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Integrated Hydro-communication of Abbay-Nile River Basin Stakeholders in Ethiopia and its Role for Sustainable Management of the Basin

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Abstract

Post-Cold War developments in the sustainable management of transboundary river basins emphasized the importance of decentralized management and stakeholder communication more than ever. The same holds true for the Abbay-Nile River Basin. Hence, this article assessed how integrated hydro-communication among Abbay-Nile River Basin stakeholders in Ethiopia was carried out and identified its role in the sustainable management of the basin. Integrated hydro-communication refers to the involvement of stakeholders and the application of two-way verbal communication among them, focusing on strategic intent and a multitude of water issues in their own settings or through coming together. The paper employed a qualitative research approach. The constructivist research perspective, two-level games theory of international relations, participatory communication paradigm, and integrated communication of stakeholders in their respective importance were used as lenses to examine the case. The primary data were collected using in-depth interviews with purposively selected expert informants from regulatory organizations, higher education institutions, and media houses, as well as through participant observations of conferences. Thematic qualitative content analysis was used to analyze the collected data. The findings show that integrated hydro-communication among Abbay-Nile River Basin stakeholders in Ethiopia took place in two forms: communication while stakeholders were in their respective settings and communication through coming together at common forums. Almost all informants believed that their respective organization was practicing integrated communication, but in most cases, each stakeholder criticized the others. Moreover, integrated hydro-communication among the stakeholders was largely limited to criticizing Egypt's long-standing hegemony over the basin and justifying the measures Ethiopia has taken to construct the Grand Ethiopian Renaissance Dam. Therefore, in order to achieve integrated hydro-communication at its best, stakeholders need to come together and set a communication strategy that recognizes and acknowledges their interdependence and works on a regular basis, focusing on the co-production and dissemination of knowledge to the public at different levels and occupations.

Keywords: integrated communication; stakeholder communication; sustainable management

1 INTRODUCTION

Communication of stakeholders on water resources has existed throughout history for two reasons. First, water resources are naturally shared resources, and second, they have an irreplaceable role for life and sustainable development. However, post-Cold War developments such as decentralized management through giving emphasis to communication and full participation of stakeholders (Furlong, 2006; Yilmaz, 2008) and the 1997 UN Water Course Convention that enshrines the twin principles—

equitable and reasonable utilization and not causing significant harm (Rieu-Clarke, 2012)—along with the argument that the ability of a country to sustain its economic growth depends on the extent to which natural resources (including water) are put to efficient use (Furlong, 2006), have emphasized the need for integrated hydro-communication for sustainable management of water resources. Stakeholder participation and sustainability are integral elements of the participatory development communication paradigm (Mefalopulos, 2008). Stakeholder participation is so critical for successful development, both from a political perspective through ensuring good governance and a rights-based approach and from a technical perspective through ensuring long-term results and sustainability of initiatives (Mefalopulos, 2008).

Integrated hydro-communication is about involving relevant stakeholders, employing a two-way communication process, doing communication with strategic intent, and addressing a multitude of river basin issues with the purpose of producing or co-producing new knowledge to enhance sustainable management of water resources (Gooch & Stålnacke, 2010). It is communication considering the cross-cutting nature of all uses, users, and issues (water resource development, protection, and utilization allocation based on principles) of water resources with the aim to ensure the social, economic, and environmental values of water resources. Integrated hydro-communication resolves possible disconnects created among stakeholders by setting up what is expected of each stakeholder and acknowledging the contribution of each stakeholder.

Adapting the definitions of sustainability to trans-boundary water resource management, sustainable management of trans-boundary river basins refers to three intertwined missions: forming and crystalizing national interest (Putnam, 1988) on a river basin, ensuring equitable and reasonable utilization of a river basin (Rieu-Clarke, 2012). It also refers meeting the needs of the present generation without compromising the ability of the next generations to meet their own needs (Camarinha-Matos et al., 2010) in utilizing a river basin. The same notion is expected to hold true for the Abbay-Nile River Basin, which refers to the water resource on which the Grand Ethiopian Renaissance Dam has been being built. However, it is the downstream riparian states, most notably Egypt, that have been enjoying a monopoly over the Nile, and Egypt is still arguing to ensure the continuity of its hydro-hegemony. Ethiopia, on the other hand, has been trying all that it can for the creation of a level playing field among riparian states, but it is a far-fetched option in the absence of binding international water law (Zeitoun & Warner, 2006). The fact that Ethiopia launched the construction of the Grand Ethiopian Renaissance Dam, but Egypt strongly opposes it, is indicative of this. The effort of Ethiopia to create a level playing field could become a reality only when it can form and crystalize its national interest on the river first. Constructing and crystalizing national interest demands co-production of knowledge by stakeholders. Hence, integrated hydro-communication on the Abbay-Nile River Basin has to be seen from the perspective of Ethiopia.

There are three rationales for using the name 'Abbay-Nile River Basin' rather than Blue Nile, Eastern Nile, or Nile. First, despite the fact that Ethiopia's headwaters provide 85% of the total river water and the river basin is a shared resource by eleven riparian states (Yacob, 2007), the river is named the Nile, Eastern Nile, or Upper Blue Nile to the convenience of Egypt and Sudan. This naming is foreign to Ethiopia, and naming should reflect that the river basin is Ethiopia's too. Second, given the fact that Abbay provides more than 50% of the Nile water (Yacob, 2007) on one hand, and it cannot be treated as an independent from Nile River Basin on the other hand, it should be called along with the Nile but needs a strong mention. Third, the focus of this paper is the 'Abbay' (roughly, it means big in Amharic) River Basin, which of course is part of the Nile River Basin. Hence, for these reasons and as part of ideational power, using the name 'Abbay-Nile' is convincing.

