Journal of South Asian Research
Vol. 2, No. 1, 2024, pp. 87-102

URL: www.arfjournals.com
https://DOI:10.47509/JSAR.2024.v02i01.05

UNVEILING THE POLITICAL ECONOMY OF WATER COMMODIFICATION: A CASE STUDY OF MARKETIZATION IN NORTHWEST BANGLADESH

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Abstract: Water is a basic resource that everyone needs, but it is becoming more and more dependent on market forces, which presents important questions about access, equity, and governance. This study explores the political economics of water commodification in Northwest Bangladesh, where resource competition and scarcity are significant factors that are changing socioeconomic environments and power structures. With the use of qualitative research method and multidisciplinary viewpoints, the researchers offer a comprehensive study that goes beyond traditional frameworks to clarify the complex aspects of water marketization. The authors examine the experiences of communities coping with the commercialization of water by drawing on extensive research carried out in the communities of Niamatpur Upazila in Naogaon district and of Nachol Upazila in Chapainawabganj district. The researchers draw attention to the intricate power dynamics that underpin water markets and emphasize the impact of local elites, governmental organizations, and agribusinesses on the availability and management of water resources.

Through a critical analysis of water commodification process in Northwest Bangladesh, this research adds to the growing body of knowledge on the political economy of water and development.

Keywords: Water, Commodification, Marketization.

Received : 28 March 2024
Revised : 18 April 2024
Accepted : 05 May 2024
Published : 30 June 2024

TO CITE THIS ARTICLE:

Sazzadul Bari, Muhammad Mahmudur Rahman & James Soren (2024). Unveiling the Political Economy of Water Commodification: A Case Study of Marketization in Northwest Bangladesh, *Journal of South Asian Research,* 2: 1, pp. 87-102.

Introduction

Water is a basic resource that is essential to life and development, but it is also becoming more and more an issue of market dynamics, which raises important issues of governance, equity, and access. In areas such as Northwest Bangladesh, where resource rivalry and shortage of water are severe, commodification has become more prevalent and has reshaped power dynamics and socio-economic environments. This essay explores the complex interplay of variables that propel the commercialization of water in Northwest Bangladesh, elucidating its political economy and consequences for nearby people as well as more general development frameworks. Based on qualitative research method and interdisciplinary viewpoints, we offer a sophisticated analysis that transcends traditional frameworks to clarify the complex aspects of water marketization.

The interplay of market forces, socio-cultural dynamics, and governmental policies influencing water availability and distribution is at the center of our investigation. We place the current trends of privatization and commercialization within larger processes of globalization and state restructuring by looking at the historical trajectory of water governance in Bangladesh and how it changed under neoliberal reforms. We investigate in our in-depth field work, the experiences of communities in Northwest Bangladesh, especially in Nachol upazila of Chapainawabganj district and in Niamatpur Upazila of Naogaon district struggling with the commodification of water. We examine the complex power relationships that underlie water markets, emphasizing the influence of entities like governmental institutions, local elites, and agribusinesses on who has access to and control over water resources.

Additionally, we examine how the commodification of water affects marginalized people, especially landless peasants and smallholder farmers who frequently suffer the consequences of market-driven policies. The authors tried to clarify the unequal distributional effects of commercialized water systems and its implications for environmental sustainability and socioeconomic fairness by elevating their voices and experiences. This essay adds to broader discussions on the political economy of water and the contested terrain of development in the Global South by providing a critical examination of water commodification in Northwest Bangladesh. The researchers would like to provide guidance for policy interventions and grassroots mobilizations that support more equitable and sustainable water governance models by dissecting the socio-political factors that drive marketization processes.

