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**STANDING COMMITTEE ON WATER RESOURCES
(2009-2010)**

FIFTEENTH LOK SABHA

MINISTRY OF WATER RESOURCES

WORKING OF BRAHMAPUTRA BOARD

FOURTH REPORT



LOK SABHA SECRETARIAT
NEW DELHI

AUGUST, 2010/SRAVANA, 1932 (Saka)

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MINISTRY OF WATER RESOURCES

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Presented to Lok Sabha on 05.08.2010

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LOK SABHA SECRETARIAT

NEW DELHI

AUGUST, 2010/SRAVANA, 1932 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON WATER RESOURCES (2009-2010)

Shri Beni Prasad Verma - **Chairman**

MEMBERS

Lok Sabha

2. Shri Ghanshyam Anuragi
3. Shri Mahendrasinh P. Chauhan
4. Shri Sher Singh Ghubaya
5. Shri Dip Gogoi
6. Shri Badri Ram Jakhar
7. Shri Haribhau Jawale
8. Shri Virender Kashyap
9. Shri Ramashankar Rajbhar
10. Shri K.J.S.P. Reddy
11. Shri K.R.G. Reddy
12. Shri S.P.Y. Reddy
13. Shri Arjun Roy
14. Smt. J. Shantha
15. Shri K. Shivkumar alias J.K. Ritheesh
16. Smt. Annu Tandon
17. Dr. P. Venugopal (Tiruvallur)
18. Shri Sajjan Verma

Rajya Sabha

19. Shri B.S. Gnanadesikan
20. Dr. Gyan Prakash Pilonia
21. Shri Ranjitsinh Vijaysinh Mohite-Patil
22. Shri Mangala Kisan
23. Shri Kumar Deepak Das
24. Dr. Ashok S. Ganguly

SECRETARIAT

1. Shri N.K. Sapra - Additional Secretary
2. Shri Devender Singh - Joint Secretary
3. Shri B.S. Dahiya - Director
4. Shri A.K. Yadav - Committee Officer
5. Shri G. Guite - Committee Officer

ABBREVIATIONS

BCM	-	Billion Cubic Meters
BTC	-	Bodoland Territorial Council
BTAD	-	Bodoland Territorial Autonomous Districts
CWPRS	-	Central Water & Power Research Station
CWC	-	Central Water Commission
CS&MRS	-	Central Soils & Material Research Station
DPR	-	Detailed Project Report
IMEG	-	Inter-Ministerial Expert Group
MW	-	Mega watts
Mha	-	Million Hectares
NEHARI Institute	-	North Eastern Hydraulic & Allied Research
NEEPCO	-	North East Power Corporation
NHPC	-	National Hydro Electric Power Corporation
NRSC	-	National Remote Sensing Centre
TAC	-	Technical Advisory Committee

INTRODUCTION

I, the Chairman, Standing Committee on Water Resources (2009-2010) having been authorized by the Committee to submit the Report on their behalf, present this Fourth Report on "Working of Brahmaputra Board."

2. The Committee (2008-2009) took up the subject "Working of Brahmaputra Board" for a detailed and indepth study. The Committee took oral evidence of the representatives of the Ministry of Water Resources, Central Water Commission and Brahmaputra Board on various aspects of the subject at their sittings held on 09.06.2008, 13.03.2009 and 27.10.2009

3. The Committee at their sitting held on 22 June 2010 considered and adopted the Report.

4. The Committee wish to express their thanks to the officers of the Ministry of Water Resources, Central Water Commission and Brahmaputra Board who appeared before the Committee and placed their considered views. They also wish to thank the Ministry for furnishing the requisite material on the points raised by the Committee in connection with the examination of the subject.

5. The Committee would like to place on record their sense of deep appreciation for the invaluable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

NEW DELHI
22 July, 2010
31 Asadha, 1932(Saka)

BENI PRASAD VERMA,
Chairman,
Standing Committee on Water Resources

PART-I
REPORT
CHAPTER-I
INTRODUCTORY

The Brahmaputra Board was constituted in 1980 by an Act of Parliament (Act 46 of 1980) called "The Brahmaputra Board Act" with the objective of planning and integrated implementation of measures for control of floods and bank erosion in Brahmaputra and Barak Valley and for matters connected therewith. It started functioning since 11 January 1982 with headquarters at Guwahati, Assam. The jurisdiction of the Board includes the Brahmaputra and Barak Valleys and rivers of Tripura. As initially notified under the Act, the States of Arunachal Pradesh, Assam and Meghalaya, parts of the States of Manipur, Mizoram, Nagaland, Tripura were added in the jurisdiction. Subsequently, with the declaration of Sikkim as part of the North-Eastern Region, the jurisdiction has been extended in June 2006 to include Sikkim and North Bengal (part of West Bengal) falling within the Brahmaputra Basin and the remaining parts of Tripura, Manipur, Mizoram and Nagaland as approved by the High Powered Review Board.

1.2 The North-East Region is endowed with a huge water potential, being drained by two main river systems – the Brahmaputra and the Barak. The river **Brahmaputra**, one of the largest rivers of the world with a specific yield of 85 ha.m./sq. km., which is next only to Amazon (87 ha.m./sq. km.), originates from Kangling Kang glacier east of Manas- Sarovar at an elevation of 5,150 m. It traverses 1,625 km. in Tibet (China) under the name of *Tsangpo*, and enters India in Arunachal Pradesh as *Siang/Dihang* and joins with Lohit river at Pasighat where it is called Brahmaputra. After it traverses 918 km. in India mainly Arunachal Pradesh and Assam, it empties into the Bay of Bengal in Bangladesh. The river is braided and unstable in its entire reach in the Assam valley except for a few places. The

instability of the river is attributed to high sediment charge, steep slope and transverse gradient. Due to heavy deposition of silt, the river has frequently changed its course, giving rise to braiding and meandering pattern in the alignment of the river system. The world's largest river island 'Majuli' in upper Assam lies in the river. The problems associated with Brahmaputra river is compounded by the fact that the entire area is in seismic zone and receives earthquake shocks of moderate to severe intensity from time to time. Next to the Brahmaputra, the **Barak** is the second largest river system in North Eastern Region. Originating in Manipur hills, the Barak emerges into the plains near Lakhimpur, Assam. It bifurcates into two streams (the Surma and the Kushiara) near Indo-Bangla border and enters Bangladesh. The Barak has a total length of 900 km., out of which 564 km. lies within India.

1.3 The Brahmaputra and the Barak, with their numerous tributaries (22 in Tibet & 39 in India for the Brahmaputra and 10 for the Barak) constitute a vast river system, with a total drainage area of 2,36,136 sq. km. (1,94,413 sq. km. for the Brahmaputra and 41,723 sq. km. for the Barak) in India alone. Their total annual yield is 524 Billion Cubic Meter (BCM) (494 BCM for the Brahmaputra and 30 BCM for the Barak), which constitutes about 33% of India's total surface water potential. Besides, 31.0 BCM of water flows annually through the rivers in Tripura, Manipur and Mizoram, to which may be added 33 BCM of replenishable ground water resources of the region. Thus, the water resource potential of the North Eastern Region is enormous. The identified hydropower potential in N.E. Region as per the assessment made by the Central Electricity Authority (C.E.A.) is 35,383 MW at 60% Load Factor as on 01.12.2006, out of which the present development is only 1,095 MW with another 2,934 MW under development. In respect of irrigation development, the total

irrigation potential of N.E. Region is 4.316 Mha. out of which only 35% of irrigation potential has been created so far.

1.4 The National Water Policy 2002 formulated by MoWR, Government of India lays down the broad outlines for proper water resources planning in the country which is reproduced as follows :-

“Water resources development and management will have to be planned for a hydrological unit such as drainage basin as a whole or for a sub-basin, multi-sectorally, taking into account surface and ground water for sustainable use incorporating quantity and quality aspects as well as environmental considerations. All individual development projects and proposals should be formulated and considered within the framework of such an overall plan keeping in view the existing agreements/awards for a basin or a sub-basin so that the best possible combination of options can be selected and sustained.”