The existing communication research works done on the Abbay-Nile River Basin so far are limited to domestic media coverage and framing of just the Grand Ethiopian Renaissance Dam (Muez et al., 2022; Yeshiwas, 2014), media narrative and state building (Yeshiwas et al., n.d.), and communication performance of the Nile Basin Initiative in 2008, 2012, and 2017 as an institution (Nile Basin Initiative, 2018). In other words, there is a serious paucity of literature on integrated hydro-communication of Abbay-Nile River Basin stakeholders in Ethiopia and its role for sustainable management of the basin. Therefore, this paper aimed at addressing this gap. It aimed at assessing how integrated hydro-communication of Abbay-Nile River Basin stakeholders in Ethiopia was carried out and its role for

sustainable management of the basin. The findings could help each stakeholder to see its strengths and gaps, if there are any, in playing its role in integrated hydro-communication in the realization of sustainable management of the Abbay-Nile River Basin through bridging the science-policy-stakeholder interface. Since it is argued that the rate and extent of diffusion of ideas and practices get more rapid when they are either initiated or promoted by regulatory organizations than in the academic or media ones (McNeill, 2006), it is the responsibility of policymakers to initiate change, if need be. This in turn could generally strengthen the knowledge production and dissemination value chain, or the ideational power, and then the sustainable management of the Abbay-Nile River Basin. In other words, stakeholders could generate knowledge and share it with the concerned on a planned basis so that sustainable management could be ensured.

2 MATERIALS AND METHODS

Based on the notion that a qualitative approach is more, it is useful because it allows you to explore issues. Again, adopting the argument that theory or perspective may be used as a theoretical lens in qualitative research (Creswell, 2009), the constructivism research perspective, two-level games theory of international relations, participatory communication paradigm, and integrated communication of stakeholders were employed as lenses.

Constructivism was employed in the sense that knowledge and meaning are generated and constructed from interactions or communication with others (Creswell, 2013) through construction, deconstruction, and reconstruction (Hiebert, 2014). In connection to this, three lines of argument are put forth. First, physical or natural reality, like rivers, transcends into social reality when they get turned into material culture, like a source of hydropower, to which the values attached are different from those of the rivers through communication (Berger & Luckmann, 1991; Hiebert, 2014). Second, and that goes with the first, is that communication is an instrument of the social production of nature or connects hard sciences with soft values (Smith, 2008). This implies, as Smith posited, that the key point is not the 'mastery' of nature, but 'how we produce nature and who controls this production of nature (Smith, 2008). Third, the failure of linking scarcity or abundance of transboundary water resources to conflict or cooperation (Le Billon, 2001) on one hand and the co-existence of conflict and cooperation as neither continuum nor mutually exclusive to each other (Zeitoun & Mirumachi, 2008) on the other hand is indicative of the importance of hydro-communication for sustainable management.

Two-level games theory in international relations argues that when there are issues different states make dialogue on and interact, states simultaneously engage in two-level interactions (games): domestic and international. In the former, domestic groups or stakeholders influence a government to adopt favorable policies, and state demand and interest is formed, and in the latter, a government seeks to maximize its own ability by trying to get national interest to win a space that satisfies domestic pressures (Putnam, 1988). The same holds true for the Abbay-Nile River Basin. There has been domestic-level communication on the basin, and what is constructed at the domestic level is taken to the regional and international arena to win space or get accepted so that national interest gets ensured.

The notion of the participatory development communication paradigm is understood along with sustainable development. Participatory communication is communication in consideration of various stakeholders (Servaes, 2003). Participatory development communication principles that govern this research are reciprocal collaboration and participation (Mefalopulos, 2008). When participatory communication is at its best, it becomes integrated communication where stakeholders build on interdependence (Ehlers, 2002), and it, in water management, is the exchange of information and reciprocal understanding of needs and perspective and the production of new knowledge to enhance water resource management (Gooch & Stålnacke, 2010).

Purposively selected two regulatory organizations (Ministry of Water and Energy and Ministry of Foreign Affairs), three mass media houses (Ethiopian Broadcasting Corporation, Fana Broadcasting Corporation, and Reporter News Paper), and two higher education institutions (Blue Nile Institute, Bahir Dar University, and Water Resources Institute, Addis Ababa University) were taken as a sample of the

study. This selection was made based on the argument that water resource stakeholders are multiple, ranging from local to international (UN Water, 2013) and from individuals to organizations, including regulatory organizations, media, and academia (Orr et al., 2006). It is based on the argument that a level playing field could be established for riparian states only when Ethiopia, as a riparian state, constructs and crystalizes its national interest on the river basin that the sampling is limited to stakeholder organization of Ethiopia only. Accordingly, the findings are generalizable only to these organizations in particular and Ethiopia in general. These organizations were considered here because they are important social actors that play an increasingly important role in conceptualizing and transforming public issues (King et al., 2010) through the exchange of messages and the co-creation of new knowledge and meaning among them based on the different ties (Shumate et al., 2016), and they are vital in water management (Warner, 2006).

Again, from these organizations, a total of 12 interviewees, three experts (coded as I1, I2, and I3) from the Ministry of Water and Energy, two experts (coded as I4 and I5) from the Ministry of Foreign Affairs, three senior journalists (coded as I6, I7, and I8) from three mass media houses (Ethiopian Broadcasting Corporation, Fana Broadcasting Corporate, and Reporter News Paper, respectively), two senior lecturers (coded as I9 and I10) from Blue Nile Institute, Bahir Dar University, and another two senior lecturers (coded as I11 and I12) from Water Resource Institute, Addis Ababa University were purposively selected and interviewed. This combination of interviewees was made based on the assertion that domestic-level stakeholders of transboundary water resources are agencies and institutions with powers to implement river basin management plans, academics, and media (Orr et al., 2006). Interviewees were selected based on the experience they have with regard to the Abbay-Nile River Basin issue. Besides interviews, participant observations of nine forums, seven domestic and two basin-wide ones, all took place in Ethiopia. Participant observation was made to see the composition of stakeholders and the issues discussed. The two basin-wide forums were observed to see the relation of knowledge co-production on the Abbay-Nile River Basin between the domestic and basin-wide arenas and how domestic-level issues were represented in the regional arena. Thematic qualitative content analysis, which is defined as any meaning creation effort from big qualitative documents (Patton, 2024) and goes with the notion of constructivism to create order out of disorder, was employed as a data analysis technique. The steps used were gathering and collecting data, organizing and structuring data, coding the data, and finally analyzing qualitative data.

