

A Comparative Study Of Heathcare Facilities And Related Issues In Bodol And Territorial Region (BTR), Assam, And India.

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Abstract:

“Health is wealth” which refers to a state of complete emotional, mental and physical well-being. A person could able to precedethe rest of his life if his health is a comfort to that level. According to World Health Organization (WHO), “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. Health facilities are places that provide health care which include hospitals, clinics, outpatient care centers, and specialized care centers, such as birthcenters and psychiatric care centers. The Bodoland Territorial Region (BTR) of Assam is an autonomous region where the health carefacilities are poor reflecting the low status of health in the region. This paper highlights the status of healthcare facilities of BTR in comparison to Assamas well as Indiawhile focussing on the causes of poor health facilities in the recently created region. The descriptive and analytical method is being applied and data is based on secondary sources. The simple average method is used to calculate the data. It is found that the prevailing low health facilities of the region is mainly because of an inefficient work process, lack of organization of work system, insufficient equipment, poor time management, inadequate staff, low health worker motivation, and low percentage of GDP expenditure on health sector. After analyzing the data some feasible suggestions have been put forwarded on this paper through which certain gaps in current health scenario in the region can be minimised.

Keyword: Health Facilities, Health Expenditure, BTR, Assam, and India.

I. Introduction

“Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (WHO, 1984). Further, in 1986, the WHO has clarified the meaning of health which is a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. “Health is considered a highly valued asset for all living beings”. (Mushahary&Basumatary, 2020). Further, they have stated that the health of the people is the foundation upon which the happiness and behavior of the people depend. Health facilities are places that provide health care which include hospitals, clinics, outpatient care centers, and specialized care centers, such as birthing centers and psychiatric care centers, and health workers of different

sectors. The health status of a particular region depends upon the availability of health facilities in that place. The recently created Bodoland Territorial Region (BTR) in the state of Assam is a 6th Schedule area of an autonomous district council (Bodoland Territorial Council or BTC) with a total area of 8970 sq. km. comprising four districts of Kokrajhar, Chirang, Baksa, and Udalgori. It is located in the western part of Assam bounded by West Bengal in the west, Bhutan in the north, Dhubri, Bongaigaon, Barpeta, Nalbari districts in the south, and Sonitpur and Darrang district in the east. The healthcare facilities of BTR are poorly maintained as there is a lack of proper implementation of health facilities. The problem does not stop with healthcare facility only as the region is also deprived of other vital aspects like education, agriculture sector, industry, and social well-being. The health facilities of BTR are lower than the state and national level average. There is a shortage of health institutions and health workers as per the population concentration. Already having a pathetic healthcare facility the region is deprived from enjoying all health facilities what they actually should get from the center and state. The percentage of Gross Domestic Product (GDP) expenditure on health sector of Assam is higher than the national average. But the state of Assam is still lagging behind the states like Maharashtra, Delhi, Tamil Nadu, Karnataka, Gujarat, West Bengal, and Kerala. The people of the region have to move towards different corners of the country for better medical treatment. Most of them go to West Bengal even when they are infected with malaria diseases. There is acute shortage of health care centers and sufficient health workers and medicines supply in BTR, Assam. Mr. Pramod Boro (CEM, BTR) has commented during his visit to Chirang at the Jyoti Basu Memorial Basumatary (JSB) Civil hospital that the hospital already had various medical-related machinery, including equipment for newborn babies, but all these were kept aside without installing by the previous BTC government (The Sentinel, 16th Feb 2021). Further, he said that all the remaining unused types of machinery presently available in the Civil Hospital would also be made functional within a short period. Mr. Boro also ordered the district health authorities to organize blood donation camps at various locations to encourage the people for blood donation as well as to enhance the stock of blood units available in the hospitals as there is a limited source of blood bank in the region. In most cases, the health worker is also not functional which might be leading to low health status. The region has an agrarian society where about 90% of people are living in rural areas and are engaged in agricultural activities. Most frequently the BTR health workers of Assam had to stay outside their workplace due to need of basic facilities and their work participation is below desirable levels. And most importantly many rural health institutions or healthcare centers of the region are under construction since long. Of late the center and state government are focusing to revive the healthcare facilities since the global pandemic outbreak of Covid-19 of Dec, 2019.