1.5 Further, the National Water Policy 2002 also lays down principles on flood control and management to be followed in the country. According to it, there should be a master plan for flood control and management for each flood prone basin. Adequate flood-cushion should be provided in water storage projects, wherever feasible, to facilitate better flood management. In highly flood prone areas, flood control should be given overriding consideration even at the cost of sacrificing some irrigation or power benefits.

1.6 As per estimate of the Ministry of Water Resources, Government of India, out of 40 million ha. of flood prone area in the country, on an average, flood affects an area of around 7.5 million ha. per year. The North-Eastern Region, drained by the Brahmaputra and the Barak rivers has been one such area facing recurrent annual flood problem in India.

1.7 The Committee's examination of the subject, 'Working of Brahmaputra Board' *inter alia* included the review of organizational set-up of the Brahmaputra Board (including its manpower requirement, issues of restructuring of the Board, Grievances redressal mechanism, North Eastern Hydraulic & Allied Research Institute), Budget (including funds availability and their utilization), functions or activities of the Board (including projects

undertaken, Master Plans and Construction Activities), issue of monitoring of the activities of the Board, and other related aspects including the views of the Ministry have been dealt with in the succeeding Chapters of this Report.

CHAPTER-II

ORGANISATIONAL SET UP

The Brahmaputra Board consists of 4 fulltime Members comprising the Chairman, Vice-Chairman, General Manager, Financial Adviser and 17 part time Members representing 7 States of the North Eastern Region, North Eastern Council, concerned Ministries of Government of India namely Water Resources, Finance, Agriculture, Power, Surface Transport and Organisations of Government of India namely Central Water Commission, Central Electricity Authority, India Meteorological Department and Geological Survey of India.

Manpower requirement

2.2 The Brahmaputra Board has a staff strength of 626 regular posts. Out of these, 245 posts are technical while the remaining 381 are non-technical. The details of the staff strength of Brahmaputra Board is given in the table as follows:

Group	Technical	Non-Technical	Total
A	73	8	81
B	80	26	106
C	92	191	283
D	0	156	156
Total	245	381	626

2.3 The Committee desired to know the actual strength against the sanctioned strength of the Board and whether it was sufficient to handle the work load of the Board. The Committee were informed that as on January 2009 as against the sanctioned strength of 626, the workforce was only 588 not sufficient to handle the works in the extended jurisdiction in West Bengal and Sikkim. 38 posts were lying vacant – 13 technical and 25

non-technical. For filling up the posts, the vacancies have been advertised and applications invited. The Ministry of Water Resources has also initiated a proposal for restructuring of the Brahmaputra Board in order to overcome the problem of staff shortage faced by the Board.

2.4 The representative of the Ministry, in reply to a query of the Committee, stated that since they were taking up with earnestness the restructuring of Brahmaputra Board, they would make their full endeavour so that the Cabinet approves some more posts including technical posts. He further stated that more posts need to be created to ensure that the Brahmaputra Board's functioning comes up to the expectations of the people of Assam and the North-East.

Restructuring of the Board

2.5 The restructuring of the Brahmaputra Board is being done to redefine and widen the objective of the Board to include integrated water resources development involving irrigation, flood management, generation of hydropower, etc. It would also lead to restructuring of the staff strength of the Board. The proposal for restructuring of Brahmaputra Board was initiated during October 2004 and framed by the Ministry of Water Resources in consultation with the Brahmaputra Board. The Committee in their 9th Report on Demands for Grants (2008-2009) had desired the Ministry to resolve the issue involved in the amendments without further loss of time and introduce amendment Bill for restructuring of Brahmaputra Board in Parliament at the earliest. Subsequently, the Ministry had replied that efforts are being made to resolve the issues with the Ministry of Law at the earliest. Keeping in view the reply of the Ministry of Water Resources, the Committee in their 10th Action Taken Report again called upon the Ministry to expedite the finalisation of the draft amendment of Brahmaputra Board Act, 1980 after expeditiously rounding of the consultation process with the Ministry of Law and introduce the amending Bill in the Parliament at an early date.

2.6 In this regard, during evidence on the subject in October 2009, the representatives of the Ministry of Water Resources informed the Committee as follows :-

“In order to make the Board more effective in its functioning, it has been proposed to restructure the Board and strengthen it by bringing out the amendments in the existing Act. For this purpose, a draft Cabinet Note has been prepared in the Ministry of Water Resources and has been circulated to the concerned Ministries and State Governments.”

2.7 The Ministry in a subsequent written reply to the Committee *interalia* submitted that subsequently the approval of the Cabinet would be sought on the Note. After the approval of the Cabinet a Bill would be brought before the Parliament for amendment of the Brahmaputra Board Act, 1980. The reply further stated that all efforts were being made to expedite amendment to the Act and the Bill would be ready for introduction in Parliament during the Monsoon Session, 2009 of the Parliament. The bill is yet to be introduced in the Parliament.

2.8 During the visit of the Committee to Majuli Island and Guwahati, one of the suggestions given by the officials of Government of Assam for improvement in the working of the Board was to convert the Brahmaputra Board into a ‘Society’ which may be chaired by the Minister of Water Resources. The Chairman, Brahmaputra Board may be made CEO of the Society and all the seven States of North-East may be given representation in the Society. It was further suggested that the Society be given full powers to review the working and monitoring of the works. The Committee was also informed that such a Society, would be able to convene its meetings at any time within a short notice and no State would be able to go against the decision taken by the Society as all the States would be having their representatives in the Society.

2.9 Regarding the suggestions given by officials of Government of Assam, the Ministry in a post evidence reply stated as under:

“Brahmaputra Board has informed that during the visit of the Standing Committee of Parliament on Water Resources, some officials of Government of Assam have suggested for setting up of a Society. This suggestion was not given earlier. Moreover, no written communication or recommendation from the Government of Assam has been received in the Ministry of Water Resources so far.”

2.10 On being asked the difference between ‘Society’ and the ‘Board’ set-up, the Ministry *inter alia* further submitted as under :

“The Government of Assam has not submitted the proposed set-up so far. Therefore, it is not possible to explain the difference in the two set-ups.”

2.11 On the question whether converting the ‘Board’ into a Society would help in improvement of working and decision making process and power, the Ministry stated :

“The Society is set-up under Society Act by an executive order, as an autonomous organisation under Government of India. The Brahmaputra Board has however been set up as a Statutory Body under an Act of Parliament. It is felt that the present set up does not require change to ‘society’ set up as it would not help in improvement of decision making process and power.”

Grievances redressal mechanism

2.12 The Parliamentary Standing Committee on Water Resources visited Guwahati and Majuli Island during 1-5 February 2009 to see the erosion control work being undertaken by Brahmaputra Board at various places. The representatives of the Brahmaputra Board Employees Union while interacting with the Committee represented that they should be covered under the pre-revised pension scheme of Government of India. They also pointed out lack of promotional avenues in the Board.

2.13 The Committee during the evidence inquired whether the Ministry of Water Resources/Brahmaputra Board were aware of such grievances of the employees, what steps have been taken to resolve the problems of the employees of Brahmaputra Board, and how the workforce of the Board have been kept motivated to perform optimally in the absence of promotional avenues. The Ministry in their post-evidence reply stated that the employees are given due opportunities /chance to air their grievances. Joint meetings with the officials

of Brahmaputra Board and representatives of different Associations/Unions are held to resolve the problems. The Ministry also further stated that the Assured Career Progression (ACP) scheme introduced by the Government has motivated the employees to a certain extent.

2.14 Regarding the efforts made by the Board for updating skills of employees to meet technological challenges, the Ministry of Water Resources in its reply stated that the Brahmaputra Board has taken various steps for training of the employees in office automation and other technical matters like computer aided design, drawings, data management, etc. More than 100 employees of the Board have been trained in computer related matters so far.