3 RESULTS AND DISCUSSION

Informants reflected their view with regard to integrated hydro-communication of Abbay-Nile River Basin stakeholders, and it was learned that integrated hydro-communication of Abbay-Nile River Basin stakeholders in Ethiopia took place in two forms, such as communication while stakeholders are at their respective settings and communication through establishing a common forum. These two forums are useful for comprehensive analysis. This is consonant with the notion that stakeholder communication on transboundary water resources could happen in two forms: communication of stakeholders from their own setting and communication through establishing a common forum where stakeholders come together to frame and solve water resource problems. The situation in which stakeholders come together to identify, frame, and solve water resource problems is termed the “multi-stakeholder process approach” (Steins & Edwards, 2009), the “space for change” forum (Warner, 2006), and “social learning (Pahl-Wostl et al., 2007) in water resource management.

Public universities of Ethiopia performed integrated hydro-communication in two forms. One was interaction among themselves, either while they were in their own setting or by coming together, or the other forms of interactions were by coming together with other stakeholders, regulatory organizations, and mass media houses in this case. With regard to the former, I9 and I11 from Blue Nile Institute, Bahir Dar University, and Institute of Water Resources, Addis Ababa University, respectively, explained that higher education institutions conducted research on the Abbay-Nile River Basin in general and the Grand Ethiopian Renaissance Dam in particular as a knowledge production scheme. Informants also said that public universities also organized different university-level workshops so as to promote co-creation of knowledge with regard to the issue, i.e., the Abbay-Nile River Basin. Setting up research

grants for selected PhD students of water resources, political science, engineering, and communication to work on the issue of the Abbay-Nile River Basin in general and the Grand Ethiopian Renaissance Dam in particular was mentioned by I12 from the Institute of Water Resources, Addis Ababa University, as part of a case of integrated hydro-communication engagement. These activities could be taken as good in the broader goal of sustainable management of the Abbay-Nile River Basin.

The other form of integrated hydro-communication of higher education institutions in their own setting was by coming together so as to learn developments with regard to the issue. I10, from Blue Nile Institute, Bahir Dar University, mentioned that including Bahir Dar University, ten Ethiopian public universities located in the Abbay River Basin had a regular workshop hosted by each university on a round basis aimed at assessing efforts going on concerning the basin. This, in other words, means these ten higher education institutions were trying to co-create or generate knowledge with regard to the Abbay-Nile River Basin in Ethiopia. This is consistent with the notion that stakeholders should have an exchange of information and reciprocal understanding of needs and perspectives between them and the production of new knowledge to enhance water resource management (Gooch & Stålnacke, 2010). However, the informants from Blue Nile Institute, Bahir Dar University, mentioned that this regular workshop, although it was a good beginning, could not continue for lack of budget and stability in the country. Hence, it could not be so effective as expected.

When it comes to the multi-stakeholder process approach or space for change in integrated hydro-communication, interviewees from higher education institutions reflected that their institutions were collaborating with other stakeholders such as the regulatory organizations, volunteer groups, and mass media. I10 from Blue Nile Institute, Bahir Dar University, said that they were working with the Ministry of Water and Energy and the Ministry of Foreign Affairs. I12 from the Institute of Water Resources, Addis Ababa University, on his part, argued that higher education institutions were working to their level best in conducting research in the area and giving findings to regulatory organizations to use the findings as policy input. However, I11, from the same institution, argued, *"It is common to send policy implications resulting from rigorous research undertakings to regulatory organizations, but regulatory organizations do not pay serious attention to the findings, and the findings were not used in most cases."* What I12 and part of what was said by I11 is consistent with the argument of relational theory to education, which argues that educational institutions should engage in conducting research and diffusing innovations so that stakeholders can solve development problems (Kessels & Plomp, 1999).

I4 and I5, from regulatory organizations, namely the Ministry of Foreign Affairs, confirmed that higher education institutions (public universities) have been contributing a lot in giving technical pieces of advice that were seriously considered before a decision had been made by the negotiating team regarding the Grand Ethiopian Renaissance Dam, which is part of the Abbay-Nile River Basin. However, I4 also said, *"Research works of higher education institutions tend to be too technical, and they could hardly be solutions for policy problems."* The complaints of I11 and I4 to each other are a repeat of what Gooch & Stålnacke said as emanating from their differences in problem formulation; scientists complain that policymakers do not take into account the knowledge generated within their disciplines, and conversely, policymakers complain that scientists do not provide the kind of knowledge necessary to solve day-to-day problems (Gooch & Stålnacke, 2010).

I10 further explained that they, as an institution, were working with the international Grand Ethiopian Renaissance Dam (GERD) consortium, which has been working on the basin in general since its establishment in 2012. The collaboration was on knowledge sharing and discussing on issues related to the Grand Ethiopian Renaissance Dam. This collaboration benefited both sides to have a unified view. This approach of higher education institutions is in confirmation with the argument that stakeholders today can be heterogeneous and have multiple identities that become salient depending on the context and nature of interactions, and most importantly, their collaboration is more likely to happen around focal issues or problems (Koschmann & Kopczynski, 2017).