II. Review of Literature:

Paulet.al. (2019), in their paper, have stated that in India, the expenditure on the health sector is very low as compared with other developed countries. The objective of their study was a comparative health facility among the different districts of Assam. In the case of Assam and other Northeastern states of India, comparatively little attention is given to the health sector by the government. Further, they have found out that those who fall into poverty and remain poor also suffer from any disease, in that situation if a health facility is not available for them then they will be unable to overcome poverty. However, they have also suggested that health care can be improved by a good political economy and progress made in poverty mitigation.

Mushahary&Basumatary (2020), have found out that the health facilities comprise all the physical infrastructure and manpower activists serving in the sector. They have mainly focused on the study of physical infrastructure, human resources, causes, and health expenditure of their study area. After finding the result they have stated that well-developed health infrastructure is dependent on the economic conditions of the country. The more developed countries have better health infrastructure and health care facilities and they have more potential to provide better health facilities to their citizens.

Kumar & Gupta (2012), have defined the meaning of health infrastructure as infrastructure has been described as the basic support for the delivery of public health activities. They have found out that five components of health infrastructure can be broadly classified as a skilled workforce; integrated electronic information systems; public health organizations, resources, and research. They have mainly focused on the study of material capacity building in the arena of public health delivery mechanisms. They also included in their studies the conditions of health infrastructure in India, the role of government, and the need for an integrated approach and judicial intervention. After finding the results, they have also provided some suggestions regarding those gaps.

Basumatary&Kar(2019) have stated that the slow progress of educational development still leads to negligence towards health and the prevalence of practicing certain age-old taboos for maintaining health conditions. Further, they have stated as apart from this, the prevalence of inequality in educational development in different parts of the country including the state of Assam, and more particularly in the districts of BTAD, now BTR leads to a prevalence of low health consciousness. In their studies, they have mainly focused on educational attainment, educational inequality, and prevailing health status. However, they have revealed that educational attainment has an important role in the prevailing health status of a particular region as higher the educational attainment level there is also a better health condition in both spatial and social contexts.

III. Objectives:

The key objectives of the paper are:

- (i) To highlight the availability of public health facilities in Bodoland Territorial Region (BTR) in comparison to the state of Assam and India.
- (ii) To find out the causative factors responsible for poor health facilities in Bodoland Territorial Region (BTR) of Assam.
- (iii) To prescribe some feasible measures as a way forward for minimizing the problems of poor health facilities in Bodoland Territorial Region (BTR) of Assam.

IV. Statement of the Problem:

The WHO has stated that one of the clearest lessons the pandemic has taught us is the consequences of neglecting our health systems. To further enhance this work, we will lead a global campaign to strengthen the global health workforce in 2021, the International Year of the Health and Care Workers. There may be a lot of attention on improving tertiary healthcare in India but, going by the latest Economic Survey, healthcare in rural areas remained a concern (Economic Survey 2018-19). The survey also reveals that states with a large number of PHCs functioning with just one doctor or without a doctor are indicative of relatively higher rural Infant mortality rates (IMR) and maternal mortality ratio (MMR). The lack of proper maintaining of healthcare facilities in the country is leading to average health status

of India in the world. There are many Primary Health Centers (PHCs) and Community Health Centers (CHCs) which are running with minimum human resources in Bodoland Territorial Region (BTR) of Assam. Mr. Arup Kumar Dey, (EM, BTR) during his visit to the R.N.B. Civil Hospital, Gossaigaonhas stated that the lack of doctors and work participation of healthcare staffs are found to be disturbing in the region (Zamduar Radab, 11th June 2021). The supply of govt. medicines are not distributed timely in most regions of BTR, Assam. Many health care centers are still under construction and the healthcare centers had to run with minimum basic infrastructure. As many healthcare centers are not functioning properly a wide gap between health worker and the public exists in BTR, Assam. Unable to access the free medical facilities provided by the government of Assam and India due to shortages, many a time the people are forced to visit private healthcare centers and purchase medicines at their own cost.