North Eastern Hydraulic and Allied Research Institute (NEHARI)

2.15 The North Eastern Hydraulic and Allied Research Institute (NEHARI) was established under Brahmaputra Board at Rudreshwar (North Guwahati) as per the Assam Accord, and operationalised during 1996 at a total cost of Rs.14 crore. The main functions of NEHARI are material testing, carrying out model studies, etc. Facilities such as Hydraulic Laboratory with model trays and flumes and Laboratories for testing soil, concrete, other construction materials and foundation rock exist in the Institute. There is a working arrangement for coordination with the Central Water & Power Research Station (CWPRS), Pune and Central Soil & Material Research Station (CSMRS), New Delhi. Three model studies and testing of several soil, rock and concrete samples have already been carried out in NEHARI for various organizations/project authorities in the North East Region viz. North East Electric Power Corporation, Central Water Commission, North Eastern Council and National Hydro Power Corporation and State Governments of Assam, Manipur, Meghalaya and Mizoram. The model studies of Majuli for long term solution of flood problem of Majuli

Island and Jiabharali river at Chokighat for construction of a bridge at the National highway (NH) 52 have been completed at NEHARI. So far, NEHARI has completed physical model studies of (i) Jiadhali River (ii) River Brahmaputra from Porvita to South Salmara (iii) Majuli Island and (iv) Kameng River.

2.16 In reply to a query of the Committee, Government stated that NEHARI is able to manage its affairs smoothly with the funds provided by the Government. It has also been generating funds by providing its services to different agencies. The details of funds generated by NEHARI are given below:

Period	Amount (Rs. in lakhs)
Upto March, 2002	119.78
2002-2003	49.78
2003-2004	16.21
2004-2005	78.70
2005-2006	11.30
2006-2007	17.81
2007-2008	16.64
2008-2009	6.70

2.17 The NEHARI is presently being run by a skeleton staff of 29 redeployed from the existing strength of the Brahmaputra Board. For the smooth functioning of the NEHARI, at least 45 posts are required in the first phase. Although the Parliamentary Standing Committee on Water Resources in their Ninth Report, had recommended for revival of deemed abolished posts and filling up of vacant posts at NEHARI on an urgent basis, the proposal for creation of even these 45 posts is still under consideration in the Ministry. It is also stated that the Ministry of Finance had observed, in this regard, that the issue of overall restructuring of Brahmaputra Board should be settled in the first place.

2.18 Regarding filling up of the vacant posts in NEHARI and whether NEHARI is covered in the restructuring process of the Brahmaputra Board, the Ministry in a written note stated :

“Being the part of Brahmaputra Board, there are no separate posts sanctioned for NEHARI and NEHARI is being run by Brahmaputra Board staff through internal deployment. However, the posts required for further strengthening of NEHARI are being worked out/finalized by the Government of India as part of restructuring of the Board. The process is likely to take about a year after which action would be taken to frame recruitment rules and fill up the posts.”

2.19 On the question how NEHARI was disposing its assigned task satisfactorily and in a time bound manner in the absence of proper staff strength, the Ministry has in a note *interalia* stated :

“.... NEHARI is presently run by deploying the staff from the existing strength of the Brahmaputra Board. In the matters involving high technical inputs, it consults CWPRS, Pune.”

CHAPTER-III
BUDGET OF THE BOARD

Availability of Funds

The budgetary position of Brahmaputra Board including income and expenditure incurred during the last four years are as below :

(Figures in Rs. crore)

Sl.No.	Year	Expenditure	RE	Income
1.	2005-06	36.41	50.76	0.72
2.	2006-07	39.33	33.27	0.98
3.	2007-08	39.49	33.85	0.75
4.	2008-09	68.31	92.1965	1.15
5.	2009-10 (upto Dec.2009)	37.70	48.56	0.18

3.2 In reply to a query of the Committee, the Ministry informed that the budgetary allocations made to the Board are sufficient to meet the expenses. Apart from Grants-in-aid received from Ministry of Water Resources, the Board has also received funds from other Government agencies towards deposit works. Deposit works are the works assigned on payment basis by other organizations to Brahmaputra Board. Details of funds received against deposit works by the Brahmaputra Board during the last three years are given at

Appendix- I.

3.3 Apart from budgetary funds and 'deposit works', other items/services under which the Brahmaputra Board is earning income include the following :

1. Interest on loans and advances paid to employees;
2. Guest House Rent;
3. Tender Fee;
4. Rent of Building;
5. Laboratory Testing charges;
6. Staff Bus fare;

7. Electricity & Water charges;
8. License fee recovery.

Utilisation of Funds

3.4 Asked what measures could be suggested for optimum utilization of the funds by Brahmaputra Board, the Ministry of Water Resources in a reply submitted as under :

“To ensure optimum utilization of the funds provided in the annual budget, Brahmaputra Board is to evolve a system for timely action for according administrative approval, technical sanction of the schemes/projects, tendering process, awarding of contract, etc. In addition, Brahmaputra Board should have proper monitoring system/progress of work so as to accomplish the achievement of the target fixed for the purpose.”

3.5 When the Committee asked the Ministry about delays in sanction of works/funds for Schemes of Brahmaputra Board, the Ministry replied as follows :

“The proposals received from the Brahmaputra Board are expeditiously examined in the Ministry and requisite sanction of works/funds is conveyed as per the established procedures. Adequate funds have been released to the Brahmaputra Board and there is no shortage of funds with Brahmaputra Board for carrying out sanctioned works/schemes.”

3.6 Asked about the procedure for getting sanction for the schemes in Brahmaputra Board and possible improvements for existing maximum time for execution of works, the Ministry stated as follows :

“For execution of schemes within the approved EFC provision, the schemes are required to be techno-economically cleared by the CWC/TAC of Ministry of Water Resources as the case may be. Expenditure sanction is to be accorded by Government of India. Restructuring of the Board which is already under the way, will help in improvement of the working of the Board.”

CHAPTER-IV

FUNCTIONS / ACTIVITIES

The main function of the Brahmaputra Board as per the Act is survey and investigations in the Brahmaputra Valley and preparation of Master Plans for the control of flood and bank erosion and improvement of drainage giving importance to the development and utilization of water resources of the Brahmaputra Valley for irrigation, hydropower, navigation and other beneficial purposes. Other functions include (i) Preparation of Detailed Project Reports (DPRs) and estimates of projects proposed in the Master Plans as approved by the Central Government; and (ii) Construction of Multipurpose Dams and other works proposed in the Master Plans as approved by the Central Government. The details of statutory functions assigned to the Brahmaputra Board by the Brahmaputra Board Act, 1980 is given at **Appendix-II**. Since inception the Board has carried out detailed planning and documentation of the water resources of the North Eastern Region and the related problems and potentials, which includes survey and investigations, preparation of Master Plans, Detailed Project Reports, etc. Since 1999-2000, the Board has also taken up various projects, construction work in the areas of drainage development and erosion and flood control. There has been no addition/deletion to the functions of the Brahmaputra Board so far.

(i) Master Plans

4.2 The Brahmaputra Board has prepared 44 Master Plans as approved by the Government and sent to the States for necessary action and implementation. Besides the 44 Master Plans, seven are under various stages of preparation, and six under survey and investigation. The list of Master Plans approved by the Board, under preparation, and under survey and investigation is given at **Appendix-III**.

4.3 On being asked about the number of Master Plans which have not been implemented and the reasons thereof, the Ministry of Water Resources in a post evidence reply stated :

“All the Master Plan(s) have been partially implemented. Implementation is mainly to be carried out by the concerned States. Water being a State subject, the flood control, anti-erosion and flood proofing works are planned, implemented and funded by the State Governments as per their own priorities.”

4.4 To a further query on whether the Board had drawn any time frame for completion of DPRs of the remaining Master Plans, the Ministry *inter alia* replied in the affirmative. They further stated as follows :

“All the remaining Master Plans are targeted for completion during XI Five Year Plan. The time required for making the DPRs ranges from six months (for anti-erosion works) to five years (for multi-purpose projects). The DPRs for some identified projects have been taken up in consultation with the State Governments in respect of multi-purpose projects and drainage development schemes. These DPRs are scheduled to be completed by the end of XI Five Year Plan. As far as the DPRs of remaining schemes which find place in the Master Plans are concerned, it depends on the priority accorded by the concerned State Governments.”

