INSIGHTS FROM THE FIELD

Measuring Impermanence: A Community Perspective on *Char* Land

Hassan Momin* and Gorky Chakraborty**

I. INTRODUCING IMPERMANENCE

Multiple factors associated with rivers, namely, their meandering course, braided nature, slope and incline, and quantum of bed-load and sedimentload, act together over the course of floods to facilitate the process of *char* (mid-channel river bar) formation (Osterkamp 1998; Rahman and Rahman 2012; Momin and Chakraborty 2021). Normally, these chars are irregular in shape and unstable in nature; their size, shape, and location change frequently as well (Wyrick and Klingeman 2010). As they are formed under flood conditions, their natural height is never higher than the height of the highest flood—while the slope of the upstream end is generally steep, the downstream part is gentle and covered with ripples and larger bed forms (Bhagabati 2001). The recession of floodwater-that is, when the velocity of flow and the capacity of the river to remove these deposits reduce-silt is deposited, which in due course, get covered with grass and vegetation. During the next flood, the chars are again submerged in water, either resulting in changes in area or greater deposition of silt (Chakraborty 2009). However, whatever their life span may be, the ecosystem surrounding the chars is truly unique. Their soil is largely composed of alluvium, freshly deposited by the river, with a little humus that allows the growth of river grasses (Chakraborty 2009). Chars may be classified into various types based on several parameters (Figure 1).

The existential realities of chars and their impermanence escape standard terra firma interpretations of land and water. Rather, chars are broadly

ISSN: 2581-6152 (print); 2581-6101 (web).

DOI: https://doi.org/10.37773/ees.v6i1.808

^{*} Research Scholar, Institute of Development Studies Kolkata (IDSK), <u>hassanmomin4@gmail.com</u>

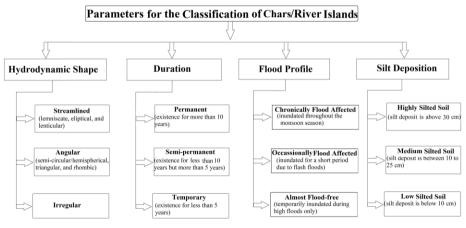
^{**} Faculty, Institute of Development Studies Kolkata (IDSK) 27-D, DD Block, Sector-1, Salt Lake, Kolkata-700064, <u>gorky8bob@gmail.com</u>

Copyright © Momin and Chakraborty 2023. Released under Creative Commons Attribution © NonCommercial 4.0 International licence (CC BY-NC 4.0) by the author.

Published by Indian Society for Ecological Economics (INSEE), c/o Institute of Economic Growth, University Enclave, North Campus, Delhi 110007.

understood as riverine lands (Lahiri-Dutt 2014a) that transcend the landwater boundary and thereby should be interpreted using wet theory (Appadurai and Breckenridge 2009) rather than conventional conceptual understandings. In South Asia, the chars, despite their impermanence, are areas of adaptive human habitation and diverse cultivation (Sarker *et al.* 2003). In the Brahmaputra flood plains, char dwellers have a unique migration pattern. Those who inhabit a relatively more erosion-prone char seek to move to a more stable one, while others expressed a willingness to migrate to chars that were closer to riverbanks. Meanwhile, a large number of char dwellers reported that in cases of severe erosion, they were left with no other option but to migrate to *kayam* (settled) areas as daily wage labourers (Chakraborty 2009). Scholars have observed similar migratory patterns in other river systems, such as the Ganga, Damodar, Padma, and Jamuna (Baqee, 1998; Islam *et al.* 2010; Lahiri-Dutt and Samanta 2013; Lahiri-Dutt 2014b; Chakraborty 2017).

