

**Brahmaputra and the Ships of Hope for Transforming the Lives of Rural Communities: A Sociological Study of the Boat Clinic in Dibrugarh District**

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*In this paper we address the issue of lakhs of persons living on the secluded islands in the river Brahmaputra in Assam. There are about 10 lakh persons or one third of the state's vulnerable population who live on these islands. These people suffers from lot of problems especially in the sphere of health, education, floods, erosion, extreme poverty and other issues relating to their livelihoods. Boat clinic has been providing basic health care services to these communities who do not have access to health facilities in the river islands of the Brahmaputra. The stress of the paper is on the Boat clinic in Dibrugarh District and its service to the inaccessible people residing in the islands in the Brahmaputra River.*

**[Key words: Boat clinic, health care, Brahmaputra, floods, river islands]**

I

The river Brahmaputra, traversing a long journey from Tibet to Bay of Bengal provides a life line to the people inhabiting the islands of this river. The river connects islands, isolated sandbanks, and spurs across the valley, helps in cultivating and also causes devastation during the floods. Health problems in these areas are acute and people are mainly affected by water-borne diseases. There is a major problem in accessing medicines and sustained health care. They face all the difficulties to come to the mainland for fulfilling their need. The center for North East Studies and Policy Research (C-NES) has made an invaluable contribution to the lives of the Vulnerable and marginalized communities through

specially designed Boat clinics providing mobile health care in ten districts of Assam.

Centre for North East Studies and Policy Research (C-NES) in May 2005 launched the Boat Clinic initiative to deliver health services to people living on the islands of the Brahmaputra in Assam. C-NES Started with one boat and seven staff in Dibrugarh district in 2005 with support from district health and administration as well as modest assistance from Oil India Limited, Assam Oil Ltd and local NGOs and business organizations. The success in the intervention received recognition which attracted UNICEF and later NRHM, Government of Assam, which wanted to reach out to a larger population. In the first phase of partnership with NRHM, beginning February 2008, the Boat clinic programme was implemented in 5 districts of Assam - Dibrugarh, Tinsukia, Dehmaji, Morigaon and Dhubri. In the second phase, from March 2009, 5 more districts Lakhimpur, Jorhat, Sonitpur, Nalbari and Barpeta were added. From August 2010, 3 more districts – Kamrup, Goalpara, Bongaigaon along with one more unit each in Barpeta and Dhubri is going to be brought under the Boat clinic health initiative. These specially developed boats are equipped with laboratories on board as well as pharmacies. There is a Public Private Partnership (PPP) with the National Rural Health Mission (NRHM), Government of Assam. UNICEF is also supporting the programme in Dibrugarh and Lakhimpur districts where it works with C-NES on health training and skill up-gradation as well as a school outreach programme to cover children who have dropped out of school or have never been to school.

Hazarika (2006:1) writes “The Brahmaputra valley forms a narrow natural trough through which high water surge during the floods and heavy rain of the summer months (May to August). Assam, with its broad flood plains and flanking hills, accounts for 9.4 percent of India’s total flood prone area and some of its highest rainfall statistics, and is the northeastern state most affected by the annual flood surges...”

C-NES has used the ship, which is named *Akha* or Hope, described also as “A ship of hope in a valley of flood” to conduct health camps at different islands in Dibrugarh District, upper Assam. Over 5,000 residents of these islands have been treated for various ailments by doctors and additional medical staff of the

boat. Measures have included immunization programmes to protect children from Polio and other preventable diseases. The focus has also been on treatment of pregnant women and new mothers as well as vulnerable adult groups.

Outbreaks of disease tend to increase at the time of flood. Disease such as gastroenteritis, diarrhea, dysentery and viral fever were reported to be common during and after floods. Lack of availability of medicines and doctors and poor road conditions exacerbated the situation.

Walker (2009:1) mentioned that 'There are an estimated, 3,000 islands in the Brahmaputra River, of which about 80 per cent are inhabited. It makes up about eight per cent of the state's population. The vastness is a major challenge.'