(ii) DPRs for Multi-purpose Projects & drainage congested areas

4.5 The Brahmaputra Board has so far taken up 14 projects for the purpose of Survey, Investigation and preparation of DPRs. DPRs have been completed for five projects, *viz.* Siang Single Stage & Subansiri Single Stage in Arunachal Pradesh, Tipaimukh in Manipur and Mizoram, Pagladiya in Assam and Bairabi in Mizoram. The Pagladiya Dam Project is under execution by the Board. Siang and Subansiri Dam Projects have been handed over to the National Hydro Electric Power Corporation (NHPC) for execution. Tipaimukh and Bairabi Dam projects have been handed over to the North East Electric Power Corporation (NEEPCO) and the Government of Mizoram respectively. DPR for Dibang Project in Arunachal Pradesh was partially completed and handed over to NHPC for DPR completion and implementation. DPR for 7 projects, namely Noa-Dehing & Jiadhal in Arunachal

Pradesh, Kulsi & Kiling in Assam and Meghalaya and Simsang, Kynshi Stage-I & Kynshi Stage – II in Meghalaya, are in various shapes of investigation/preparation.

4.6 Asked whether the Board keeps track of Plans/DPRs prepared by it and handed them over to State Governments/other agencies, the Ministry in a post evidence reply informed that after the Plans/DPRs prepared by the Board are handed over to Departments/agencies/State Governments, the Board has to keep a tab by calling for the status of implementation by the States.

(iii) Construction Activities

4.7 Since 1999-2000, the Brahmaputra Board has taken up various project construction works also in the areas of drainage and erosion and flood control. In construction activities, the major components are as follows :

(a) Pagladiya Dam Project, Assam

This is a major project meant for flood moderation to benefit an area of 40,000 ha., irrigation benefit to 54,160 ha. and incidental power generation of 3 MW being executed by Brahmaputra Board across Pagladiya river at Thalkuchi in Baksa District which falls under Bodoland Territorial Autonomous Districts (BTAD) in Assam. The proposed dam is 25 m. high and 21 Km. long earth dam with a spillway. The Government of India had sanctioned the project in January 2001 at an estimated cost of Rs. 542.90 crore for construction by Brahmaputra Board. Till now, works carried out pertaining to this project include pre-construction survey; investigations, studies, design, drawings etc.; taking possession of land (956 ha.) for resettlement & rehabilitation (R&R) purpose; construction of project roads, offices etc; preparation of technical specifications & tender document; and pre-qualification of contractors for main works. Out of Rs.250 crore earmarked for Pagladiya

Project during 10th Plan, only Rs.18.13 crore had been incurred. The amount earmarked for 11th Plan for Pagladiya work is Rs.500 crore.

4.8 The works for Pagladiya Dam Project are held up due to non-completion of Zirat Survey and delay in land acquisition by the State Government. The Ministry has stated that the Government of Assam has informed that since all the revenue and land matter having been transferred to Bodoland Territorial Council (BTC), the Board should take up the matter of Zirat Survey with BTC. Subsequently, a discussion between the Chairman and other officials of Brahmaputra Board was held on 12.01.2009 at Kokrajhar, Assam with Dy. Chief Executive Member & other officials of BTC wherein the details related with the project were explained and the need for taking up of Zirat Survey expeditiously was impressed upon. The Ministry also informed that the BTC suggested the possibility of finding an alternative project site way upstream of the present dam site. Another meeting was convened by Secretary, Ministry of Water Resources on 12.02.2009 wherein it was decided that Chief Secretary, Assam would meet BTC officials at the earliest to persuade them for construction of Pagladiya Dam Project at the present location, even while the Brahmaputra Board would simultaneously carry out preliminary studies about the alternate dam sites upstream of the existing site.

4.9 When asked about the outcome of the proposed meeting, it was stated that the proposed meeting between the Chief Secretary, Assam and the BTC officials had not taken place till then. The proposed meeting was subsequently taken by the Chief Secretary, Government of Assam on 23.10.2009 in which Brahmaputra Board and Bodoland Territorial Council officials were present. It was decided that the Board should take up investigations for alternative project location near the Assam-Bhutan border in view of socio-political problem in the present dam site location. The Brahmaputra Board has carried out

reconnaissance survey and initiated topographic survey upto the Indo-Bhutan border area to explore the location of alternative dam site.

4.10 Regarding acquisition of land prior to the start of the construction of the dam, the Ministry in a post evidence reply stated:

“Yes sir, the Government of Assam agreed to provide the required land prior to the start of the construction of the dam.”

4.11 Asked why the extent of submergence due to Pagladiya Dam Project had not been assessed at the time of finalizing/approval of the DPR of the project resulting in avoidable delay, the Ministry in a post evidence reply stated :

“The extent of submergence area was assessed based on the topographical map as required for preparation of DPR of project. But detailed Zirat Survey is done during the implementation of the project.”

4.12 When the Committee asked whether the estimated cost and anticipated date of completion for the Pagladiya Dam Project have been revised by the Brahmaputra Board in view of the delays plaguing the Project and the latest hurdles about the dam site, the Ministry stated that new estimate will be made once alternative studies are completed.

(b) Construction of Drainage Development Schemes (DDS)

4.13 The Brahmaputra Board has identified 41 Drainage Development Schemes (DDS) in the country of which 2 DDS have been suspended. Out of the remaining 39 Schemes, nine were taken up for execution during the Tenth Plan. These are (i) Harang (Rs.30.49 crore) (ii) Barbhag (Rs.7.23 crore) (iii) Jengrai (Rs.1.49 crore) (iv) Jakaichuk (Rs.2.96 crore) (v) East of Barpeta (Rs.1.34 crore) (vi) Joysagar (Rs.2.13 crore) (vii) Kailashahar (Rs. 4.18 crore) (viii) Singla (Rs.3.54 crore) and (ix) Amjur (Rs.14.15 crore). Out of the remaining 30 Schemes, 2 schemes viz. Rudrasagar and Demow have been technically cleared by CWC

and DPRs have been handed over to State Governments. Rest are under various stages of modification, preparation and investigation.

4.14 On the status of 39 DDS, identified by the Board, the Chairman Brahmaputra Board, testified as follows :

“Out of 39, only nine have been sanctioned by CWC during the Tenth Plan. Out of 39 which have been identified, 20 DPRs have been made, 19 are nearing completion. Out of the 20 which have been prepared, 11 were cleared by the CWC and most of them we have already implemented except a couple where we had difficulty. As regards others there have been some complaints, like in respect of 8 numbers where we are modifying and sending to CWC. CWC is already examining one. We are a little behind in respect of the 19 which are left over. That is lagging otherwise, in respect of 20, we have more or less done.”

4.15 The status of 9 Drainage Development Schemes (DDS) was clarified by the Ministry in a post evidence reply as follows :

“Of 9 schemes taken up for execution during Tenth Plan work programme for 7 drainage schemes have been continued. Two schemes viz. Kailashahar Drainage Development Scheme and Joysagar Drainage Development Scheme could not be continued due to problem of acquisition of land. The physical progress of execution of 7 (Seven) Drainage Development Schemes continued during Eleventh Plan are as follows :

Harang	:	96%
Barbhag	:	26%
Jengrai	:	30%
Jakaichuk	:	12%
Singla	:	3%
East of Barpeta	:	3%
Amjur	:	Land for execution is being made available by the State Government (of) Assam.”

4.16 The Committee pointed out that works of some of the Drainage Development Schemes were affected due to delay in handing over of land by the State Government of Assam and asked what steps the Brahmaputra Board had taken to persuade the State Government to hand over the land. The reply of the Ministry to this query is as follows :-

“The Brahmaputra Board is continuously pursuing the matter with the State Government of Assam. The field office of Brahmaputra Board are continuously co-

ordinating with local authority of District Administration for speedy disposal of land acquisition works.”