2. Literature Review

Water has attracted a lot of interest in the field of political economy since it is a basic resource that is necessary for human existence and socioeconomic development. This is especially true given its commercialization and the resulting socio-political ramifications. This survey of the literature provides a theoretical and empirical framework for comprehending the processes at work in the context of Northwest Bangladesh by synthesizing important findings from the body of research on water commodification. Water commodification is a process that reflects changes in state-market interactions and governance paradigms. It interacts with broader tendencies of neoliberal globalization and market-oriented reforms (Harvey, 2005; Swyngedouw, 2009). The rise of market processes in water management has been made possible by neoliberal beliefs and practices, which have resulted in privatization, commercialization, and the consideration of water as a traded commodity rather than a public good (Bakker, 2010; Loftus et al., 2016).

The unequal distributional effects of water commodification have been highlighted by critical political economists, especially in the Global South (Bakker, 2003; Loftus et al., 2016). Market-based changes frequently worsen access to and control over water, disproportionately impacting marginalized groups, rural residents, and the impoverished in urban areas. The results of water governance changes are shaped by power dynamics, entrenched interests, and historical legacies, which maintain socioeconomic inequality that already exists (Bakker, 2010; Swyngedouw, 2009). The perspective of political ecology highlights the relationship between the commodification of water and wider changes in the socio-ecological system (Zimmerer & Bassett, 2003; Bakker, 2003). Since land use change, intensification of agriculture, and environmental degradation are all closely related to water marketization, comprehensive and multidisciplinary approaches to water governance are needed.

In a variety of settings, empirical research has shed light on the specific experiences and effects of water commodification (Budds, 2004; Bakker, 2007). Case studies from South Africa and Bolivia, for example, highlight the significance of community-based alternatives and grassroots mobilizations by documenting social challenges, conflicts, and resistance movements resulting from water privatization and marketization activities. In this environment of severe water scarcity and rural livelihoods, our study investigates the political economy of water commodification in Northwest Bangladesh. Through the use of a case study methodology, the investigators

hope to shed light on the intricate interactions between market forces, state regulations, and sociocultural elements that shape water governance in the area and add to the growing conversation about water commodification and its effects on sustainable and equitable development.

3. Findings and Discussions

3.1. The Period before the Development of Authorities' Dominance of Price Value of Water

Based on the interpretation of the collected data and further discussion with a number of selected respondents, the present investigation has identified form stages of marketization of water. The type of ownership dominance in water governance or management has been taken into consideration here. Considering the most active driving factors related with the prevailing water governance system centered on the agricultural production and the type of ownership of the production material in the investigated society form historical stages of development of marketization of water is presented below.

3.2. Social Management of Water

The investigators refer to the period before the introduction of permanent settlement of 1793 imposed by the British colonial ruler. Management of water was society controlled during that period. This social management of water broke down after the imposition of permanent settlement and a feudal class developed to serve the colonial rule. The society was sharply divided into Zamindar (land lord) and subjects (common man). Social management of water is an old system, which can be characterized as follows:

- Plenty of water was available in nature from spontaneous sources.
- All sources of water were under social control.
- Absence of private ownership of sources of water.
- Free access for all to the sources of water.
- Presence of joint ownership and group-based production.

3.2. a). Management of Free Water

Before the introduction of Barind Multipurpose Development Authority (BMDA) in 1982 and set up of deep tubewells in this locality water was free from any imposition of price. People did not think of any price to pay for

using any source water. They could collect water from any source without any opposition from anybody. The people had no idea of making financial going by making water a commodity of trade.

3.2.(b). Water from Plenty to Paucity

There was plenty of water available in this locality and water was not regarded as a commodity of trade. But with the courses of time the growth of the population also continues to rise. To feed the growing population production of more foods become necessary. So, more water was needed for the surplus agricultural production. The balance between the growing productions system and the prevailing water management system was being lost. The correlation between the two system was apparently lost. Under the changing circumstance the system of marketization of water come the fore fronts.

3.2.(c) Social Ownership of Water Sources

Before the introduction mechanization of water, the social control of water sources was force. During that time some water sources were owned by some individual but the feeling of ownership was not apparent. Everybody had free access to the water sources.

