 'fate of the nation' depends. In Ethiopia, political elites deploy sociotechnical imaginaries to link the Dam construction with the country's political and economic ascendency, and to create the political will and public resolve to attain them (Jasanoff & Kim, 2009). However, drawing on the immediate and mundane context of their everyday lives' citizens are also articulating counter-narratives to link the Renaissance Dam with their vision of a desirable energy future (i.e. access to reliable and affordable supply of power).

In this paper, I argue, the large energy projects like the GERD has enabled urban households to articulate visions that contradict the dominant narrative in three ways. First, citizens associate the Dam with access to electricity at a lower cost. This expectation stands in contrast to the market-oriented future envisioned by the government and the architects of the ongoing sector reform. Second, for those with access to the grid, the Dam epitomises abundance in supply and an end to the frequent power outages. However, this expectation is also not aligned with the dominant vision that prioritises exporting power to neighbouring countries. This is evident in the inadequate investment in distribution networks. Third, the localised and bounded imaginaries, which treat access to electricity as a shared public value, contradict the market-oriented logic espoused by the government. These diverging views represent a disconnect between the exploitation of energy resources and the delivery of universal energy access goals. One manifestation of this is that although the government is diverting resources to develop large-scale low-carbon energy infrastructures, those with access to the grid are increasing their reliance on biomass fuels and predicting their gradual reduced electricity consumption (Tesfamichael et al., 2021).

The paper uses the term 'caught between' in the title to refer to how citizens are caught between the sophisticated 'official' accounts of energy futures and everyday uncertainties. Although hopeful about the future large energy infrastructures promise, changes in some areas (e.g. cost, digitalisation of service) and the lack

of it in other areas (e.g. continued lack of transparency) heighten their sense of precarity. The uncertainty people experience is also enhanced by the mixed signals they receive from the government. On the one hand, the political and developmental rhetoric strengthens the tacit expectations citizens have about the role of the state and state-led economic projects. On the other hand, as part of the ongoing sector liberalisation, the state is taking steps to distance itself from direct engagement with citizens. Furthermore, the absence of a meaningful deliberative process to address the risks inherent in large-scale projects point to energy injustice (Sovacool et al., 2017).

It has been argued that the supply-driven and top-down approach to the planning and construction of the GERD is incompatible with social, cultural, ethical and justice concerns (Tarekegne, 2020). Lee and Byrne (2019) argue that large-scale and centralised energy projects initiated through authoritarian decision-making tend to neglect the social impacts, widen energy inequalities, and further marginalise traditionally underrepresented voices. The deficit of opportunities for meaningful public engagement is also a concern from the perspective of ensuring the legitimacy of and trust in institutions. Hence, while there is a compelling argument for investments in low-carbon energy transitions, research must consider the disparity between national strategies and local and place-specific needs and the short- and long-term effects. More specifically, the case study points to an important knowledge gap about how citizens in non-democratic societies are experiencing energy transitions (Huang & Liu, 2021). This paper attempts to address the research gap in this area and call for a nuanced approach to understanding and incorporating non-elite imaginaries for more just energy systems.

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