V. Methodology:

In this paper, both qualitative and quantitative methods of research approaches have been applied to emphasize the problem. The data is mainly collected from secondary sources which include annual reports done by the census reports, statistical handbooks of Assam (Govt. of Assam), Rural Health Statistics (GOI), News Papers, and News portals, and the internet sources. Data is formulated in MS-Excel and a simple average method has been applied. The processed data are shown with tables to highlight the different indicators. Descriptive, analytical and comparative methods are being used to state the result. The journal published papers have been reviewed to identify the study gap. After finding the results, some suggestions have been put forward in this paper.

Year/ Region	BTR				Assam				India			
	Human Resource	Growth in %	Health Infrastructure	Growth in %	Human Resource	Growth in %	Health Infrastructure	Growth in %	Human Resource	Growth in %	Health Infrastructure	Growth in %
2004-05	*	NA	245	-	9159	-	5819	-	217311	-	172608	-
2009-10	*	NA	680	177.55	13365	45.92	5732	-1.49	158740	-26.95	176820	2.44
2014-15	2072	NA	700	2.94	16307	22.01	5786	0.94	332264	109.31	209944	18.73
2019-20	2792	34.74	592	-15.42	20210	23.93	4917	-15.01	366042	10.16	187601	-10.64

VI. Discussion and Analysis:

- The trend of growth of the number of Health Centers and number of Health Workers, 1990-2021:

The public health care facility of erstwhile Bodoland Territorial Areas Districts (BTAD) and now BTR improved significantly after the signing of Bodoland Territorial Council or more popularly BTC Accord in 2003. The percentage of the physical infrastructure of BTR has increased to 177.5 in 2009-10 (Table 1).

This percentage of health infrastructure, however dropped to-15.42 during 2019-20. It is understandable as during the same financial year, the negative growth rate is seen at the state and the national level too. However, there was surge in human resources in the BTR, Assam and India during 2019-20.

Table 1: Growth of trend of Healthcare Facilities of BTR, Assam and India, 1990-91 to 2019-20

Source: Rural Health Statistics, GOI.

*India has now a total number of health infrastructures of 187608 of which 155404 of SCs, 24918 of PHCs, 5183 of CHCs, 1193 of SDHs, and 810 are DHs (Table 2). But the health infrastructure in the country is decreasing with a percentage of -10.64% during the year 2019-20. India has also a total human resource of 366042 including all workers of health sectors.

b. Health facilities of BTR, Assam, and India:

Table 2 shows that the total availability of the health infrastructure of BTR is 706 and the total covering the total population of 3155359. Whereas the state of Assam has a total of 5833 physical health infrastructures and health workers of 47200 covering a total population of 31169272. India has a total public health care centers of 187508 and total health workers of 1225373 engaged in various kinds of health care centers with covering a total population of 1210193422.

Table 2: Healthcare centers and health workers of BTR, Assam, and India.

Region/ Indicator	SCs	PHCs	CHCs	SDHs	DHs	Total Health Care Centers	Doctors at PHCs	Specialist at CHCs	ANMs at SCs & PHCs	Radiologists at CHCs	Lab Technicians at PHCs & CHCs	Nursing Staff at PHCs & CHCs	ASHAs	Pharmacist at PHCs and CHCs	Total Health Workers	Total Population
BTR	551	129	21	1	4	706	587	*	1046	*	*	*	4006	240	*	3155359
Assam	4659	946	190	14	24	5833	1424	188	8614	117	1279	3575	30619	1384	47200	31169272
India	155404	24918	5183	1193	810	187508	28516	4957	212593	2434	19903	71847	859331	25792	1225373	1210193422

Source: 1. Rural Health Statistics 2019-20, GOI. 2. Census of India, 2011.
3. Statistical Handbook of Assam, 2019-20.