3.2.(d) Permission for Access to Water Sources was not Necessary

Consent to have access to the water source was not necessary from the owner of the water source. The owner as well the user did not even think about such formality of seeking permission to use the water source. Although the water sources belonged to some individual, The ownership consciousness was almost absent and all people had social right to have free access to any water source. As this was the social order, any permission for access to any water source was out of question. All the drinking water sources were free for everybody, no matter who owned this source.

3.2.(e) Old System of Water Management and Irrigation

There existed the old system of water governance during pre-mechanization of water. The farmers were dependent upon the rainfall to irrigate their crop land. Rainfall was regular and timely as the climate condition was congenial for it in the past. So, the peasants did not feel the need for additional and extra irrigation. As this natural source of water was plentiful, they did not have any idea of purchasing water for irrigation and their agricultural activation were adjusted with monsoonal and extra monsoonal rainfall.

3.2. (f).Application of Indigenous Knowledge on Climate

The people of pre-mechanization days used their indigenous knowledge to forecast the weather condition. They have to depend upon the rainfall for their agricultural production. They could ascertain the possibility of rainfall by observing the color position of the cloud in the sky. Depending on the possibility of cultivation. The respondents informed that the peasant used to preserve rainwater in water holes previously dug at a suitable place of their crop land so that water could be lifted from this hole to irrigate the crop field in need. Their water holes were found to retain water throughout the whole year.

3.2.(g) Well- the Main Source of Drinking Water

The principal source of drinking water for all families of the investigated locality were the wells or the ground wells which remained operative till the introduction of deep tube wells. People enjoyed free access to the village wells.

Rich people used to cover the space around the well with bricks and cement to make a permanent pavement. The mouth of the well was encircled by cemented ring well. The mediocre people are to encircle the well with bamboo fencing or fencing with banana plants. Generally, the well was very deep and water was available throughout the whole year. A bracket fastened with a long rope was always kept ready near the well to lift water by anybody. The people were careful in selecting a place for digging a well be save easy access to all. The society was conservative and the women used to observe Parda (curtain), special arrangement was made for the women to use the well where the man had no access, particularly at the time of taking bath.

3.2.(h) Joint Water Management

During the days before mechanization of water the wells were managed jointly by a family group. The entire clams group used the well jointly by the clams' man. Each large family group maintains a pond having joint equal ownership. Everybody had free access to their source of water. Water of sources under joint ownership was non marketable and used by everybody with amity.

3.2.(i) Cordial Relations on Water Issue

People of the locality always maintained cordial relationship on the use of water sources during the past year. Any conflict on this issue was completely absent and unthinkable to them. Everybody used to put priority to the availability of drinking water for all. The case of joint as corporate agricultural activities such conflict for was totally absent in the society. The common people had a

tendency to share their efforts to maintain fellow feeling and amity in their society.

3.2. (j) Ritual based Water Management

The people of the locality use to perform various rituals directly related to water. At the time of ritual, a young man is by the kinsman to the pavement of a large masonry well to bathe him with the water of well. During this performance of ritual only the relative with whom a frolicking relationship exists to play prank and marry jacking (with the bridegroom /sister-in-law, brother-in-law etc.) other important ritual were mass prayer for rain, Frog marriage etc. are still in vogue in this society.

3.2.(k) Social Vigilance

Days before the establishment of marketization of water social vigilance was in force to protect the water sources to make sure of the availability of drinking water unabated. Everybody remained careful about the safely and cleanliness of the drinking water sources. Dumping of any dirt in to the wells strictly prohibited. In case of any accidental death of domestic as ret animal by falling with the well. The well was partially or completely dewatered according to the suggestion of the local religious leaders. Big shed was established around well site and properly fenced bathing place were made for the Muslim women who practiced Parda (curtain).