Each district has a total strength of 14 team members. This includes one District community organizer (DCO), two medical officers, one general nurse cum midwife (GNM), one pharmacist, one laboratory technician, two auxiliary nurse midwives (ANMs), two community workers and four crew members. The Project Management unit has five members at the Guwahati office and one in Delhi for coordination and data analysis. The ship goes to the islands for three to five days at a stretch, with doctors and paramedical staff. Camps usually begin at 9 AM and continue with a brief break till 3 PM, when the team boards the ship for the next destination. After a night's rest, they set out for the next camp. Sixteen to twenty camps are conducted on an average in a month, local communities and leaders are involved in the conduct of the camps, which are often held in difficult condition, with teams battling floods and erosion in the monsoons and shallow routes and long walking distances to remote villages in winters.

The boat clinics provide services which have been developed under a Memorandum of Agreement with the NRHM, which is fully funding the project, barring the cost of the ships, which are being financed by private donations and grants. Five of the boats have been funded by the well-known economic columnist and philanthropist, Swaminathan A Aiyar and his wife Shahnaz.

The programmes include national programmes such as immunization of mother and child, pregnant women receiving regular doses of TT and IFA, prevention and treatment for malaria, pulse Polio activities, programmes for giving Japanese Encephalitis

(JE) vaccine, general checkups and awareness of the importance of family planning, general health as well as of sanitation.,

Other focus areas include curative care like referral of complicated cases, early detection of TB, Malaria, Leprosy, Kala-Azar and other locally endemic communicable diseases and non-communicable diseases such as diabetes and cataract cases and minor surgical procedures and suturing. Reproductive and child care services include Ante-natal check up and related services e-g injection of tetanus toxoid etc., supplying iron and folic acid tablets, referral for complicated pregnancies, promotion of institutional deliveries, post-natal check up, immunization clinics, treatment of common childhood illness such as diarrhea, ARI/Pneumonia etc., treatment of RTI /STI. Family planning services includes counseling for spacing and permanent methods, distribution of condoms, oral contraceptives, emergency contraceptives, IUD insertion by ANMs, and Radiant warmer for premature babies.

The basic laboratory services include testing of Hemoglobin, urine for sugar and albumin and malaria-RDK.

Besides all these emergency services and care in times of disaster, epidemic, public health emergency and accidents etc. are providing by the boat clinic. IEC materials on health including banners, posters, pamphlets on personal hygiene, proper nutrition and sanitation as well as screening of health documentaries is done to develop awareness on the issue.

The ship *Akha* was 22 meters long and over 4 meters wide with an OPD, Cabins for medical staff, a laboratory, pharmacy, medicine chest, Kitchen, toilets, crew quarters and a general store. Equipped with a generator set and a 200 liter water tank, it is powered by a 120 truck hp engine and now has a solar ice line refrigerator (ILR). The solar ice line refrigerators (ILR) and tents for organizing camps have been installed in the boat which is donated by UNICEF. The other vessels designed and built by C-NES have similar facilities.

## II

The study is based on both primary and secondary data. In case of primary data a sample of 100 respondents were selected by purposive sampling method. The respondents were from Chakia Chapori, Bhaisiawali and Chaurkholia of Lahowal Block of

Dibrugarh District of Assam. These respondents were interviewed while they attend the camp for treatment and rest was interviewed in their respective houses. Besides these, all the 14 team members of the boat clinic were also taken as our respondents. Thus there are all together 100 respondents of which 86 numbers were the villagers residing in the mentioned Chapories and 14 numbers were the team members of the ship. The primary data were collected by interviewing all the 100 numbers of respondents of the study and also observation method is taken into account. The secondary data were collected from various sources like books, journals, magazines and so on.

The universe of the study consists of entire Dibrugarh District, out of which only the Lahowal block is taken into account. It was informed that according to 2001 census there are twenty five thousand populations of people in the entire Dibrugarh District residing in the islands of river Brahmaputra. According to C-NES, it is only 13,010. The fact is that there is always change of this scenario due to flood etc. Within Lahowal block the above mentioned three chaporis of river Brahmaputra is chosen for the study.

**The main aim of this paper is to highlight the following**

Socio-economic status of the people inhabiting the sample chaporis / villages of Dibrugarh District.

To highlight the activities of the boat clinic in Dibrugarh District.

To find out the kind of changes in the status of health and hygiene, life style and life chances of the people in the chaporis of Dibrugarh District.

### III

Out of the total 100 respondents of the study, 45 numbers (45%) of them were female and 55 numbers (55%) were male. All the respondents who were residents of the Chaporis of the study were engaged in agriculture and animal husbandry works. Five numbers (5%) of them were also engaged in boating, collecting five woods and fishing activities.