As to whether public universities have integrated communication with mass media, I10 and I12 argued that they were working with the media. Media experts also confirmed that public universities were working with them. Particularly, I8 from the Reporter Newspaper said that water scientists of public universities were giving rich explanations on instances of the Abbay-Nile River Basin in general and the

Grand Ethiopian Renaissance Dam in particular. I8 concluded that “Some scholars of public universities were even columnists of the newspaper, especially when the issue of the Grand Ethiopian Renaissance Dam became a regional and global talking point.” This is consistent with two arguments. First, the legitimacy of higher education to society is evaluated by the level and quality of its commitment to its community (Jongbloed et al., 2008), and second, mass media could serve their purpose only through interacting with other institutions that could serve as sources of news or information, and institutions make use of mass media for communicating with their public (Tiffen et al., 2014). Underpinning the notion that people’s minds about issues and behavior could be significantly influenced in many ways as long as the media set citizens’ relevant agendas (McCombs & Shaw, 1972), it is not wrong to say here that social learning of the Abbay-Nile River Basin took place. Media use higher education institutions as stakeholders and sources of information that would be aired to the public so that the public could be aware of issues of the Abbay-Nile River Basin.

Informants from regulatory organizations such as the Ministry of Water and Energy and the Ministry of Foreign Affairs, on their part, mentioned that they were working with public universities and mass media houses concerning the Abbay-Nile River Basin in general and the Grand Ethiopian Renaissance Dam in particular. For instance, I3 from the Ministry of Water and Energy said, “What can be said for sure is that students and researchers from higher education institutions usually come to us to consult relevant documents concerning Abbay water resources.” Consonant with this, I5 from the Ministry of Foreign Affairs, on his part, said, “The Ministry of Foreign Affairs signed a memorandum of understanding with different universities to work on the Abbay River Basin.” This, along with some complaints, was confirmed by informants from higher education institutions. I12 from the Institute of Water Resources, Addis Ababa University, for instance, said, “Regulatory organizations tried to work with us, but it was not on a regular basis and a multitude of issues arose, as most of the time their approach is politically driven.” This may be emanated from the fact that policymakers (regulatory organizations) in their role as politicians or elected officials need to take into account the perceptions of their electorate, the people who hopefully will vote for them again the next time around, and need practical immediate solutions to a problem (Gooch & Stålnacke, 2010). I4 from the Ministry of Foreign Affairs mentioned a lack of professionals in the area and attention as barriers to integrated hydro-communication in the Abbay-Nile River Basin.

Experts interviewed from regulatory organizations also said that they had collaboration with mass media. I1 from the Ministry of Water and Energy explained, “We give expert analysis on the media whenever required, especially when the issue of the Nile gets heated in both the regional and global arenas.” I4 from the Ministry of Foreign Affairs, on his part, said that the ministry collaborated very well with mass media to address the issues of the Abbay-Nile River Basin in general and the Grand Ethiopian Renaissance Dam in particular. Interviewees from mass media houses, however, were quite hesitant to confirm this claim of experts from regulatory organizations, and even they inclined to criticize regulatory organizations. For instance, I6, from the Ethiopian Broadcast Corporation, complained that because of the high chance the politicians’ voice, by and large, was heard concerning the Abbay-Nile issue, many times, it was difficult to access factual information from experts in the regulatory organizations to cover issues of the Abbay-Nile River Basin in general and the Grand Ethiopian Renaissance Dam in particular. Extending his explanation, the informant said that there were times the media got information concerning developments in the negotiation over the Grand Ethiopian Renaissance Dam from external sources rather than the concerned institutions, such as the Ministry of Foreign Affairs, Ministry of Water and Energy, etc., who lead the negotiation representing Ethiopia.

I7, an informant from Fana Broadcasting Corporate, on his part, mentioned that sometimes the government used the Grand Ethiopian Renaissance Dam (GERD) as an instrument to calm down uprisings or internal chaos, and the media worked for this through airing the voices of regulatory organizations. This inclines to be consistent with the argument that at the internal level, ruling elites use dams as symbols of national pride and honor of progress and prosperity (Menga, 2016) on one hand and instruments of silencing critical voices as security issues (Zeitoun & Warner, 2006) on the other hand.

I8, from the Reporter News Paper (Amharic), on his part, said that regulatory organizations were not open to up-to-date information. He argued that it was because of the strong connection his media house had with members of the negotiating team from regulatory organizations that the newspaper

was able to collect information off the record from the negotiating team members even while they faced pressure from the government. Information-giving off the record was done when it was serious and urgent, but, at the same time, may not be quickly allowed to be done openly. As a case in point to information given off the record by negotiating team members, I8 said that during the Washington Tripartite Negotiation over the Grand Ethiopian Renaissance Dam in 1920, some negotiating team members used to send written materials when the negotiation went wrong and out of line and the media was publishing the concerns. The existence of very well-established good relations with water engineers, professionals, and experts working on the Abbay-Nile River Basin in the Ministry of Water and Energy and in the Ministry of Foreign Affairs, as well as members of the negotiating team on the Grand Ethiopian Renaissance Dam, was mentioned as a reason for securing important information off the record.

I7 believed that there was no body of knowledge organized that could help media to integrate itself with regulatory organizations, as a result of which media reports were limited to the personal efforts of journalists. Integrated communication, when applied effectively, can generate a popular and dominant narrative that could resonate and influence actions. However, mentioning a lack of integrated hydro-communication to set narratives and crystalize it through consistent reporting, I7 said the following:

Egyptians frame narratives, as for instance, argue for historical rights and conclude their report with a mention of the 1929 and 1959 treaties. However, it is not consistent, or it is a mix in our country. We should set the frame. Should we say the Abbay issue is an existential issue, should we say there is no such historical right in international water law? We have to choose. Egyptians chose historical rights. But there is no clear direction here to shape with a consistent narrative, and reporting was limited to blaming Egypt, not constructing Ethiopia's national interest.