*SC: Sub Center, PHC: Public Health Center, CHC: Community Health Center, SDH: Sub-divisional Hospital, DH: District Hospital.

c. Shortfall of Physical health Infrastructure of BTR, Assam, and India:

In BTR, there is a total health infrastructure of 706 (Table 2). The total shortfall of health infrastructures in the region is about 96 taking from SCs to Medical College. There is only one medical college in the region locating the Kokrajhar district of BTR, Assam but it is also in the position of under construction. In many health infrastructures of the region as well in the state of Assam there are no basic facilities and some of them are not in functioning. India has a total health infrastructure shortfall of 45113 of which 36057 are SCs, 6419 of PHCs, and 2637 are CHCs.

Table 3: Shortfall of Physical infrastructure of BTR, Assam, and India.

Region	SCs		PHCs		CHCs		SDHs		DHs		Govt. Medical College & Hospitals	
	Require	In Position	Require	In Position	Require	In Position	Require	In Position	Require	In Position	Require	In Position
BTR	632	551	106	129	27	21	10	1	4	4	*	*
Assam	6436	4644	1050	946	262	172	33	14	33	24	*	7
India	191461	155404	31337	24918	7820	5183	640	1193	640	810	*	274

Source: 1. Rural Health Statistics, 2020 2. Ministry of Health and Family Welfare, 2014-19 3. Statistical Handbook of Assam, 2020

In case of SDHs and DHs surplus is seen. There is a huge requirement of physical health infrastructure in the country and in most cases the condition of health care centers are very poor. The BTR chief Mr. Borohas expressed his unhappiness with the infrastructural facilities and human resources scarcity during his surprise visit to RNB Civil Hospital, Kokrajhar (Today Speed News, 18th Dec 2020). He said that the hospital should be humanity services oriented to serve the needy poor and the health staff should be dedicated to serve the ailing people. There is also a shortage of other services like ambulance, machinery types of equipment, etc in Kokrajhar hospital. The lacking of basic equipment and specialists is a common phenomenon which is affecting the entire healthcare facility system of the country. As such the patients have to take en-route to some other private care centers for better medical treatment.

d. The shortfall of Human Resources in Health Care Centers of BTR, Assam, and India:

Shortage of health workers are prevailing not only in Bodoland Territorial Region (BTR) but also in Assam as well in India. There is a lack of sufficient doctors, specialists, nursing staff, lab technicians, and pharmacists in the entire country (Table 4). Many health care centers are functioning without doctors and specialists and other health workers. Speaking on the inauguration of the 30-bedded model hospital at Karigaon in Kokrajhar district of Assam, the BTR chief Mr. Boro has to say that now the people would

not have to go to Kokrajhar and other places for medical treatment as the government would ensure to provide doctors and paramedical staff to serve the people. He also said that his government would give priority to the healthcare sector (The Sentinel, 17th Feb 2021).

Table 4: Shortfall of Human Resource in Health Centers of BTR, Assam, and India

Region	Doctors at PHCs		Specialist at CHCs		ANMs at SCs & PHCs		Radiologist at CHCs		Lab Technicians at PHCs & CHCs		Nursing Staff at PHCs & CHCs		ASHAs		Pharmacist at PHCs and CHCs	
	In Position	Require	In Position	Require	In Position	Require	In Position	Require	In Position	Require	In Position	Require	In Position	Require	In Position	Require
BTR	587	129	*	84	1046	1102	*	21	*	300	*	1500	4006	*	240	300
Assam	1424	946	188	760	8614	5605	117	190	1279	1136	3575	2276	30619	30507	1384	1136
India	28516	24918	4957	20732	212593	180322	2434	5183	19903	30101	71847	61199	859331	870089	25792	30101

Source: 1. Rural Health Statistics, 2019-20, GOI.

e. Health Expenditure:

India's percentage of GDP expenditure (Table 5) on the health sector is very low (3.51% of actual budget of Rs. 71260 crore, Union Budget 2020-21) as compared to the developed countries like Germany (11.43), France (11.26), Japan (10.95), Canada (10.99), etc. And even some other neighboring countries have a higher percentage of GDP expenditure on health like Sri Lanka (3.76), Nepal (5.84), China (5.35), and Afghanistan (9.62). And as per the source, India's percentage of GDP expenditure on health sector will be 2.5% in the next five years i.e. 2025 which will be very unfortunate for the country. The percentage of GDP expenditure on the health sector by the state of Assam is lower than the national level, 1.29% with Rs. 649600 lakh only during the Assam budget 2020-21. Low expenditure of state of Assam as well as India on health sector has a negative impact reflecting poor health conditions of BTR, Assam. In a way it can be said that the countries investing more on health sector are having better health facilities and healthier life.