86 (86%) of the respondents of the Chaporis informed us that they do mostly paddy cultivation. Besides that vegetable like cauliflower, cabbage, potato, corn, tomato, gourd, pumpkin etc. were cultivated and marketed.

32 (32%) of the respondents were involved in milk business, they have cows and buffalos. It was reported that during winter the buffalos were kept in far away places from their residence especially in the Dhemaji district for their survival where they get grass etc. as their food. They used to give rent of Rs. 1,000 to 10,000 to the locals who were mostly people of Mishing community. During summer they again bring their buffalos to their respective places. It is also a fact that they face threat due to flood during summer. 25 number (25%) of the villagers reported that about 300 numbers of cows from the selected three chapories were dead after flood this year. It was informed that these cows might have eaten some unwanted things after the flood and also they reported unavailability of veterinary treatment in their respective villages. They told us that in spite of all these they have purchase lot of medicine from the mainland but unable to find any Solution of it.

It was found in the study that in Chaurkholia there are 60 households and 59 numbers of them belong to people migrating form Uttar Pardesh and Bihar and only one number of them is a Assamese Family. In Bhaisiawali the entire 22 numbers of populations belong to the people migrating form Uttar Pradesh and Bihar.

In case of Chakia Chapori there are 56 numbers of households, out of which there are Six Assamese families and rest 50 numbers of families from Uttar Pradesh and Bihar. It was informed by the respondents that Bodo, Mishing, Tea Garden Community and Barmans of Koch Bihar were the other groups inhabiting in other Chaporis of Dibrugarh.

All the migrants of Uttar Pradesh and Bihar were Hindus and the Assamese families of those Chaporis were Hindus. There are indigenous people among the Bodo and Mishing and only few of them were Christians. The Barmans were Hindus by religion.

It was found that 82 numbers (82%) of the respondents belonging to villagers categories were poor and marginalized. The occupation of agriculture, fishing and animal husbandry do not give them high economic status. 72 numbers (72%) of the respondents of the villagers category opined that they have only monthly income of Rs. 5000 to Rs. 8000 and usually they have 5 to 6 persons on average in their respective houses. Only 4 numbers (4%) of the families informed us that they have monthly income of Rs. 10,000 to

Rs. 15,000 and they are engaged with milk business. They used to sale milk in Rs. 35 to Rs. 40 to different hotels restaurants and public of Dibrugarh Town. It includes both cow and buffalo milk as well. There are families that herds cattle that provide 60-70 liters of milk per day and they sell the surplus milk on the mainland. Small boats they call it as fighters' bout which carry goods as well as passengers to Dibrugarh Town from those Chaporis. These are the only means of transportation. It takes Rs. 50 to Rs. 60 in one way and for goods they have different rates. It was observed that around 20 numbers of people were employed in such boats and they have around 10 to 12 such boats. Moreover they have different other boats owned by different people of those chapories which they use during the flood situation.

So far the social background of the team members of the boat clinic are concerned, there were two doctors with MBBS degrees and earned Rs. 30,000 per month, one District Programme Officer (DPO) whose job is to organize such camps with all official arrangement and budgets who earn Rs. 20,000 per month. One GNM earns Rs. 8,000 per month, 2 ANM who earn Rs. 6,000 per month. There is one Pharmacist who earns Rs. 8,000 per month and one lab technicians who earn Rs. 8,000 per month. There is also one family planning coordinator who earns Rs. 5000 per month whose job is to organize the programme of family planning services which includes operations and sterilization etc. Besides these there are three community workers (CWs) whose salary is Rs. 3000 per month. Boat crew members consists of one Master who earn Rs. 5,000 per month, the engine Driver earn Rs. 3000 per month, one cook earn Rs. 2500 per month and one helper who earn Rs. 2000 per month. The two of the community workers were Hindi speaking people who migrated from Uttar Pradesh and one from Mishing Community. The Master of the crew member is also Hindi speaking person originally from Uttar Pradesh and the rest were the people from Assam.

It was found that in some cases the entire families with young children spend their days in the fields to meet their daily needs. 58 numbers (58%) of the respondents live in thatched bamboo huts with a small piece of cultivable land, which is often temporary in nature, and depend on the whims of the river. There is very little access to communication and people are badly hit by recurring

floods. Post flood problems, losing homes and assets such as livestock are common. 70 per cent of their children reported that they seldom go to school.