4.17 Asked about the plan of the Ministry to complete the 30 drainage schemes during the Eleventh Plan period, the Ministry stated *inter-alia* as follows :

“During Eleventh Plan, preparation of DPR for 20 (twenty) numbers of drainage development schemes are targeted to be completed, out of which 2 (two) DDs have been completed so far.”

4.18 When asked about the amount of expenditure incurred on drainage development scheme during the Eleventh Plan, the Ministry stated as under :

“The amount of expenditure incurred during Eleventh Plan for survey, investigation and preparation of Detailed Project Report of Drainage Development Scheme is Rs.44.00 lakhs till October, 2009.”

4.19 In reply to a written question whether the Board faced any problem while dealing with the State Governments, the Ministry stated :

“Brahmaputra Board has taken up these projects only with Central funding. Sometimes, there is a delay by the State Government in providing the land required for the project.”

(c) Anti-erosion and Flood Control Schemes

4.20 The Brahmaputra Board has undertaken Avulsion of Brahmaputra river at Dholla-Hathighuli in three phases of which two phases were completed by July 2004. The third phase was completed in 2007-08. The amount of expenditure incurred for the three phases are Rs.10.47 crore, Rs.4.95 crore and Rs.8.47 crore respectively for the first, second and third phases. The works in these three phases were able to divert back the Dibang and Lohit rivers to their original course and erosion was reduced. The DPR for fourth phase of this scheme is under submission to CWC for techno-economic clearances, and Rs.23.19 crore has been earmarked for this fourth phase.

4.21 The representative of the Board during evidence accepted the fact and *inter-alia* further stated as under :

“As rightly pointed out, we are now doing this within this November. Actually we start off all these work orders in October. From the past year we have been doing like that. We try to give all the work orders in October or November. The work may start early or late; it depends upon the capability of the contractor to whom the work has been awarded. What happens is, if there is a particular couple of contractors who are not able to pick up the work in the time, then there are difficulties. But, we have not faced too much problems; that is the washing away as you have indicated- we have not faced it. The feeling is February would be the end of the working season; but we are able to work up to May. Most of the works we are able to complete. But the financial year headache comes up; that finishes in March and then the payments will have to be done in the next financial year. So, there is a small delay in that. Otherwise, we close the project once the payments are made and once the physical achievements is done.”

4.22 Asked about the probable cost and date of completion work of Phase IV of Avulsion of Brahmaputra river at Dholla-Hathighulli, the Ministry in a post evidence reply stated :

“DPR for Phase IV amounting to Rs.53.29 crore was prepared by the Board and submitted to CWC for techno-economic clearance (TAC). The TAC has given clearance to undertake works for an amount of Rs. 23 crores within the approved EFC. Additional works are to be taken up based on recommendations of the Standing Committee of Experts on erosion of Majuli. Tender documents for a part of work amounting to Rs. 7.00 crore of Phase IV have been proposed and will be floated. The work for Phase IV will be carried out as per guidelines of the Expert Committee and is likely to be completed by March, 2011.”

4.23 To a query of the Committee whether the Phase IV work would be able to control the avulsion at Dholla-Hathiguli completely leaving no chance for avulsion in future, the Ministry *inter alia* further replied :

“The estimate has been framed as per present morphology of the river configuration. As such, the scheme should be able to control avulsion at Dholla-Hathiguli completely subject to the condition that there is no drastic change in the river configuration.”

4.24 The Brahmaputra Board has also undertaken anti-erosion works to protect Kushiabil & Durgajan Village at Dimapur of Dhansiri(s). Phase I for protection of Kushiabil & Durgajan village has been completed for Rs. 0.85 crore, while Phase II for protection of Mao colony, Kuki village & Assam Rifles Transit Camp (Rs. 1.80 crore) is also completed. Further, anti-erosion works at Nagrijuli, Rangia town and Mukamua /Borbhag area from flood and erosion

of Puthimari river, Assam were undertaken in March 2007 at an estimated cost of Rs. 4.89 crore and already completed by February 2009.

4.25 On being asked to provide the present status of anti-erosion works on river Dhansiri(s), the Ministry informed the Committee as follows :

“It is being implemented by the Assam Government. It was to be completed long back but now they have sent a new proposal for completing this project in 2013. They have sought another three year extension. For this project, the Central Assistance is to the extent of 90 per cent that is provided by the Central Government.”

4.26 To queries on the total cost of anti-erosion works at Nagrijuli, Rangia town and Mukamua/Borbhag area recently executed by Brahmaputra Board, the Ministry *inter alia* stated :

“The sanctioned amount of Nagrijuli protection work is Rs.489.00 lakh and the work is completed within the sanctioned amount.”

4.27 To a query whether the anti-erosion works on Puthimari river has been able to check erosion at Nagrijuli, Rangia town and Mukamua/Borbhag area, the Ministry replied :

“Yes, the anti-erosion works carried out at Nagrijuli have performed satisfactorily.”

(d) Protection of Majuli Island

4.28 Majuli is the world’s largest riverine island located in the upper reaches of the Brahmaputra river. The island extends to a length of about 8 Km. along the east-west and about 10-15 Km. along north-south direction. It has a population of about 1.53 lakh (2001 census). It is also the nerve centre of Vaishnavite culture developed during the unique Vaishnava Satra system founded by the great saint, Sri Sankaradeva in the 15th century.

4.29 The existence of this island was threatened by severe bank erosion which aggravated during the earthquake of 1950 that rocked the North East region. Due to severe flood and erosion in the river island, the work of protection at Majuli was taken up by the Brahmaputra Board in 2004. Prior to 2004, the Government of Assam had been carrying

out the flood and erosion control work at Majuli since 1953. They constructed nearly 111 km. of embankment, 48 km of retirement embankment, construction of dowel bund and 4 check dams, 3 Timber dampeners and also undertook strengthening of check dam & pro-siltation measures in the form of bamboo cribs and bamboo porcupines as anti-erosion works up to the year 2003.

4.30 In December 1996, the Flood Control Department of Assam posed the problem to Brahmaputra Board with a request to prepare a Master Plan as well as to carry out hydraulic model studies to suggest suitable anti-erosion measures. The Government of Assam requested the Central Government in November 1999 to take up the protection of Majuli Island through Brahmaputra Board. Accordingly, the Brahmaputra Board took up field survey and investigation for preparation of Master Plan for the Majuli Island and completed the Master Plan in March 2000. The Brahmaputra Board prepared the Detailed Project Report for protection of Majuli Island from flood and erosion and submitted to the CWC in August 2000. The DPR as subsequently revised was based on the suggestions made by the technical teams after site visits and techno-economically cleared by CWC in August 2003 at an estimated cost of Rs.86.56 crore to be taken up in three phases as below :

Phase I	-	Rs.41.28 crore
Phase II	-	Rs.18.28 crore
Phase III	-	Rs.27.00 crore

4.31 Keeping in view the gravity of erosion, and as the Government sanction for Phase I works was anticipated to take sometime, the Brahmaputra Board took up some protection works as immediate measures to provide relief to the people. The works included the following :

- (i) Closure of 20 nos. of breaches on Malual-Malapindha dyke and PWD road;
- (ii) Raising and strengthening of 5.55 km. embankment from Kamalarighat to Kharkharijan; and

- (iii) Construction of RCC porcupine permeable screens/spurs/dampeners at various locations.

These works were started during January 2004 and completed in February 2005 at an expenditure of Rs. 5.92 crore.

4.32 The immediate works were followed by the regular flood and erosion protection works under Phase I, which started in March 2005 as per DPR. The scheme is under execution and 92.50% of works have been completed. The scheme was originally targeted for completion by the end of X Plan. However, due to the constraint of construction materials, transportation bottlenecks, non-performance of some contractors, the work programme was re-scheduled. The scheme has now been revised at Rs. 56.07 crore. The main works carried out under Phase I are as follows :

- (i) Raising and strengthening of 25.52 Km. of embankment : completed.
- (ii) Raising and strengthening of another 64.56 Km. embankment/road in progress : 90% of the works completed.
- (iii) 3 nos. of breach closing on Puhuwara-Gormur-Jengrai-Halidhibari (PGJH) road : completed.
- (iv) Anti-erosion measures in the form of RCC porcupine screens/spurs/dampeners in erosion prone reaches are completed.
- (v) Construction and repair of nose portion of land-spurs at Sonowal Kachari and Kandulimari in progress and targeted for completion by March 2009.
- (vi) Physical model study completed.