Table 5: Total Health Expenditure of State and Central, 1990-91 to 2020-21.

Year/Region	Assam			India		
		Per Capita			Per Capita	Budget

	% of GSDP	Expenditure	Rs. In Lakh	% of GDP	Expenditure	Estimated (Rs. In Crore)
2000-01	0.76	258	2724	4.035	185	2473
2001-02	0.76	234	3163	4.263	184	2827
2002-03	0.62	212	3857	4.24	184	3029
2003-04	0.64	226	5167	4.01	203	3762
2004-05	0.66	297	21764	3.957	263	4311
2005-06	1.85	387	44410	3.791	320	6685
2006-07	2.12	474	73270	3.635	350	8326
2007-08	2.40	584	109010	3.518	420	10727
2008-09	2.87	784	141510	3.515	510	13751
2009-10	3.85	1231	201460	3.485	621	15889
2010-11	2.99	1109	221700	3.272	712	22765
2011-12	3.72	1523	218790	3.246	802	24355
2012-13	3.40	1511	248430	3.329	890	25133
2013-14	2.79	1413	240080	3.749	913	28618
2014-15	2.64	1522	192700	3.62	973	31914
2015-16	1.02	1261	266900	3.596	1112	33121
2016-17	1.17	1112	376100	3.511	1397	37671
2017-18	1.28	1397	463400	3.535	1657	51382
2018-19	1.5	1657	537800	3.544	1112	52954
2019-20	2.21	1546	705000	3.12	1167	62397
2020-21	1.29	2053	649600	3.51	1418	71260

Source:Data iscompiled from various annual financial statements of the government of Assam and GOI.

f. Causes of prevailing poor health facilities in BTR:

The following are the major causes of prevailing poor health facilities in BTR:

- i. Lack of proper implementation and supervision: The lack of proper implementation and supervision is one of the major causes of poor health facilities in the BTR region. Many physical infrastructures are under construction and not functioning. The shortage of human resources can be seen frequently in many health care centers. The inefficient supervision is also leading to the poor management of many health care facilities. Mr. Dey during his surprise visitto the RNB civil hospital, Kokrajhar, found that several doctors who were supposed to be on duty were missing in action and expressed deep dissatisfaction about the condition of the hospital. Speaking to media during his sudden visit to the hospital, he said that crores of rupees were sanctioned, beds were to be procured but despite that nothing has been done. Hospital beds are in a bad condition, walls and ceilings are leaking (The Sentinel, 5th Jun 2021).