It was observed that recently the Government of Assam is distributing solar energy sets with nominal rate of Rs. 5,000/- for the villagers for electricity as there is no electricity as such. Such solar energy to hamlet areas, education and mobile technology are enabling people to be connected to each other and to the world.

The boat clinic members informed us that certain basic training was given to the community workers regarding veterinary care and sanitation programmes which they are incorporating in the villages. But the community workers reported that even though they are trained in giving injections to the cattle etc. but the villagers are less interested of their services as they have to bring medicines by their own. Governmental persons never visited those places as informed by the villagers.

During the leisure time, especially the crew members visited different households and collect vegetables, milk, fruits etc. for their food in the day time. It was found that master of the crew members knows the art of catching fishes in the river and he himself make nets for catching fishes. During night the vest of the members watch films, listen to music and if it is winter they sit around fire and so on.

It was found that two *thanas* (Police stations) are established in Chaurkholia and Chakia Chapori. There are two L.P. schools in the Chaporis with 60 to 130 students. There is one teacher each in both the schools. It was observed that 9 numbers of students of the Chakiya Chapori go to cement Chapori to attend high school and college which is 15 to 20 Kms in the Dhemaji District. The parents of those children told us that they prefer to send them to Dhemaji for their education than to Dibrugarh Town. It is because it takes lot of time as they have to go by boat and also have to spend at least Rs. 100 per day as transportation charge. On the other hand the other way it is much cheaper and takes less time.

68% of the respondents of villagers category were illiterate and only 18 percent (18 numbers) of the respondents attended L.P. School. In case of the members of the boat clinic all of them were literate who can read and write.

It was found besides certain L.P. School in those Chaporis, UNICEF is supporting a unique education initiative which brings learning skills to out-of-school children on the Chaporis of Dibrugarh. There are 25 students of such category in Bhasaiwali Chapori and 16 Students in Chakia Chapori. They have actual enrolment in Dibrugarh Railway School, Running Gate, Naliapool and they have to give their final examination in Dibrugarh Town. There they can read up to Class VII. These schools run by UNICEF are known as feeder schools.

78% of the respondents of the villagers category and 14 numbers of the boat clinic members informed that during flood the water level used to raise by 4-5 feet inside the Chapori and it last for 3-7 days usually. The Assam Government has made several Pacca Platforms of 5-6 feet height which were used during flood to put cows, buffalos and persons and their items. One such platform was made in Chakia chapori near Government School of west-side. Two of them were made in Chaurkolia, one near the north side of temple and other East Side of the temple. The forest department is also making their effort for plantation in 2010 in Charkholia in the west side near the platform.

While asking about their life in the Chaporis, 45 numbers (45%) reported that it is uncertain as many have left for their native place. It is uncertain because of flood and the river Brahmaputra changes its course regularly. Another 28 numbers (28%) talked about the instance of firing by militant in January 2006 where some people were injured and one of them died. The members of the boat clinic also informed us that due to temporary nature of their stay in the Chapori it is difficult to provide constant treatment to the people of those Chaporis and also to find out the exact number of people as it is changing repeatedly.

14 numbers (14%) of the respondents of the members of the boat clinic informed that diseases like gastroenteritis, diarrhea, dysentery, viral fever, skin diseases, (both caused by prolonged exposure to river waters, especially among children who are not in school) diabetic, hypertension, anemia and general weakness, certain eye and ear diseases, respiratory infection, worm infestation are common in these Chaporis. They have reported their inability to treat different serious cases due to lack of equipment's, staff, OT and medicines. Most of the common diseases are preventable-the

health team gives them awareness in maintaining personal hygiene. They have given their opinion that in many a times the patients who were referred to AMC Dibrugarh do not turn up at all and only rely on the boat clinic. They also express their difficulties during flood and erosion in the monsoons and Shallow routes to continue their camps regularly. Also the vastness of population and the geographic area is a major challenge. It is also difficult to walk for long distances to remote villages in winter.