The Ministry of Foreign Affairs was criticized for not supporting the establishment of an outreach program forum by journalists from different media. “We (journalists from different media) asked the Ministry of Foreign Affairs for support to launch an outreach program forum aimed at reaching schools and creating awareness about the Abbay-Nile issue using mini media, but we could not secure support and could not materialize the outreach program forum,” I8 said. This implies extended social learning was not in place, and as a result, there is a lack of enhancing ideational power of Ethiopia with regard to the Abbay-Nile River Basin.

Moreover, I8 also mentioned how difficult it was to get timely information from regulatory organizations and negotiating members. The informant elaborated his view as:

Understanding GERD as a security issue and not giving information in the guise of security still exists. It is very difficult to officially confirm information. For instance, recently in one event, the prime minister said, “We do the last filling this year.” However, when we asked to understand what this meant. The concerned individuals replied, “What do you mean? Are you to provoke Egyptians?” Hence, we are not able to be together and organize ideas. There is a lack of understanding and communication about the issue of the basin on the side of the government. Only water professionals and negotiators work hand in hand with us.

Besides covering the Abbay-Nile River Basin issue, individuals in the media suggested the government establish a concerted communication strategy and even a global upper riparian forum. For instance, I7 mentioned, “We, journalists from different media, time and again suggested that Ethiopia has to design a communication strategy and establish a forum of upper riparian states that include the US, Turkey, and China, but we could not be listened to.”

The complaints made against regulatory organizations with regard to integrated hydro-communication of Abbay-Nile River Basin stakeholders of Ethiopia imply that these organizations were not positively utilizing their power. In the power dynamics of stakeholders, it is argued that the rate and extent of diffusion of ideas and practices get more rapid when they are either initiated or promoted by regulatory organizations than in the academic or media one (McNeill, 2006). However, it was found to be more

of a hindrance than otherwise in the integrated hydro-communication on the Abbay-Nile River Basin.

Informants from media houses, on their part, posited that they had integrated hydro-communication with other stakeholders, namely regulatory organizations and public universities. I8 posited that the media was used as a platform for sharing views of different stakeholders concerning the Abbay-Nile River Basin in general and the Grand Ethiopian Renaissance Dam in particular. Explaining the critical contribution of media, I8 mentioned the following example.

While Bereket Simon, then Minister of the Ministry of Information, was discussing GERD with the media, he said, "GERD is the last big project we want to do, and it is in a place where it is not suitable for agriculture." In fact, Bereket might have said this for diplomatic purposes. However, we argued that such expression is not right as it constrains the ability of the next generation to develop and make use of the basin. We raised questions such as why we weaken the capacity of the next generation to use the basin. Why should we give such a response for the unasked question? Mr. Bereket appreciated this and redressed. We presented and debated issues that the negotiators and politicians did not see.

As to the informant from the Reporter News Paper (Amharic), their media house was not just reporting the statements of the Ministry of Foreign Affairs as is, but instead, they reported adding critical analysis. The informant said, *"When the Ministry of Foreign Affairs released a statement opposing the move of the Arab League, we didn't report by saying just 'Ethiopia opposed the Arab League,' but instead we identified the agenda in it and emphasized what could help Ethiopia."* Substantiating his explanation, I8 said that concerning the above statement, for instance, they reported by saying, *"Egyptians are using the Arab League, not the African Union, and the Ministry of Foreign Affairs expresses its acknowledgement to Africans who took a neutral stand in the Arab League and makes further calls and requests to these countries to isolate themselves from the position the Arab League takes."* As to the belief of I8, this approach helps Ethiopia gain diplomatic leverage.

However, informants from regulatory organizations criticized the efforts of the media in covering the issues of the Abbay-Nile River Basin in general and the Grand Ethiopian Renaissance Dam in particular. For instance, I2, from the Ministry of Water and Energy, said that the media lacked continuity, issue plurality, consistency, and development. He further explained that media coverage was limited to countering Egypt's claim, the construction performance of the Grand Ethiopian Renaissance Dam, and resource mobilization for the construction of the dam. This explanation begged for the fact that hydro-communication on transboundary river basins could be about water-related problems (UN Water, 2013), water regime elements, water policy, information management (Raadgever et al., 2008), cooperation benefit assessments (Willner, 2006), and future potentials.

Acknowledging this limitation and recalling the effort exerted to establish a communication strategy so as to make communication on the Abbay-Nile River Basin in general and the Grand Ethiopian Renaissance Dam in particular consistent, continuous, and progressive, I4, from the Ministry of Foreign Affairs, said the following:

There was a GERD communication strategy designed showing who (Office of the Prime Minister, Ministry of Foreign Affairs, Ministry of Water and Energy, GERD Fundraising, and GERD project office) should do what and when. However, for no clear reason, the strategy was never translated into practice. So, communication on GERD is haphazard. Anyone says anything, but too many do not like to say a word to avoid uncertainty. People are afraid of expressing ideas on it.

I12 shared the view of I4 by saying many people are not ready to take water politics as knowledge of any other kind than perceiving it as a sensitive issue.

What I4 said above is consistent with the argument that communication on transboundary river basins should be planned and designed considering a multidisciplinary and intersectoral approach, the target audience, content that needs to be developed for those specific target audiences, the way the message

will be delivered, and the time when the message will be delivered (Willner, 2006). Besides the hydro-communication of stakeholders from their own setting, hydro-communication instances of stakeholders through establishing a forum to come together to produce knowledge that enhances sustainable management of the Abbay-Nile River Basin were witnessed. In other words, there were practices of what Stein and Edwards termed “Multi-Stakeholder Process Approach” (Steins & Edwards, 2009), Warner called “space for change” (Warner, 2006), and Pahl-Wostl et al., 2007 called “social learning” (Pahl-Wostl et al., 2007) in water resource management concerning the Abbay-Nile River Basin. The five domestic and two basin-wide forums to which participant observations were made were indicative of this effort. “Multi-Stakeholder Process Approach” or “space for change” is a setting and situation in which stakeholders come together and share their knowledge and views so that shared knowledge gets constructed.