Figure 1: Classification of Char/River Island



Source: Adapted from NPC (1986); Bhattacharjee et al. (1991); Wyrick and Klingeman (2010)

2. LEGISLATING IMPERMANENCE

One of the earliest legal enactments regarding land in char areas was the Bengal Alluvion and Diluvion Regulation, 1825. Section 4(3) of this regulation states that when

a *char* or island is thrown up in a large navigable river (the bed of which is not the property of an individual), or in the sea, and the channel of the river or sea between such island and the shore may

not be fordable, it shall according to established usage, be at the disposal of the government. (Ganguly 1999, 273)

But if the "channel between such island and the shore is fordable during any season of the year, it shall be considered an accession to the land, tenure or tenures of the person or persons may be most contiguous to it, subject to several provisions" (Ganguly 1999, 273). While the regulation defines a char and its ownership broadly, complications arise due to the impermanence of chars, as a result of which access, occupancy, and ownership of land remain uncertain. This often gives rise to discord and violent conflicts among char dwellers (Rahaman 2018; Momin 2020). Litigations under such circumstances are sought to be addressed using the morals of "justice, equity, customs, and good conscience" (Chakraborty 2009, 113–114).

Interestingly, several legislations—for instance, The Bengal Alluvion and Diluvion Regulation, 1825; Assam Land and Revenue Regulation, 1886; The Goalpara Tenancy Act, 1929; The Tripura Land Revenue and Land Reforms Act, 1960; West Bengal Land Reforms Act (WBLRA), 1956; and The Assam Temporarily Settled Areas Tenancy Act, 1971—fall short of providing a definitive interpretation of the land that emerges again in situ (Chakraborty 2009). It is true that there is a broad specification that if the eroded land reappears in 20 years, the existing holder continues to hold the title. However, there are overlaps on the issue of revenue payment continuity, the authority who can proclaim reduction or remission of land revenue, and so on, which complicate the process of verifying claims concerning settlements on land emerging through accretion.

Given the lack of specific regulatory provisions for the re-emerged chars, observations from a study conducted by The Law Research Institute, Guwahati (1982), seems interesting. "When a new *char* is thrown up in the Brahmaputra, it is taken to be the property of the state government, which either keeps it as grazing reserve or settle it with the cultivators as per the Land Settlement Policy Resolution in force." It further goes on to elucidate that "in reality, people do not wait till the systematic settlement of the Government. They immediately occupy the newly formed *char*." Now, as it happens without the sanction of state authorities, "they are regarded as encroachers and they remain to be so until their land is settled under land settlement provisions or the *char* gets submerged in the river."

The existence of several land revenue settlement deeds for the chars of different states in India complicates the matter further. In Assam, one generally comes across three different patterns, namely, *touzi*, *ekchonia*, and, rarely, *meadi*. Land that is yet to be settled or allotted by the government is

known as khas. Users do not enjoy ownership rights over touzi land, but they have the right to use it by paying the required land revenue, either as tonzi khazana (for allotted government land) or as bedakhali jarimana (for unallotted/occupied government land). The state may order the occupant to vacate touzi land if it has not been allotted by the government. If an individual has inhabited the land for a long time, it may be converted into ek chonia or an annual lease. The annual lease is issued for one year and does not confer on the owner the right of transfer or sub-letting, and the right of inheritance is limited to the particular year of issue. Periodic leases or meadi patta are rare in the char areas of the Brahmaputra, and those that exist largely pertain to those chars that were once a part of the mainland but got detached due to a change in the course of the river. A periodic lease confers the right of both transfer and inheritance at least up to the period of next settlement. In West Bengal, land in char areas is administered under three settlement types-khas, where the ownership is vested with the state; *patta* land, where khas land is distributed to landless families and they are provided a title deed; and rayati land, which is privately owned and generally inherited (Chakraborty 2009).

3. LIVING THE IMPERMANENCE

This section deals with an exercise that was initiated at the community level to identify ownership/occupancy of land that emerged through accretion in River Ganga in Kaliachak-II Block of Malda district in West Bengal. We observed that the community plays an important role in trying to resolve complications arising due to accretion.