78 numbers (78%) of the respondents of the villages category informed that 'the boat clinic is the only help line of the area,. God sent this boat to us. It is a ship of hope that is *Akha* in case of medical help and gives much relief for the people since availability of medical assistance has been so difficult for us'. Emergency obstetric services are also available to deliver babies when complications arise. The members of the boat clinic opined that serving these people who are so isolated gives us great satisfaction. They are so poor; our service can really help them. The boat clinic members believe that the Children have the right to health and immunization. We can share this knowledge and tell their children immunized. They said villagers see us as people who are bringing an improvement into their lives.

The ASHA (Accredited Social health Activist) and the community workers of the locality work with the medical crew of the Akha. Two or three days before the boat arrives they inform the families on the island that doctor will soon be arriving to serve their health needs. The ASHA interviews prospective patients to get their medical history and tells mothers about the importance of getting their children immunized for measles and other childhood diseases. She dispenses folic acid tablets to pregnant mothers and ORS to Children who have diarrhea. For each mother she refers for institutional delivery, she receives about 400 rupees.

43 numbers (43%) of the respondents of villagers category informed that if the boat did not come to their community they would not go to the mainland for care, because it is too far and transport costs are too high.

The 69 numbers per cent of the respondents of the study opined that the serious case of suffering of an two year child from an acute asthmatic attack, suffering from serve hypertension, suffering from acute anemia and serious cases of pregnancy were

successfully treated by the boat clinic which otherwise become fatal and had serious consequences.

Also it was found that the boat clinic initiative enabled students to research on delivery of primary health care and education services to the islands on the Brahmaputra. Scholars from Tata Institute of Social Science, interns from 'Knowledge Community on Children in India' sponsored by UNICEF, Scholars from the institute of Global leadership at Tufts University USA, scholars from Sardar Patel University, Gujarat, Yale University USA, Groningen University, Netherlands, Singapore National University etc. conducted different studies on it. France TV journalists were also visited the site for the documentation of the boat clinic activities.

The boat clinic provides free check-ups; distribute medicines and do necessary laboratory tests etc. They also treat serious patients of delivery case etc. as and when needed. Also they referred cases to AMC Dibrugarh. It was informed by the boat clinic members that full immunization and pulse polio programmes were carried out in those chaporis of Dibrugarh District. So far it was reported that 193 Camps were organized in Dibrugarh District and 8586 health check-up was conducted with 974 case of family planning exercise.

All the respondents of the study believe that with the coming of the boat clinic to their places there is tremendous increase in their health status, personal hygiene and awareness and improvement of their educational and to some extent their Socio-economic status.

#### IV

To conclude one can say that the boat clinic has improved the health status of the people of the Chapori's (Small River Island) of Dibrugarh District of Assam. The *Akha* approach has worked and the process represents a positive outlook. The *Akha* model's initiative is innovativeness, motivation, mobilization, training, self-help and sustainability which has provided a platform for change, giving all a stake in improving their lives, not just relying on governments and other agencies but help people in developing capacity building process to help the region grow inclusively with prosperity, dignity and stability.

It provide health services, training and awareness on health, sanitation, livestock care and education to the poor and

marginalized on the islands of Dibrugarh district and was responsible for the surge in medical coverage, health check-ups and treatment of child and pregnant women. Thus, ship of hope brings them quality medical care right at their doorstep.

## References

- Centre for North East Studies and Policy Research (C-NES). Annual report. 2009-2010.
- Hazarika, Sanjoy. 2006. Living Intelligently with Floods, Centre of North East Studies, India.
- Walker, Angela. 2009. Ship of Hope Brings Health Services to Isolated Island Communities.
- Hanna, Ingber. 2010. 'Boat Clinics on the Brahmaputra', July 20, / *Outer Voices, Untold Stories*, <http://pulitzercenter.org/audio/boat-clinics-brahmaputra>
- Case Study-Boat Clinic-Health Care for Marginalized Communities in Assam [http://indiagovernance.gov.in/files/gkc\\_oneworld\\_boat\\_clinic.pdf](http://indiagovernance.gov.in/files/gkc_oneworld_boat_clinic.pdf)
- Hanna, Ingber, 2010. 'How Boat Clinics are Transforming Rural India' July 20, / *Outer Voices, Untold Stories*, <http://pulitzercenter.org/articles/how-boat-clinics-are-transforming-rural-india>
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- The Author is a Member of the Management Committee of C-NES (Centre for North East Studies and Policy Research), Community Radio Station (CRS), and Dibrugarh. C-NES has designed the boat clinics and the author has extensively travelled and worked with the boat clinics.