4.33 For protection of Majuli Island, the Brahmaputra Board has so far received funds amounting to Rs.53.00 crore and has utilized Rs. 51.54 crore upto December 2008.

4.34 In regard to a question regarding the extent of success achieved as a result of protection work, the Committee were informed that the works carried out by the Brahmaputra Board has been able to check the flood and erosion at most of the places. They have provided considerable relief to the Island from flood and erosion. The people harvested Sali paddy after a long gap of 20 years in lower Majuli. Erosion has been mitigated in severely affected reaches. The villagers who deserted the villages of Salmara and Kordoiguri

returned due to mitigation of erosion. It is also stated by the Ministry that the erosion problem has been contained except in a reach of about 2.5 km. at Bessamara and 0.5 km. in the reach downstream of Bengenauti.

4.35 Despite the claims of the Ministry on anti-erosion and flood protection works at Majuli Island, during the flood of 2008, due to breach in Brahmaputra dyke at Matmora, a large discharge of water entered to the north of Majuli, flooding the entire area several kms. to the north of Majuli. On 25 July 2008 due to 2 breaches on Puhumara-Gormur-Jengrai-Halidhibari (PGJH) PWD Road-cum-embankment, the flood waters entered into Majuli area and submerged almost the entire island. These two breaches gradually widened to about 350 m. and 250 m. and the entire Majuli was under grip of flood during the remaining monsoon period. The Parliamentary Standing Committee on Water Resources made an on-the-spot visit to Majuli Island in February 2009 to get first-hand knowledge of the problem of flood and erosion there.

4.36 When the Committee asked the reasons for occurrence of breaches at Brahmaputra dyke and on another embankments at Majuli Island, the Ministry in their post evidence reply stated that the breaches in Brahmaputra dyke have occurred mainly due to erosion while the breaches on another embankments at Majuli Island were due to over topping. Asked further whether such instances in the flood and erosion protection works of the Brahmaputra Board or Assam Government be avoided in future, the Ministry *inter alia* stated:

“Brahmaputra is a very complex river as the morphology of the river keeps on changing and therefore, it is difficult to say with certainty that such instances would be avoided in future. However, efforts would be made to reduce such instances in future to the extent possible.”

4.37 The Majuli Island was recently in the news for inclusion in the list of World Heritage sites. When the Committee asked whether the Board has received any proposal in this regard from the United Nations, the Ministry gave a post evidence reply as follows:

“Brahmaputra Board has not received any proposal from the United Nations”.

(iv) Visit of Parliamentary Standing Committee on Water Resources to Majuli Island

4.38 During the visit of this Committee, representations were submitted to the Committee by several individuals/bodies, one of which pertain to protection of South-East Barpeta District of Assam, including region from Bahari Satra to Pazarbhanga from annual flood and erosion havoc and the measures for rehabilitation of erosion affected families. The issue was also discussed by the Committee during the meeting with officials of Brahmaputra Board.

4.39 Asked to furnish the magnitude of the problem of flood, erosion and rehabilitation problem as well as remedial measures taken by Government of Assam/Ministry of Water Resources in respect of Barpeta District of Assam, the Ministry submitted a point wise reply furnished by the State Government of Assam which is reproduced at **Appendix-IV**.

4.40 To a query whether a permanent solution can be found for annual flood and erosion havoc at Barpeta District of Assam and the suggested measures for the same, the Ministry stated:

“Suitable measures for permanent solution can be worked out after detailed field survey and studies of the area.”

4.41 The Ministry also submitted that the following works have been taken up by Government of Assam for permanent solution to annual flood and erosion problem at Barpeta District of Assam:

“For permanent solution of the problem, proposals sanctioned are:

- (i) **Flood Management Programme:** Raising & strengthening of Brahmaputra dyke from Bahari to Baghbar and construction of retirement at Betortari and Chesra including A/E measures at different area around Babari, Pazarbhanga, Chesra and Baghbar from the erosion of river Brahmaputra for Rs. 7.45 crore.

- (ii) **Under CRF:** Immediate measures to protect Fulbari, Bhogarper and its adjoining area from the erosion of river Brahmaputra for 2008-2009 (including breach closing) CRF for Rs. 22.36 crores.

In addition to above, proposal for one new scheme "Protection of Fulbari, Bhogarper, Pazarbhanga and its adjoining area from the erosion of Brahmaputra (construction of land spur at ch. 44.30 km, 44.65 km, 45.00 km and 45.35 km.) amounting to Rs. 67.90 crore is recommended in the 45th Technical Advisory Committee, preparation of detailed estimate is under process."

(v) Standing Committee of Experts

4.42 There is a Standing Committee of Experts constituted by the Government of India in December 2007, consisting of experts in the field of river engineering from the Government organizations, an expert of international repute and local representatives to review and suggest measures for protection of Majuli Island. The Standing Committee of Experts visited the Majuli Island five times, i.e. January 2008, June 2008, November 2008, May 2009 and April 2010. During their first meeting (January 2008), Expert Committee recommended several measures amounting to Rs.5.00 crore (approx.) to be completed prior to monsoon of 2008 to be executed by Brahmaputra Board. It also recommended the works to be executed by Government of Assam. The Brahmaputra Board completed the works recommended by the Experts Committee. During the second meeting of the Standing Committee of Experts in June 2008, the Committee inspected the works executed by the Brahmaputra Board and provided the guidance regarding construction technique to be adopted. Guidance was also provided to the Board for the works to be taken up in Phase II & III. The Standing Committee of Experts visited the Island for the third time from 30 November 2008 to 1 December 2008, and recommended that 5 Boulder Spurs may be taken up immediately. The Committee also observed decrease in flow along Summoimari channel which is hugging Majuli Island from Dakhinpat to Kamalabari and attributed this fact to the screens laid at Aphalamukh and

Dakhinpat by Brahmaputra Board. The Committee also recommended laying of porcupine at several locations and strengthening of the existing works. In view of the request made by the Deputy Commissioner, Jorhat, the Committee further recommended plugging of the two breaches that occurred during flood in 2008 near Samahiaati and Borbeel on PGPH Road-cum-embankment.

4.43 The Government of Assam was not executing anti-erosion works since 2004. However, the Standing Committee of Experts during its first meeting held in January 2008 suggested some emergent works to be carried out by the State Government of Assam in addition to works allotted to Brahmaputra Board. Subsequently, during the meeting convened by Secretary, Ministry of Water Resources with Chief Secretary, Government of Assam and Chairman, Brahmaputra Board on 15.05.2008, the need of carrying out anti-erosion works on Majuli Island on the part of Assam Government was emphasized. It was also agreed that the State Government should prepare a suitable scheme with proper justification for funding under "Flood Management Programme" and provide for the State share, i.e. 10% of the estimated cost. This was agreed to by the Chief Secretary, Government of Assam. The State Government of Assam constructed RCC porcupine screens at 4 places as recommended by the Experts Committee in the reach from Summoimari Check Dam to Potia Channel (up stream of Bengenauti) at the cost of Rs.2.82 crore during 2008. It also undertook the dredging of a small channel through Inland Waterways Authority of India during 2007-2008, which resulted in the diversion of part flow of the channel away from the bank. Further, the Government of Assam has taken up the Raising & Strengthening of dyke along left bank of Subansiri from 10 to 21 miles under Flood Management Programme at the cost of Rs.7.43 crore.