According to local resident Asraful Sk,

If any conflict arises regarding ownership rights in char lands, we first try to settle it within the claimants. Decisions are primarily taken by respected people, usually elders with such experiences in our community. Religion or caste does not play any role in determining the occupancy of the lost land in the chars. (Field survey, January 5, 2020)

He further adds, "Here, erosion-accretion is a continuous process, and identifying land in terms of prior occupancy is a complicated process." According to another respondent, Lotifur Rahman,

> Powerful people from nearby areas sometimes attempt to grab the newly emerged char land. But, if the original inhabitants are able to lay claim to their land, the community elders intervene to facilitate a meaningful resolution. However, if the elders find it difficult,

local *amins* [land surveyors] are involved to decide on the fate of the land. (Field survey, January 5, 2020)

It was further observed that those char dwellers who have migrated to urban or distant locations to secure their livelihoods seldom lay claim to land, in which case, occupying such land becomes an easier option.

Section 11 (1) of the WBLRA (1956) was later modified to say

if *rayat* loses a land or a portion of the land by diluvion and the land re-emerges within a time period of 20 years then the land proper title, name and interest of land subsists with the *rayat*. In this case the *rayat* has the right to possess and thereafter will be responsible to pay revenue. The revenue officer will decide the revenue of the re-emerged land as regarded compatible in accordance with the law. It should be based on certain time period regarding claims over the diluviated land. (WBLRA 1956).

However, according to the law, an owner who has lost land in the river can summon the local *amin*, if the land resurfaces somewhere in the river within 20 years, to chalk out and claim the approximate area of lost land and settle and cultivate there.

We came across a local *amin* who described the process to us and allowed us to observe a real land settlement at the community level, as land had emerged through accretion (in the west) after the River Ganga had eroded areas on its east bank. According to this 73-year-old local Hurmot Ali,

> in 1963, we all met and decided to make a boundary with pillars around the Kaliachak-II Diara (*char*) belt. We erected one concrete pillar at the place which was the last point from the Bengal side in terms of the Bengal–Bihar border (presently Jharkhand) of the River Ganga (near Udhwa Nala). Another concrete pillar was erected at Islampur village (which was submerged later). (Field survey, January 7, 2020)

Ali, in an excited tone, stated that "the entire exercise took about one year to complete but in the process the land in the Diara was marked, measured, and identified." The *amin* recalled, "One of our villagers, Durun Babu, undertook the operation of measuring the land from the Udhwa Nala end, while from Islampur side, Radhika Babu took charge. So, from two points at both the ends, the measurement of the Diara belt was initiated. This was completed in 1964." Ali explained that once this process was over, they "collated the *daag* [a unique number allotted to each plot of surveyed land] and *khatiyan* [individual land record certificate] numbers, and the entire land was thereby fully mapped and marked." Thereafter, in case of any dispute,

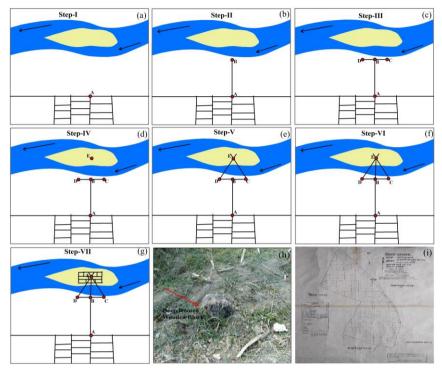
elders from the community come together to decide on the ownership of land through accretion on the basis of the markers of 1963–1964. The char dwellers were no longer dependent on the whims of the officials of the land revenue department regarding settlement of ownership/occupancy of land that emerges through accretion.

4. MEASURING IMPERMANENCE

We came across an exercise whereby traditional/community amins conducted surveys to pinpoint the location of the new chars and their former occupants. To measure land, and ascertain the location and ownership of the newly emerged land, these instruments/tools were used: plain table, spirit level, alidade, cadastral map, pencil, scale, measuring tape or chain, and flag.