3.3. Introduction to Lease System

As the productive labor centered on the usage of water continued to advance from the primitive society, the practical value of water became apparent. Alongside these socio-economic changes the concepts of private ownership of the water sources continue to grow in the society. The promulgation of permanent settlement by the British colonial rulers a land lord (Zaminder) clans had developed. These Zaminders became the master of the land for generation. The old land system broke down and a feudal land system had developed. Under this feudal land system, the Zaminders become the owner of the natural sources of water. Soon lease based ownership system evolved in place of social ownership system of water management.

Salient Features of Lease System

- The Zaminders acquired the ownership of both land and water sources.

- The Zaminders gave away the right of the water sources to the peasant in exchange of payment of taxes.
- The lease holders used to provide irrigation water in exchange of certain portion of the produced crops.
- Under the lease system some ponds were kept preserved as source of drinking water e. g *sarola dighi* of *Miah* Zamanders of of Nachol.
- The Zamanders provided opportunities for access to drinking water and collected taxes from the people.
- The old system of water management disappeared gradually at the advent of the lease system.

3.3.(a) Pond based Water Management

During the days before the mechanization of water the ponds of the locality were fully functional as the sources of water. Pond water was potable and also used for cooking food. The pond water was clean, transparent and free from any toxicity. Each pond had several wharfs (ghatt) on all sider used by women to clean utensils and wash. Fruit plant was grown on all sides of the ponds. In this investigated locality majority of the houses are mud built and each house possesses a pond which was dug to use the earth for making the houses. There are also family-owned ponds here. Pond water was also necessary for rearing domestic animals. The ponds were regarded as the only resort as water sources in this locality.

3.3.(b) Open Joint Agriculture

During those old days open joint cultivation was practiced. There was minimum inequity in having cultivable land among the peasants. They helped each other mutually during cultivation of their land. As water was not a commodity of trade and crop cultivation was rainfall dependent, everybody cherished apparently similar water needs.

3.3.(c) Joint Family

In the farm production system following the feudal system more agricultural laborer were needed, which helped the joint families to grow in number of their family members. During the days before mechanization of water, investment of agricultural farmhand laborer has come under agricultural practice through the joint families. The joint families grew in number of their family members to provide more man power in the agriculture farming sector. Although the wages of an agricultural farmland were financially to some extent.

3.3.(d) Unexpanded and Backward Capital in Agriculture

During the days immediately before the marketization of water the farm and characteristics the post-feudal capital in agriculture sector was backward and undeveloped. Because during that time profit based commercial agriculture for the expansion of capital wealth have not been conceptualized in this investigated locality on the hand the agricultural production was static to exactly fit the need of the peasant, and hence, there was no surplus agricultural production to help the growth of agro-based capital. The marketing system centered on Agriculture was backward.

3.3.(e) Backward Agricultural Production

There was minimum agricultural production during the post-feudal days. People had to depend on the rainfall to cultivate their land. If property rain fed the agricultural land could produce up to ten monds of paddy per bigha (33 decimal). Only one crop (paddy) was grown in a year in the crop field. In case of shared cultivation, the land owner gets half the crop.

3.3.(f) Uninhabited Field and Ponds of Niamatpur

The respondents informed that there was a big empty field without human habitation at Niamatpur upazila. The empty field belonged to the common people who used to cultivation paddy crop under the guidance of a central farm houses. The product was shared by everybody. There were some government owned large ponds around which habitation of the landless people have been established two years ago. People used to irrigate their crop field by nearly creek water. But some new ponds were dug here to facilitate irrigation. Before the commercialization of water management system was agro-based and social.

3.4. Technology Based Commercialization of Water

Under the feudal system of leasing out lands serious land ownership conflict between the Zaminders and the subjects broke out in the entire region. This land conflict ultimately culminated bloody mass upsurge of the Santal community under the leadership of socialist peasant leader Ila Mitra. The then Pakistan government promulgated law to abolish the Zaminder system. The land was recorded in the names of those people who cultivated it as under their possession. This governmental action helped in establishing right person on the land but also a concept of private ownership on the water bodies had developed in the entire gone including the investigated locality.