The first forum was the ‘Equitable and Reasonable Water Utilization of the Nile’ forum held at Sheraton Hotel, Addis Ababa, in the first week of September 2022. It was organized by the Ministry of Foreign Affairs and aimed at conducting a forum independent of sponsoring supranational organizations. In other words, Ethiopia took the initiative of bringing the stakeholders together. The forum was acknowledged as a good attempt at bringing stakeholders together to discuss the river basin issues. Scholars and experts from riparian states except Egypt participated. Renowned Ethiopians of the negotiating team members and Sudan presented papers for discussion. The whole discussion was about the need for cooperation to ensure equitable and reasonable utilization of the river basin.

However, there were three arguments reflected defending national interests with regard to the Abbay-Nile water resource. The first argument was presented by a participant from Sudan. He argued how number two of article five of the 1959 Egypt-Sudan bilateral agreement is problematic to implement. He posited, “*If Ethiopia’s share is 37 bcm, for instance, and the two states, Egypt and Sudan, should equally contribute, will Sudan give its whole share?*” This argument raised was referring to Sudan’s share in the 1959 bilateral agreement, which is 18.5 bcm. Number two of article five of the 1959 bilateral agreement states, “... *if the said consideration results in the acceptance of allotting an amount of the Nile water to one or the other of the said states, the accepted amount shall be deducted from the shares of the two Republics in equal parts, as calculated at Aswan*” (United Nations, 1963). A Tanzanian participant, on his part, argued that riparian states were not well represented in the forum. He said, “*This way, where many riparian states are not well represented, it is difficult to secure cooperation.*” The organizer of the forum reacted that all riparian states were informed to attend. The third argument that tried to defend national interest was the argument raised against the discussion made by one presented that the down riparian states intended to get the annual rainfall Ethiopia receives considered as part of the water share. A water resource senior researcher and lecturer from Addis Ababa University, Ethiopia, argued against this by saying, “*Thinking something uncontrollable (annual rainfall Ethiopia receives) to be part of the basin is ridiculous.*” The three arguments were consonant with the notion of two-level games theory of Putnam, who posited that when there are issues, different states make dialogue on and interact; states simultaneously engage in two-level interactions (games): domestic and international, and in the latter, states work to get national interest to win a space (Putnam, 1988). Hence, the specific outcome of this forum was defending national interest.

The ‘Abbay International Water Conference’ (two-day conference) held at Bahir Dar University, Bahir Dar, on 17-18 September 2022 was just academic. Participants of the conference were drawn from different public universities in Ethiopia. During the opening of the conference, a presentation about the conference and two papers on the three I’s (information, infrastructure, and institution) and a general overview of the Abbay-Nile River Basin were presented by a renowned scholar from Addis Ababa University. Information refers to collaboratively generated ideas, information, and knowledge with regard to the river basin, and infrastructure refers to investments to use the basin. Institution is about developing and strengthening legal policies and proclamations with regard to how the basin is taken care of. The combined implementation of these three I’s was discussed as crucial to ensure sustainable management of the basin. Following the presentations, a brief discussion was made, and different issues were raised. The two most important were the lack of consistent information, including figures regarding the basin to use as research input, and the lack of exerting effort to construct Ethiopia’s discourse instead of wasting time discussing how Egypt was and is wrong. Then, the conference got kicked off in different

parallel sessions under two major themes: Integrated Watershed Management and Water Governance. The first theme alone was conducted in two parallel sessions, which implies that one session was not able to attend the other. The second theme was conducted in a session, and one learns about the other.

The scope of all the 26 research papers presented under the first theme focused on Ethiopia. The reason for this was the fact that watershed management is treated on a small scale. This large number of papers discussing watershed management implies a lot was being done. However, 11 (eleven) of the 13 (thirteen) papers presented under the theme 'Water Governance' focused on basin-wide issues, and they were, by and large, arguments about how the 1959 Egypt-Sudan bilateral agreement and Egypt's move were wrong. Even there was a paper arguing against the tripartite negotiation going on between Ethiopia, Egypt, and Sudan, considering that the tripartite negotiation is an escape from basin-wide cooperation and could not be long-lasting and fruitful. Conversely, the need to avoid using the name Blue Nile and Nile to refer to 'Abbay,' Ethiopia's water resource that provides more than half of the Nile water, was raised. The very reason behind this argument was that the name Blue Nile or Nile is not Ethiopian and obscures the fact that Ethiopia provides much of the Nile water on one hand and communication to the population of Ethiopia on the other hand. The instance was consonant with constructivism in the sense that knowledge and meaning are generated and constructed from interactions or communication with others (Creswell, 2013). It was also in support of the argument that stakeholders in water resources perceive the same resource management problem and realize their interdependence for solving it (Warner, 2006).

The conference in general was consistent with a reactive phase strategy to resisting continuation of hydro-hegemony and creating a level playing field for transboundary water utilization (Cascão, 2009), but three points were raised as points of concern. The first was the absence of regulatory organization and media as stakeholders. Second, the social and economic dimensions of the basin were hardly touched. Third, there was no media coverage of the event, which implies that the general public as a stakeholder did not get a chance to be informed of the development on the Abbay-Nile River Basin in this particular instance.