As observed, the process involved the following steps (Figure 2). Measuring is initiated by locating a pre-existing point (A) on the ground in the settled land, whose daag and khatiyan numbers have already been determinedknown as the "cadastral point" (Fig 2a) on the map. This is followed by setting up a fixed point or station or flag (B) near the riverbank (Fig 2b). Flag B has to be visible through the alidade from station A. Thereafter, the distance between station A and B is measured with tape on the ground and drawn as a line on the cadastral map using the scale specified on it. Stations C and D are drawn from B at an equal distance (Fig 2c), and the baseline (CD) is drawn on the cadastral map by converting the ground distance according to the scale used in the cadastral map. The next step is to fix another ground station (E) in the newly emerged char (Fig 2d). This is calculated from stations C and D using the alidade, thereby determining station E as the point of intersection between lines CE and DE on the map (Fig 2e). The following step is to obtain the measurement in real terms by calculating the distance between B and E. As points B and E are inaccessible, they are added at scale to the cadastral map. The distance between B and E is measured and converted to the scale of the cadastral map. The calculated distance is the ground distance between stations B and E. The final step is to plot out the char land. Here, the amin moves the plane table on the char to point E. Point E is subsequently identified at a specific point on the cadastral map. First, the amin measures the plot on which E is placed and then marks the remaining plots (Fig 2g). To skip the first two steps, the amin inserts a half-burned wooden pole deep into the ground near the riverbank for future reference (Fig 2h). They also use it to locate further diluviated land that emerges in the char or adjacent chars. The estimation of char areas by traditional amins is based solely on the cadastral survey maps (Fig 2i) of the land revenue department.

Figure 2: (a–g) Measurement of Char Land; h) Deep-rooted Wooden Block; i) Referenced Cadastral Map (Prepared by the Land Revenue Department, Government of West Bengal, 1954–1957)



Source: Field survey (2020)

5. CONFLICTING CONCLUSIONS ON IMPERMANENCE

After this arduous community exercise, the newly emerged char land was settled with the prior occupants of the land, which otherwise would not have been possible due to the lack of will of the revenue authorities to travel and undertake such a survey for the settlement of land gained through accretion. It was therefore a community exercise facilitated by traditional amins at Jot Kasturi village in Kaliachak-II Block in Malda. Once this exercise was completed, the char dwellers went to the revenue office and informed them that their settlement had been properly marked on a cadastral map. To consolidate their claims, the owners of the newly settled land expressed eagerness to pay revenue. To our surprise, the officials announced, "All this land is now vested land and no one is allowed to take possession or pay revenue for such land" (Field survey, January 2020). They further expressed displeasure at the ignorance of the char dwellers, saying, "All land that emerged as River Island has become *khas* land after the government order issued in 2000" (Field survey, January 2020). This new act (Section 12 of WBLRA, 2000) specifies, "any land gained by the gradual accession to a plot of land, from within the recess of a river or of the sea, shall vest in the State Government and the *rayat* who owns the plot of land shall not be entitled to retain such land as an accretion thereto."

This entire community exercise and settlement along with the rebuttal by revenue officials suggests that a binary understanding of land and water regarding char areas persists. This is further complicated by a forked vision between the state and the communities that dwell in these areas. Until a hybrid understanding evolves based on the existential realities of the lived experiences of char dwellers, ignorance may rule the roost in place of knowledge production.

REFERENCES

Appadurai, Arjun, and Carol A Breckenridge. 2009. "Wet Theory." In SOAK: *Mumbai in an Estuary*, edited by Anuradha Mathur and Dilip Da Cunha. New Delhi: Rupa & Co.

Baqee, Abdul. 1998. Peopling in the Land of Allah Jaane. Power, Peopling and Environment: The Case of Char-Lands of Bangladesh. Dhaka: The University Press Ltd.

Bhagabati, Abani Kumar. 2001. "Biodiversity and Associated Problems in the Islands of the Brahmaputra, Assam." *Geographical Review of India* 63 (4): 330–343.