There was a severe drought in 1982 in whole Briand region. During that severe and prolonged drought, the crop production totally failed and the people had to face immense deification for drinking water in many areas. Under the circumstances the government of President H. M. Ershad decided to set up deep tube wells in the Barinda area. The government established Barind Multipurpose Development Authority (BMDA) to undertake the deep tube well project in the Barinda Zone. Nachol in the investigated locality shared to get deep tube well on payment of water change. The investigators term this arrangement as technology-based commercialization of water. The respondents hold the view that this is an intrusion of the modern technology which converted the practical value of water into commodity of trade under a new exchange system.

Salient features of the Technology based marketization system

- A new chapter of mechanization has started with the introduction to water related technology.
- The owner of the technology became the controlling authority water management.
- The owner of technology became the authority to fix the water rates.
- People became compelled to purchase water from the technology owners.
- Accessary martial (electricity, fuel, spare parts etc.) became essential.
- There was spontaneous certain of some new profession under the water management system.
- The co-existence eroding social system and the new system of water management was perceptible.

3.4.1. Beginning of the Water Trade

Water has become a salable commodity to meet various need of the people of this locality. The observed reasons for the marketization of water are narrated below.

(a) Water for existence: The agricultural production in this locality is rain water dependent. But in this semi-arid and drought prone area rainfall was irrigates and insufficient. In every drought period the agricultural crop specially the *Amon* Paddy totally or partially failed. The most necessary food need of the people was under constant Threat. Under the circumstances the people had to look for an alternative source of irrigation water.

(b) Historical reason – drought and crop safety: During the prolonged drought of 1982 the standing agro-crops in the field were burnt and laid waste. The wailing and utterly distressed peasant were looking for water with desperation. All communities continued to pray according to their own religions' rituals throughout the whole rainless year. Under the circumstances the peasantry had to find a new alternative and dependable source of water.

(c) Aridness and soil fertility: Due to prolonged drought the soil fertility continued to decline. Many fertile crops land become hard and dry and the engine land cracked. During this time the peasants heard about the establishment of deep tube wells in their region and they become hopeful the availability of irrigation water from this dependable source.

(d) Commercial agriculture (commercial farming): In the past peasants used to cultivate their land to meet their family need only. They did not think about surplus production. But with the introduction of agriculture marketing the peasants started to produce more paddy on commercial basis. They were capable of marketization their surplus production easily. Agricultural production became diversified as peasants began to produce not only the cereal but also summer and winter vegetable. This expansion of agriculture needed more water and consequently. The peasants turned to the deep tube wells as dependable source of water.

(e) Need for IRRI cultivation: Cultivation of IRRI variety of rice was started in the adjacent region. But due to undulated and untrimmed nature of topography in the investigated locality the peasants were not to go for IRRI cultivation. But due to pressure of the growth of population and to keep up with the process of the growing marketization the peasants had to lean laurels IRRI cultivation. More over IRRI cultivation gained ground in their areas of the Northern zone. These factors encouraged the peasants to start IRRI cultivation in this locality. So, the intrusion of the culture of IRRI cultivation enhanced the need of mechanized water here.

(f) Loan from relations: The relatives were more important as a source of agro-loan. Peasant would go to their rich relatives to receive this agro-loan to be paid back with or without any interest after the harvest. But in majority of the cases there is imposed unwritten give interest for the loan money. The borrower gives paddy at pre-determined price to the loan giver as the borrower pays off in kind.

2. From friends and money-lender: The needs peasants used to borrow agree-loan from personal friends and also from money-lenders. But the money-lenders imposed interest at certain rates.

3. Trades of agricultural essentials: The peasants also borrowed loan money from some trades with condition that the loan is be repaid in kind. The money lender perhaps the standing crop before the harvest. As for example the fertilizer trader sells fertilizer on credit to the ready peasant.