4.44 Based on the model studies carried out by Brahmaputra Board, DPR for Phase II & III of anti-erosion and flood protection programme on Majuli Island was cleared by CWC at an estimate of Rs.116.02 crore in November 2008. The works under Phases II & III mainly include the following:

- (i) Construction of 10 Nos. of impermeable boulder spurs from Salmora to Kamalbari.
- (ii) Construction of RCC porcupine screens/dampeners/spurs etc. at various specified locations.
- (iii) Bank revetment of 500 m. on left bank of Kherkhutiasuti near Jengrai.
- (iv) Construction of Raised Platform along left bank of Malual-Malapindha at Chelekhpathali.
- (v) Construction of sluice on Malual-Malapindha dyke.

4.45 For taking up the protection works under Phase II and Phase III cleared by the TAC for Rs.115.03 crore, the tender preparation for Phase II & III works have been started by Brahmaputra Board and the works are scheduled to be completed by 2011-2012. It was stated that the erosion at Majuli Island would be further contained after execution of the balance works of Phase I and the proposed works under Phase II & III.

4.46 When asked the areas likely to be protected from erosion in Phase II & III, the Ministry in a reply stated :

“The reach from Tekeliphuta to Ukhalchuk (90.00 km.) on Northern bank of Brahmaputra and Jengrai to Milithiniali on the southern bank of river Kharkhatia Suti will be protected from erosion.”

4.47 To the query whether Majuli Island would be protected from erosion completely after completion of the two phases, and what further works/factors needed to be taken up to achieve this objective, the Ministry replied:

“River training & anti-erosion works are continuing process for protection of an area. After completion of Phases II & III, the acuteness of problem of Majuli Island will be significantly reduced. However, anti-erosion measures as per future river morphology & requirement have to be continued.”

4.48 The office of Brahmaputra Board is located in Guwahati. There is no site office or branch office at Majuli Island to keep constant vigil of the anti-erosion works there. The Ministry were asked if they felt the need for one office at the island for continuous monitoring of the work being done by the Board. In response thereto, the Ministry replied :

“Yes, it is necessary. Therefore, two Sub-Divisions are already there and one Division is also placed in the Island.”

4.49 The Ministry also *inter alia* stated that coordination between different agencies during work execution at the Island is maintained by seeking the help of District Administration, whenever required.

4.50 When asked to respond to the criticism made by some agencies / individuals about lack of efforts of Government for protection of a heritage place like Majuli Island, the Ministry in a note stated :

“Most of the criticisms made by various agencies/individuals about lack of efforts by Government on protection of Majuli Island are not based on hard facts. In fact, the Government of India, Government of Assam and Brahmaputra Board are working in coordination for effective implementation of the project for protection of Majuli Island from floods and erosion.”

4.51 During their study visit to Majuli Island several NGOs/Residents Welfare Associations shared their problems with the Committee. The Committee were informed that major delays occur in getting the sanction which reduces the period available for execution of work to 2-3 months. The time available for carrying out the work is normally November to April. However, the sanction comes in January or February. Therefore, very little time is available for works as the flood season starts in April. Asked to comment on delays in sanction of works/funds for Schemes of Brahmaputra Board, the Ministry in a post evidence reply stated :

“The proposals received from the Brahmaputra Board are expeditiously examined in the Ministry and requisite sanction of works/funds is conveyed as per the established

procedures. Adequate funds have been released to the Brahmaputra Board and there is no shortage of funds with Brahmaputra Board for carrying out sanctioned works/schemes.”

(v) Flood Management Programme

4.52 The Government of India in November 2007 approved the Cabinet note for implementation of ‘Flood Management Programme’ a State Sector Scheme under Central Plan to provide Central assistance of Rs.8,000 crore during XI Plan period. 148 Schemes of the States of Assam, Arunachal Pradesh, Nagaland, Sikkim, Mizoram, Tripura and West Bengal under the jurisdiction of Brahmaputra Board estimated at Rs.948.84 crore have been cleared and Rs.148.67 crore released so far. The amount released was meant for new schemes as well as ongoing schemes. To the question as to what role Brahmaputra Board would play in execution of the said State Sector Schemes, the Ministry in a reply stated that the Board coordinates with the States and recommends the schemes to the Ministry. The Board also monitors the progress of such schemes and recommends release of funds against the schemes.

4.53 The Brahmaputra Board also has chalked out a long term strategy for Flood Management and Erosion Control in Brahmaputra river basin. When asked for detailed information about the long term strategy and by when it was likely to be implemented, the Ministry stated as follows :

“Long term strategy was identified by Brahmaputra Board in the Master Plans, which included construction of reservoirs in the upstream for flood storage. However, upstream States have objection due to submergence of their land and displacement of their population. Another long term approach is to control Brahmaputra river by constricting its width for creating a defined river channel. Board has already taken some initial steps towards study of such a scheme.”

4.54 When asked about the appropriate period for implementation of the long term plan, the Ministry stated :

“In addition to structural measures, the long term plan includes non-structural measures like watershed management involving multidisciplinary activities and as such appropriate period of implementation can only be ascertained after firming up the detailed schemes.”

4.55 An area of 1,000 sq. km. in the North East Region has been provided protection from low and medium flood since 1982 as a result of the flood protection efforts of Brahmaputra Board. As reported by the State Government of Assam, the flood prone area of about 10,000 sq. km. still remains to be made safe from annual floods of Brahmaputra river, out of the total flood prone area of 24,380 sq. km. When asked as to whether the perennial flood problem in North East Region could be controlled, and the efforts needed in this regard, the Ministry stated as follows :

“Complete immunity from the perennial floods is utopian in concept and economically not viable. However the flood can be managed with the help of judicious mix of structural as well as non-structural measures and the damage caused every year by the floods can be minimized in the North East Region. The Master Plan prepared by Brahmaputra Board has suggested structural as well as non-structural measures, which requires to be implemented. In the Master Plan it has been concluded that the flood in Brahmaputra and Barak valley can be effectively controlled by constructing reservoirs on the upper catchments of the tributaries of Brahmaputra and on Barak. The short term measures like embankment, anti-erosion etc. are also to be constructed at selected location. The non-structural measures like Flood Plane Zoning, Flood Forecasting, Flood Proofing, Flood Insurance etc. would also need to be implemented to minimize the flood damage.”

4.56 The Committee asked the Ministry of Water Resources to give opinion on declaring Brahmaputra as a ‘National River’ as was done recently by the Government in case of the Ganga river and whether it would help in implementation of various flood and erosion control programmes by the Brahmaputra Board. In reply, the Ministry stated as follows :

“Invoking the provision of entry 56 of the Union List, it has already been declared that it is expedient in the public interest that the Central Government should take under its control the regulation and development of the inter-state Brahmaputra River Valley to the extent provided in the Brahmaputra Act 1980. Regarding Ganga river it is to mention here that the Central Government *vide* Ministry of Environment and Forest notification dated 20.02.2009 has constituted ‘National Ganga River Basin Authority’ having authority for planning, financing, monitoring and coordinating

for strengthening the collective efforts of the Central and the State Governments for effective abatement of pollution and conservation of river Ganga. The authority does not have any role in the flood matters.”

4.57 As part of its long term measures to tackle river bank erosion problem, the Brahmaputra Board has already prepared a Concept Note on Bank Stabilization of river Brahmaputra and forwarded the above to CWC; CWPRS; WRD, Government of Assam; WRDTC, IIT Roorkee; Civil Engineering Department of IIT Guwahati; Assam Engineering College; Jorhat Engineering College; and NIT Silchar. The Report has been modified as per the suggestions/observations of the experts/organizations. Modalities are being worked out for carrying out mathematical model studies in collaboration with IIT Guwahati to ascertain the feasibility of the proposed channelization of river Brahmaputra so that a long term solution of flood/erosion problem of the Brahmaputra Valley can be concretized and executed.