Bhattacharjee, I, R Borgohain, and RR Jha. 1991. Diara Lands – The Grannary of Assam, Jorhat: Assam. Jorhat: Agriculture University.

Chakraborty, Gorky. 2009. *Assam's Hinterland: Society and Economy in the Char Areas*. New Delhi: Akansha Publishing House.

—. 2017. "The Char Dwellers of Assam: Flowing River, Floating People." In Water Conflicts in Northeast India, edited by KJ Joy, Partha J Das, Gorky Chakraborty, Chandan Mahanta, Suhas Paranjape, and Shruti Vispute, 178—192. India: Routledge.

Ganguly, Kalyanmoy Justice, ed. 1999. The West Bengal Laws (Annotated), Vol I. Calcutta: Hindustan Law Book Company.

Islam, Shafi Noor, Shilpa Singh, Hasibush Shaheed, and Shouke Wei. 2010. "Settlement Relocations in the Char-Lands of Padma River Basin in Ganges Delta, Bangladesh." *Frontiers of Earth Science in China* 4 (4): 393–402. https://doi.org/10.1007/s11707-010-0122-5.

Lahiri-Dutt, Kuntala. 2014a. "Beyond the Water-Land Binary in Geography: Water/Lands of Bengal Re-visioning Hybridity" ACME: *An International Journal for Critical Geographies* 13 (3): 505–29.

Lahiri-Dutt, Kuntala. 2014b. "Islands that Float within Rivers." ANU Research Publications 8 (2): 17.

Lahiri-Dutt, Kuntala, and Gopa Samanta. 2013. Dancing with the River: People and Life on the Chars of South Asia. New Haven/London: Yale University Press. https://doi.org/10.12987/yale/9780300188301.001.0001.

Law Research Institute. 1982. "A Study of the Land Systems of North Eastern Region, Gauhati." Law Research Institute 1: 124–126.

Momin, Hassan. 2020. "River Dynamics and Uncertainties: A Case Study of Kaliachak-II Block in Malda District, West Bengal." M.Phil. diss., Institute of Development Studies Kolkata, University of Calcutta. <u>https://idsk-opac.l2c2.co.in/cgi-bin/koha/opac-detail.pl?biblionumber=23176</u>.

Momin, Hassan, and Gorky Chakraborty. 2021. "Morphological Changes in the Hazardous Zones of the Ganga and the Brahmaputra Rivers in East and Northeast India." *Applied Geomatics* 13 (4): 925–944. <u>https://doi.org/10.1007/s12518-021-00395-y</u>.

NPC. 1986. Survey Report on Char Area Development in Assam (Barpeta, Dhubri, Goalpara Districts). Guwahati: National Productivity Council.

Osterkamp, WR. 1998. "Processes of Fluvial Island Formation, with Examples from Plum Creek, Colorado and Snake River, Idaho." *Wetlands* 18 (4): 530–545. https://doi.org/10.1007/BF03161670.

Rahaman, Matiur. 2018. "Ownership of Land in Select Chars of the River Ganga." M.Phil. diss., Institute of Development Studies Kolkata, University of Calcutta. https://idsk-opac.l2c2.co.in/cgi-bin/koha/opac-detail.pl?biblionumber=22637.

Rahman, Mohammad Arifur, and Munsur Rahman. 2012. "Char Formation Process and Livelihood Characteristics of Char Dwellers of Alluvial River in Bangladesh." ICSE6, Paris.

Sarker, Maminul Haque, Iffat Huque, Mustafa Alam, and Rob Koudstaal. 2003. "Rivers, Chars and Char Dwellers of Bangladesh." *International Journal of River Basin Management* 1 (1): 61–80. <u>https://doi.org/10.1080/15715124.2003.9635193</u>.

WBLRA. 1956. West Bengal Land Reforms Act, Calcutta. Government of West Bengal.

WBLRA. 2000. West Bengal Land Reforms Act, Calcutta. Government of West Bengal.