- ii. Inefficient work processes or organization of services: Signs of a poor organization include patient waiting in queue for long time, inadequate or inappropriate staff scheduling, lack of health worker accountability, and poor management. Mr. Dey expressed his dissatisfaction over the feasibility of infrastructural facilities in the RNB Civil Hospital, Kokrajhar that has been lacking sufficient bed facility as well as maintenance, besides doctors are not seen punctual in their services during his surprise visit to the hospital. (Today Speed News, 5th Jan 2021). Mr. Dey has stated strict actions would be initiated against the absentee doctors, medical employees, and no private visiting services from the doctors would be spared. Further, Mr. Dey also said that doctors and medical infrastructural development would be initiated from the health department within a short period. Poor organization can contribute to health facility inefficiencies where health workers and managers do not optimize resources. Poor organization can lead to a need for more resources to attend to a given number of patients or can lower patient demand due to a perception of poor quality. This may be the reason behind the lack of interest of the public towards government health care centers.
- iii. Shortage of physical infrastructure, insufficient equipment, and supplies: Under construction and lack of basic quality infrastructure could be the reason for the shortage of health infrastructure in the region. There is also dearth of technical equipments and even where available the problem of not functioning smoothly due to the lack of technological know-how experts is visible in the BTR, Assam. On 14th May 2021, Mr. Dey, visited and took stock of government hospital in Chirang district of BTR, Assam and promised to resolve the shortage of basic health infrastructure and human resources and dreaming to make Bodoland self sufficient especially in the health sector (New Move, 14th May 2021). The health workers might be able to deliver their service but it is not possible to handle their services with missing or broken medical pieces of equipment and inadequate drug supply. It is also frequently seen that patients do not get their prescribed medicines whoever go to government health care centers and instead have to purchase medicines at their own cost at the private pharmacies. Many a time they have to move outside BTR or Assam elsewhere in India for better treatment.
- iv. Poor time management: The shortage of human resources in the government health care centers is a prime factor leading to a poor time management system in health care centers of BTR, Assam.. In most of the time many health staffs are irregular and it is related to poor organization of the health care system in the districts of BTR, Assam. Mr. Dey had surprise visits to Udalguri Civil Hospital in Udalguri and he expressed his strong displeasure over the irregularities in the hospital (The Sentinel, 7th Jan 2021). Mr. Dey also interacted with the patients and their relatives. Mr. Dey also took stock of the functioning of the hospital and assured of stern action against negligence by the doctors and medical staff in the hospital. Further, he instructed the officials concerned to utilize the government funds and facilities to improve the quality of services being provided. Mr. Dey has expressed dismay over the lackadaisical attitude of the doctors and said that if the medical staff and doctors continue to be not punctual, strict departmental action would be initiated against such erring staff. He further reiterated and appealed to the Superintendent of the hospital to report to the department about all the requirements of the hospital, including lack of an adequate number of doctors, and assured of resolving the issues at the earliest. Some doctors and specialists are visiting at some private care center if they don't have a duty in the public care centers and that might be the reason in which its time inefficiently to produce desired outputs.

- v. Inadequate staff: Poor health care facility in BTR, Assam may also have been due to inadequate staff or shortage of human resources. Inefficiency often arises when the health care center is staffed with health workers who are not qualified or experienced or skilled enough. The ratios of health workers to the patients and the ratio of health workers to supervisors might affect staff workloads and service outputs. If there is not adequate staff which is not only in terms of numbers but also type and skill, then the inefficient provision or poor quality of services may result.
- vi. Low motivation and supervision of health workers : The health workers of BTR, Assam are less motivated and are not properly supervised affecting completion of timely performance of the tasks to the best of their ability and poor organization of the health care system. Level of know-do gap is something a worrying factor in the region. The know-do gap refers to the difference between what trained health workers know to do and what they actually do on their job. Low motivation can have many causes, including inadequate remuneration, poor working conditions, high workload, and lack of accountability. In most cases, the workers are present but are not motivated or engaged to do their jobs effectively and efficiently, which affects the performance of output levels. Health worker inefficiency may also relate to time management due to their unorganized system.
- vii. Low Expenditure on health sector: Table 5 shows that the expenditure on health sector of both state and central government is very low since very early. There is, however, a substantial increase in investment in Health Infrastructure and the Budget Outlay for Health and Wellbeing in BE 2021-22 which is Rs 2,23,846 crore as against BE Rs 94,452 crore in 2020-21, an increase of 137%. The saga of low investment in health sector continues in BTC of BTR, Assam which may have been one of the major causes of poor health facilities and as well low health status in the region. It is expected that the plan-outlay of BTC govt. in the forthcoming Budget Sessions be handsome so that the gap on health care facility be lessened in the BTR, Assam.