The 'Water, Hydro-Diplomacy, and Communication Forum' is a regularly staged forum run under the auspices of the Ministry of Water and Energy. It aims at influencing communication and diplomacy on the Abbay-Nile River Basin by bringing stakeholders from different water and energy offices and higher education institutions so that what Cascão called ideational power (Cascão, 2009) of Ethiopia improves. Ideational power is improved through generating and sharing knowledge concerning the river basin. It is through this that ideas that could influence bargaining power could be generated. Raising awareness and constructing an alternative reality is the expected outcome. When this forum was held at Adama Science and Technology University in December 2022, five research papers were presented. Three of the papers focused on transboundary issues, and only two of the papers focused on Ethiopia vis-à-vis the Abbay-Nile River Basin. One paper examined how communication on the basin came to this stage, the stage where Ethiopia's voice came to be heard better relative to the past long time, and the other was about practices and challenges of Ethiopia's digital diplomacy on the Grand Ethiopian Renaissance Dam. Participants of this forum were selected from the university community, renowned figures from the Ministry of Foreign Affairs, scholars from Addis Ababa and Arba Minch Universities, and officials of the Ministry of Water and Energy. Here, a participant from the Institute of Foreign Affairs, Ministry of Foreign Affairs, argued, "*We have to think of creating our own alternative realities on the basis rather than wasting our time blaming the 1959 Egypt-Sudan bilateral agreement and Egypt's move.*" This argument was consonant with the quest for a transition from the reactive phase, during which non-hegemony resist and contest the status quo of hegemony on a transboundary river basin, to the active phase, during which non-hegemony start building an alternative regime of utilizing a transboundary river basin (Atwan, 2018). It also was consonant with constructivism in the sense that knowledge and meaning are generated and constructed from interactions or communication with others (Creswell, 2013), and stakeholders in water resources perceive the same resource management problem and realize their interdependence for solving it (Warner, 2006).

A lot of mass media practitioners were part of this forum, but they were limited to reporting what was said in the conference. This forum was given huge media coverage.

The fourth forum to which participant observation was made was the forum under the theme 'National Water Resource Utilization and National Security: GERD in Focus.' It was held in Addis Ababa in February 2023, and the participants were mainly from the security sector, including police, defense force, and intelligence. Officials from the Ministry of Foreign Affairs and some members of the negotiating team were also participants. The presenter, chief negotiating member, said that Egypt's intention in the negotiation is to make sure that Ethiopia does not utilize the water resource of the Abbay-Nile found above the Grand Ethiopian Renaissance Dam. The presentation and discussion were said to be enlightening as it gave the security sector an additional new perspective to look into. This implies that the forum played its role in enhancing ideational power.

'Lessons Learned from the Negotiation on the Grand Ethiopian Renaissance Dam' forum was the fifth forum observed. It was held at Skylight Hotel, Addis Ababa, in March 2023, and was the other 'space for change' forum. Former ministers of the Ministry of Water and Irrigation, veteran negotiators, and officials from regulatory organizations attended. However, it is difficult to say the forum served its purpose as the presentations focused on the features of the Grand Ethiopian Renaissance Dam and the interest of Egypt rather than lessons learned from the negotiations. Given the fact that the papers were presented to those who were familiar with the concepts presented, it seemed what I7, an informant from Fana Broadcasting Corporate, said was "*evangelizing the evangelized*." There was no such experience sharing except the mention of different encounters experienced here and there. Only I4 and the former minister of the Ministry of Water, Irrigation, and Energy tried to share the time pressure they experienced as a challenge. Given the presentations and the participants of the forum, it is possible to say that lessons learned were not presented in an organized manner and in the manner the coming generation could learn from. However, it was said that the ups and downs passed through should be well documented in the form of a documentary as a basis for ideational power. Complaining about the forum, I4 (participant of the forum) during the interview said:

Ministries themselves lack openness between them. For instance, there was a panel to discuss lessons learned from a decade-long negotiation, but unnecessarily non-relevant papers were presented instead of openly discussing the weaknesses and strengths experienced in the decade-long negotiation.

The other space for change was the forum held at Addis Ababa Science and Technology University in April 2023. It was the 8th 'Water, Hydro-Diplomacy, and Communication' Forum for which participants were drawn from Adama Science and Technology University, officials from the Ministry of Water and Energy, chief negotiators from different institutions (such as the Ministry of Foreign Affairs, the Ministry of Water and Energy, and Addis Ababa University), and senior journalists from different media houses. Three research papers and one outreach program proposal were presented. One of the papers presented was from the natural science field, whereas the other two were communication ones, namely, strategic communication on GERD and stakeholder communication on the Abbay-Nile River Basin. Unlike in other 'Water, Hydro-Diplomacy, and Communication' forums, participants from the media actively participated in this forum, and a participant from the Ethiopian Broadcast Corporation strongly expressed the lack of integration among stakeholders of the Abbay-Nile River Basin. Lack of willingness, readiness, and systems are the major barriers to this. He also said, "*It is difficult to get information from the concerned body*." Another participant from the same media said, "*Important diplomatic influence was made through digital media, and communication research papers presented here should have included this*." The need to be consistent in discourse and narrative creation was strongly recommended. The need to ensure internal stability to utilize the basin was also strongly mentioned.

The outreach program proposal was presented as part of the mission of the 'Water, Hydro-Diplomacy, and Communication' Forum. It aimed to raise awareness among high school students about water resources in general and the Abbay-Nile River Basin in particular. Everyone appreciated the initiative of the Ministry of Water and Energy to do this. This is an attempt to apply extended social learning, which, according to Pahl-Wostle et al., refers to learning about water issues through relating it to backgrounds and experiences (Pahl-Wostl et al., 2007). However, due to lack of attention and manpower, the program was not progressing very much.

The 'Water, Hydro-Diplomacy, and Communication Forum' received criticism for being just another

version of an academic forum. For instance, mentioning the bulletin it published in English and the technical papers presented regularly, I4 said, “*The forum is nothing more than being a replica of an academic forum.*” In addition to this, learning that the discussions made were simply a repetition of what we already know because there were different new participants, participants suggested the need to make the forum two layers: one working on forming an alternative reality and another working on creating and raising awareness. Nevertheless, it continued as it was.