4. Institutional loan or loan from corporate bodies: Agriculture loan is available from the agricultural development bank or from some non-governmental development organizations located in this area. The borrower has to repay the loan money along with its interest within a given time. Sometimes the peasants faced extreme thought to pay the irrigation water changes after repaying the bank loan or that from the corporate bodies.

3.4.2. Sale of Land, Domestic Animals and Valuable House hold Articles

In nineteen eighties the severe and prolonged drought completely damaged the standing crop in the field and the people of the locality and adjacent area had to face immense financial trouble. Hardship was painful and the peasants had to sell out their landed property at a very cheap praise to repay the agriculture loan and also to meet their family expenditure. During this hard time some businessman and rich man from the adjacent Nachol area who purchased most of the domestic animals from the peasants of this locality. In same case the peasants had to sell out gold ornaments of the women members of the family.

3.4.3. Introduction of Technology

Barind Multipurpose Development Authority (BMDA)

The people of the area failed to find a way to get rid of this perpetual hardship caused by nature they moved to local and zonal public representatives to work for a permanent solution of this problem. Due to continuous efforts and persuasion of the public representative the BMDA setup deep tube well with public financial collaboration in this locality. The new technology-based lifting of underground water by deep tube well was first introduced in Nachol in 1982, to meet the need of irrigation water. The deep tube well authority introduced serial system for the peasants to get irrigation water. The peasant had to pay water change at a fixed rate. Thus water has become the commodity of trade with the introduction of technology in agriculture.

3.4.4. Marketization of Irrigation Water

The recipient peasant had to obtain pre-paid cards from the deep tubewell authority they had to maintain serial for receiving irrigation water change from deep-operator who used to realize the water change at a prefixed rate

and adjusted the pre-paid card of the recipient. Within short period the BMDA established eight deep tubewell in the locality to bring the entire area under irrigation. This system gave to the merechandization of water in this zone.

3.4.5. Share Cultivation and Paid Irrigation System

Most of the people of this locality are engaged in shared cultivation and they had to pay five or six *mon*s of paddy per year to the land owner. This amount off paddy is paid as land rent. After the coproduction of deep tube well the share cultivations had to purchase irrigation water to raise the crop production. The land owners do not pay any water charge. As such the share cultivator had to pay more attention to raise the production for his own interest.

3.4.6. Deep tubewell intra-structure development on peoples expresses

The people had to bear the expenditure to setup deep tube wells by the BMDA. The area of crop land under the jurisdiction of a deep tube well to irrigate is generally two hundred bighas or 66 acres. The land owners or the peasants under this irrigation area had to pay to bear the expenditure for infrastructure development and setup of the deep tube well. The peasants had to bear the expenditure for irrigation water supply lines also. In case of any break down of the deep tube well machinery the peasants shall have to bear the expenditure for the purchase of spare parts.

3.4.7. Ineffectiveness of Old System of Water Management

During the present years the rainfall patterns has undergone a perceptible dealing change. This semiarid drought prone zone has been experiencing a change probably due to climate change. Drought has become a regular feature over the past year. As a result the rain water dependent agriculture has been suffering a serious setback every year. Due to insufficient rainfall over the year the creek and ponds in the locality remained almost empty and the rainfall dependent irrigation become irrigative and shattered generally.

3.4.8. Loss of Interest on Well Water

Science long time the wells and draw wells were the principal sources of drinking water in the locality. But the people lost their interest on well water due to repeated radio and TV publicity against the well water. People come to know through the media that well water is not good for health and anybody may be victim of water borne disease. This publicity gave rise to a new public notion on well water as a drinking water. The people started to find on alternative source of drinking water.

3.4.9. Initiation of Hand Tubewell

Under the circumstances people turned to hand tube wells. The Nachol first initiated the setup of hand tube wells. The media publicity about the safely and usefulness of hand tube well popularized it in no time. The BTV and Rajshahi radio station rendered service to this effect. Use of hand tube well as a reliable source of drinking water speeded over the area. During that time the presence of a hand tube well was considered as a mark of good financial condition of the owner.