VII. Way forward:

- (a) Removal of infrastructure bottlenecks in health care system, provision of basic minimum services in health sector, creating conducive environment for private investments are the important priority issues which would go a long way in improving the performance of health sector in BTR, Assam. Moreover, lack of medical expertise/ professionals in the region also creates problems and hindrances toward better performance of health care facility which need to be addressed properly by the BTR govt. and Assam govt..
- (b) The BTR government should adopt new health policies regarding technological development such as Remote Sensing (RS) and Geographic Information System (GIS) for the geo-coding system to monitor the status of health at various levels.
- (c) There should be substantial increase in investment in Health Infrastructure in the BTC Budget Outlay for Health and Wellbeing in BTR, Assam to improve the performance of poor health care facility in the region.
- (d) Integrating infrastructure plan in the BTC Budget outlay for Health and Wellbeing to resolve the shortage of basic health infrastructure as well as human resources in the region would immensely help to resolve the poor quality health care facility in the BTR, Assam.

- (e) Opening of medical colleges in BTR, Assam and opening of more hospitals in the far-flung areas of the region may greatly help in minimising the poor public healthcare facility in the region. In this regard the most recent foundation stone of 430 bedded Tamulpur Medical College and hospital laid by honourable Union Home Minister, Amit Shah in Bodoland Territorial Region (July 25, 2021) is a historic step forward which would boost the health sector of BTR.
- (f) The BTR government of Assam should focus more on supervision system of health workers and there should be an enforcement system for health workers at various dimensions.
- (g) Focussing on shortage of basic modern equipments in the health care centers and educating the health staff on their responsibility and in the technological know-how should be the top priority of the existing UPPL govt. of BTR.
- (h) The BTR government and Non-governmental Organizations (NGOs) should conduct awareness programmes and activities regarding the importance of health and hygiene at various levels in BTR.
- (i) Gynecologists and child specialists conspicuously absent in most far-flung areas of BTR, Assam is the need of the hour.
- (j) Other grey areas needed to be focused by the present UPPL govt. of BTR, Assam are:
 - Setting up integrated public health labs in all districts and block public health units in BTR, Assam.
 - Establishing Critical care Hospital Blocks in districts of BTR, Assam.
 - Setting up of Health Emergency Operation Centers and Mobile Hospital in district headquarter, Kokrajhar of BTR, Assam.

VIII. Concluding Remarks:

It is pertinent to say that in the nascent Bodoland Territorial Region or BTR of Assam the current Public healthcare system facility is quite poor if compared to Assam and India. So far in terms of infrastructure, modern technical equipments and human resources are concerned, the BTR, Assam stands at much lower level than its counterpart Assam and India. There is a lack of necessary type of equipments in health centers and some types of medical equipment are being unused due to the gap of technical know-how people in the region. Many health care centers in the BTR, Assam are running with minimum basic facilities and they are far behind the prescribed quality they should have as per health guidelines of the central government. Lack of human resources in the healthcare centers is also a key concern and many health care centers are running without doctors, specialists, and other health workers. The poor quality of health infrastructures and shortage of human resources prevailing in the region is directly reflecting the low health status of BTR, Assam. Whereas India's expenditure on the health sector remains lower than many developed countries and some other neighboring countries too, Assam's investment on health sector is even lower than the national level. India is expecting 2.5% of its GDP's expenditure on health arena in the next five years (2021-2025). As mentioned elsewhere in the paper, in the current financial year there is a substantial increase in investment in Health Infrastructure and the Budget Outlay for Health and Wellbeing in BE 2021-22 is Rs 2,23,846 crore as against BE Rs 94,452 crore in 2020-21, an increase of 137%.

In the end as the saying goes, "A stitch in time saves nine," serious attention and addressing by the 'Troika' governments of Bodoland Territorial Council or BTC, Assam and India is the urgent need of the hour to uplift the public healthcare facility landscape of BTR, Assam. As the Bodoland Territorial Council

(BTC) govt. of the region rests heavily on the timely funding and goodwill of Assam and India govts. the duo need to care and guide the newly created Bodoland Territorial Region (BTR) in Assam so that its public healthcare system facility dramatically improves and thrives well in the new normal environment.

IX. Declaration of conflict of interest:

The author(s) of this paper declares that there is no known potential conflict of interest or any financial support with regard to the reserach, authorship and/or publication of the paper. Further, the views expressed in thispaper are strictly personal.

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