The other ‘space for change’ was the “Policy Dialogue” organized by the Institute of Foreign Affairs on 25 November, 2023. Scholars drawn from different higher education institutions, members of the negotiating team, and participants from the Ministry of Water and Energy and Ministry of Foreign Affairs participated. The dialogue took place under the theme “Building Resilience through Ecosystem Services Payment: A Roadmap for the Nile River Basin.” Three interrelated papers that emphasized the importance of considering payment for ecosystem service for sustainable solutions to Abbay-Nile problems were presented. “The existing international water laws, by and large, are in favor of ‘first developers’” was mentioned as justification by presenters for bringing up this issue to “policy dialogue.”

It was indicated that this issue (Ecosystem Services Payment) with utmost care would be part of the agenda in the upcoming negotiations. Hence, this event could be taken as enhancing both ideational and bargaining power in the negotiation. This is the new reactive phase strategy of Ethiopia, and it is equivalent to what is labeled as contesting the existing hydro-hegemony and status quo and enhancing the creation of a level playing field (Cascão, 2009) for equitable and reasonable utilization of the Abbay-Nile River Basin. This move was also consonant with two-level games theory, which argues that when there are issues, different states make interactions on them. States simultaneously have two-level interactions called domestic and international, where the formation and crystallization of national interest is made in the former, and this concern is communicated in the latter (Putnam, 1988). The move was also in line with the argument that communication of stakeholders on transboundary river basins helps decision-makers to make functional, logical, and rational decisions at the heart of the delicate cooperation between governments in transboundary water management issues (Willner, 2006).

The eighth observed forum was the ‘Water, Hydro-Diplomacy, and Communication Forum’ held at Addis Ababa University in February 2024. Three issues, such as the ecosystem service payment system (presented for the second time), the relation between power and transboundary water political economy, and the rationale for Ethiopia to request access to the sea (it was a hot issue during this time), were presented. Compared to the previous one, this forum this time did not have many participants, and it was relatively passive.

The 3rd Annual Forum for Regional Integration and Reasonable Utilization of the Nile (Afri-run III) was held in Skylight Hotel Addis Ababa on June 15, 2024, with the theme “Shared Resources for Shared Future and Prosperity: Cooperation and Regional Integration through Equitable and Reasonable Utilization of the Nile.” It was the ninth forum to which participant observation was made. More than ten panelists presented papers in three sessions. Six of the panelists were from riparian states of the Abbay-Nile River Basin. Egypt was not represented in this forum. Contents were diverse, ranging from natural science to social science. Participants were also from different sectors. What was particularly different in this forum was the presentation of the electric power generation of the Grand Ethiopian Renaissance Dam and the consumption and selling scheme, which was in action. This presentation made by a panelist from Ethiopian Electric Utility was referring to what was on the ground, not theoretical assumptions.

Integrated hydro-communication of Abbay-Nile River Basin stakeholders in Ethiopia in both settings was not to the level expected for different challenges it faced. For example, the unwillingness of politicians to apply plans made by experts was mentioned as a problem of integration. I4, from regulatory organizations, said:

The government does not follow master plans that show priority and logical order to projects, and it simply implements what it likes. For instance, the ‘Beles’ hydropower project takes water from Tana Lake, and there is the 64 thousand hectares upper ‘Beles’ Irrigation below it. Nonetheless, ‘Beles’ energy generation was constructed without paying the required attention

to the beneficiaries of Lake Tana and how water could pass from the turbine to the upper Beles irrigation (no construction that reaches water to the irrigation). This created a problem and required other construction, other costs, etc.

I7, from the mass media house, on his part, said:

It is difficult to say integrated hydro-communication of stakeholders in Ethiopia is able to form Ethiopia's national interest on the river basin. There is no such strategic communication that could bring stakeholders together and work on constructing narratives except simply giving information to the media and working with other stakeholders when demand comes. There is a lack of maintaining sustainability in working together as well.

I9, from higher education institutions, noted issues such as duplication of research efforts, lack of identifying what is done and what is not, and lack of brevity to openly claim Ethiopia's national interest as results of lack of integrated hydro-communication. Besides, I9 argued:

Basin management demands an integrated approach, and different stakeholders should be part and parcel. However, it does not seem it is practiced in our case. For instance, the completion of GERD will bring about tourism, fishery, recreation, and other economic activities, to which a system enabling this work in an integrated manner is needed, but it does not seem work is being done in this regard.

4 CONCLUSION AND RECOMMENDATION

Hydro-communication of Abbay-Nile River Basin stakeholders in Ethiopia was more or less participatory and played an important role in knowledge production and dissemination in particular and enhancing ideational power in general. However, it was limited to showing how Egypt's long-standing hegemony over the basin is wrong and anachronistic on one hand and justifying the measure Ethiopia has taken to construct the Grand Ethiopian Renaissance Dam, a publicly funded hydroelectric dam, on the Abbay-Nile River Basin on the other hand. In other words, for the lack of integrated hydro-communication that would entertain diverse issues such as water-related problems, water regime elements, water policy, information management and financing systems, cooperation benefit assessments, and future potentials, it was not to the level of constructing an alternative reality or a full application of constructivism. As a result, hydro-communication of Abbay-Nile River Basin stakeholders was not to the level of impacting regional dialogue. In other words, two-level games theory was not found practical. Hence, integrated hydro-communication of Abbay-Nile River Basin stakeholders in Ethiopia has not yet reached a stage where it impacts forming and crystalizing national interest on a river basin, ensuring equitable and reasonable utilization of a river basin, or meeting the needs of the present generation without compromising the ability of the next generations to meet their own needs in utilizing a river basin. Lack of willingness and a system that implements integrated hydro-communication of Abbay-Nile River Basin stakeholders in Ethiopia were the reasons for this. In order to get integrated hydro-communication at its best, stakeholders need to come together and set a communication strategy that recognizes and acknowledges their interdependence and entertains diverse issues of the river basin, focusing on co-production and dissemination of knowledge to the public at different levels and occupations. Journalists should be very well-trained, specializing in transboundary water issue reporting so that consistent and strategic reporting happens.

5 CONFLICT OF INTEREST STATEMENT

No conflict of interest was reported.

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