3.4.10. Environmental Change-decline of Underground Water Level

Use of deep tube well water for irrigation and use of hand tube well for drinking water have become popular. The use of surface water has become neglected with the increase in the use of underground water. Withdrawal of underground water by deep tube wells continued incessantly resulting in the decline of the underground water level.

3.4.11. Introduction of New Technology and Marketization of Water

Against this back drop of eroding changes in the social water management system and introduction of the technology-based water management system the investment of capital crept into the water merechandization process. After the severe drought of 1982 the government establish BMDA to provide irrigation water in the area by setting up of a large number of tube wells. The peasant of the area had to bear the expenses to set up deep tube wells. Thus, by using the small capitals of the peasants a technology-based water management system has evolved. The wells as source drinking water become ineffective people turned to deep tube wells both for irrigation and drinking water. Alongside hand tube wells continued to function at Nachol Upazila which have been introduced earlier. At this time the value of water in term of money has become apparent. Top water supply system was introduced to provide drinking water to each house of Nachol on payment of water charges. After the settlement of villages in Niamatpur, before some years, the inhabitants collected their drinking water from the pond. Which was turbid and unhygienic. The inhabitants in collaboration with the local Union Parishad set up hand tube well in the village. The public representatives also played active role in this issue. In past few years two deep tube wells have been established in this village to supply irrigation in the crop fields on payment of water changes at a fixed rate, of these two deep tubewells one is privately owned, during the establishment of which the public representatives raised objection against it on

political grounds. Because they can use their influence in case of government controlled deep tube well installation which would increase their political popularity. The respondents from Nachol held that due to the unavailability of enough water, stressed agriculture food crisis and rapid population growth have led to the intrusion of the technology-based water management system in this region. Alongside this system merechandization of water has begun. Many rich men of the locality set up private mini-deep tube well to supply water in exchange of money.

4. Conclusion

In Conclusion, our investigation into the political economy of water commodification in Northwest Bangladesh has illuminated the intricate interactions between government regulations, market forces, and sociocultural elements influencing water governance in the area. We have revealed the complex nature of water marketization and its ramifications for local communities and larger development objectives by a thorough examination of historical trajectories, current trends, and localized experiences. The commercialization of water is mostly driven by power relations and institutional structures, as our findings demonstrate. State-led neoliberal reforms have enabled the growth of market processes and corporate interests in the management of water resources. The aforementioned process has resulted in various socio-economic and environmental ramifications, intensifying disparities and susceptibilities among disadvantaged populations while sustaining unsustainable water resource extraction.

In addition, our analysis has brought attention to the contentious character of water commodification, with conflicting interests and viewpoints influencing policy discussions and execution procedures. Proponents of market-based approaches to resource allocation contend that they are efficient and successful; detractors, on the other hand, draw attention to the social inequalities and ecological damages that come with commercializing a basic human need. Crucially, our work has highlighted local communities' agency and resistance in navigating and opposing the effects of water commercialization. There is a wide range of tactics and programs aimed at regaining control over water resources and advancing more just and sustainable development paths, from grassroots movements supporting alternative water governance models to indigenous practices of community-based resource management.

In order to effectively tackle the problems caused by water commodification in Northwest Bangladesh and elsewhere, a comprehensive strategy that

incorporates knowledge from various fields and viewpoints is needed. To achieve this, it is necessary to challenge established power structures and special interests that uphold unequal access to and distribution of water resources, as well as to rethink water governance frameworks based on the values of equity, participation, and ecological stewardship. Finally, our research adds to the current discussions about the political economy of water and the necessity of radical reform in the water governance system. By exposing the processes of water commercialization in Northwest Bangladesh, we intend to spark important thought, discussion, and action in the direction of more equitable and sustainable water futures for all.

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