(vi) Other issues

(a) Issue of proposed dam on upstream of the Brahmaputra river by China

4.58 There have been reports in newspapers in recent years stating that China proposed to construct a dam on the upstream of the Brahmaputra river inside its territory. As per news report, the proposed dam was planned to generate 540 MW of electricity. It is said to be built at a place called Zangmu, and the project is to be completed by December 2015. It was reported that China's plan to build the dam is to divert the waters of the Yarlung Tsangpo (as the Brahmaputra is called there) from Tibet to irrigate the Xinjiang and Gantsu portions of the Gobi desert. It was also further reported that the subject of China's plans to build dam on the Brahmaputra was raised with China several times, but each time China denied of any such activity. When clarifications were sought by the Members during the sitting of the Committee, the representative of the MoWR stated that the issue was raised during the visit

of the President of China to India in 2006, by the media persons. In response, China had stated that they were not constructing any such dam and if they did so then being a responsible country, the effect on downstream reaches will be kept in mind.

4.59 The Committee desired to know whether any international law exists which deals with the international water disputes. The representatives of the Ministry of Water Resources replied in the negative.

4.60 When the Committee asked the Ministry as to whether any agreement has been made between India and China on sharing the waters of the Brahmaputra, the Ministry stated as follows :

“With China, there is no agreement on sharing of waters of Brahmaputra. But there is an MoU with China under which China provides flood season data on river Brahmaputra as well as river Sutlej which helps India in better flood management. But there is no agreement on water sharing.”

4.61 Asked further by the Committee as to whether any discussion has taken place about the reported construction of dam and diversion of the waters of the Brahmaputra river, the representatives of the Ministry replied as follows :

“This issue of construction of dam and diversion of water of Brahmaputra river by China was taken up with China through the Ministry of External Affairs and the Ministry of External Affairs informed us that the Government of China said that they have no major programme for diversion of water Brahmaputra and they also said that if they take up any such project, they will consider the concerns of the downstream States.”

4.62 The Committee also asked for the comments of the Ministry on certain reports in the media regarding construction of dam on Brahmaputra River by China. In their latest communication dated 17 May 2010, the Ministry of Water Resources has stated that during the External Affairs Minister’s visit to China on 7 April 2010, the Chinese Authorities conveyed that Zangmu is a small hydropower station for generation of power and not for water storage. It would have no impact downstream.

4.63 Regarding the protection of Indian interests, the Ministry has further stated that an Inter-Ministerial Expert Group (IMEG) under the Chairmanship of Joint Secretary (EA), Ministry of External Affairs (MEA) monitors the developments in China regarding activities in Brahmaputra basin. The specialized agencies are monitoring Chinese activities on diversion/control of Trans National Rivers flowing from Tibet to India. No instance of water diversion activities on Brahmaputra River by China has been observed so far by the IMEG.

4.64 As regards the impact on downstream areas on the Indian side, the Ministry has stated that in case of any diversion of Brahmaputra water to some adjacent basin by China, the flow in Indian territory will reduce to the extent of diversion and there will be effect on power generation and other uses. In case the water is discharged back into the main river the reduction in flow may be negligible.

(b) Flow of water in the Brahmaputra River

4.65 The Committee also desired to know the quantum of water in Brahmaputra River when it enters Indian territory and also when it enters Bangladesh. The Committee were informed that the Central Water Commission (CWC) has conducted studies and according to the studies the flow is 78 BCM when it enters India and 629 BCM when it enters Bangladesh border. The Increase is because of contribution of Indian rivers. The CWC has also established a site on Indo-China Border to observe the flow of Water there.

(c) Impact of works done by Brahmaputra Board on irrigation and hydropower in the region

4.66 The Brahmaputra Board has been in existence for the last 30 years. The Committee desired to know the position of erosion control increase in area of irrigation and also in hydropower in the region in comparison to the period when Brahmaputra Board was established. The representatives of the Ministry of Water Resources and Brahmaputra

Board assured that the relevant information will be collected and provided to the Committee.
However, the requisite information is yet to be submitted by the Board.

CHAPTER-V MONITORING

The work of Brahmaputra Board is monitored by the Union Ministry of Water Resources. Also there is a High Powered Review Board under the Chairmanship of the Minister of Water Resources and the Chief Ministers of seven States of North Eastern Region as Members of the Review Board. The High Powered Review Board had held 5 meeting and its last meeting was held in 2005 when it recommended the following :

- (i) Revamping of Brahmaputra Board.
- (ii) Extension of jurisdiction of Brahmaputra Board.
- (iii) Appointment of full time Chairman.
- (iv) Filling up of statutory posts.

5.2 To implement the above recommendations of the High Powered Review Board, the Ministry has initiated a proposal for restructuring of Brahmaputra Board which is under finalization. The jurisdiction of Brahmaputra Board has been extended to Sikkim, areas of West Bengal falling within Brahmaputra Basin and the left out portion of Nagaland, Manipur, Tripura and Mizoram. Besides the Central Government has already appointed a full time Chairman in the Brahmaputra Board, and that out of seven statutory posts, four have been filled.

5.3 Asked why an independent agency has not been appointed to monitor the working of Brahmaputra Board, the Ministry in a post evidence reply *inter-alia* stated :

“The Board entrusted the evaluation studies to assess the usefulness of the investment made in preparation of 4 (four) Master Plans prepared by Brahmaputra Board in the Tenth Plan to Assam Engineering College. The evaluation of Phase-I and Phase-II works of Dholla-Hathigulli have been entrusted to IIT Guwahati.”

5.4 Further, the Committee were informed that the Board is going to have collaboration with the institutes to see whether they can do a mathematical modeling for the whole Brahmaputra Basin and then identify areas which could be critical in future considering the temporal changes and special changes. However, the Board does not have the data

required for that study. The Board does not have manpower to collect these data and further expertise is required for modelling which CWPRS and IIT Roorkee have. Asked whether work of mathematical modelling of Brahmaputra river has been given to any expert institution and approximate expenditure likely to be incurred for conducting such studies, the Ministry stated :

“The Board has approached the CWPRS, Pune in the matter and side by side, IIT Guwahati is being contacted. The work will be assigned after receiving the detailed work plan by the Institutes. CWPRS has been requested to work out a probable cost estimate for the work.”

PART II

OBSERVATIONS AND RECOMMENDATIONS

1. The Committee note that the North East region is endowed with a huge water potential, being drained by two main river systems – the Brahmaputra and the Barak. The Brahmaputra is braided and unstable in its entire reach in the Assam Valley except for a few places. Due to heavy deposition of silt, the river has frequently changed its course, giving rise to braiding and meandering pattern in the alignment of the river system. This problem was compounded further by earthquake shocks of moderate to severe intensity that visited the region from time to time. The Barak is the second largest river in the region. The Brahmaputra and the Barak rivers have been causing recurrent annual floods in the North Eastern part of the country. The Brahmaputra Board was, therefore, constituted in 1980 under The Brahmaputra Board Act (Act 46 of 1980) with the objective of planning and integrated implementation of measures for control of floods and bank erosion in Brahmaputra and Barak valley and to deal with matters connected therewith. Other functions entrusted to the Board include preparation of detailed project reports (DPRs) and estimates of projects in the Master Plans approved by the Union Government; and construction of multipurpose dams and other works in Master Plans. The Board started functioning in January 1982 with its headquarters at Guwahati, Assam. Subsequently, parts of all other North Eastern States and West Bengal were also added to the jurisdiction of the Board. The Committee note that the Board has carried out detailed planning and documentation of the water resources in the North Eastern Region and related problems and potentials. The Board has prepared 44 Master Plans which, after approval of the Union Government, have been sent to the States for implementation. In addition,

seven Master Plans are under different stages of preparation while six are under survey and investigation. The Committee also note that all the Master Plans have been partially implemented. The reason cited by the Ministry for partial implementation is that water being a State subject, the flood control, anti-erosion and flood proofing works are planned, implemented and funded by the State Governments according to their own priorities. Implementation of Master Plans is, therefore, mainly to be carried out by the concerned States. It is also noted that the Brahmaputra Board had stipulated the XI Five Year Plan as the time frame for completing all the remaining Master Plans. In fact, the DPRs for some identified projects have been taken up in consultation with the State Governments in respect of multi-purpose projects and drainage development schemes. The Committee note that since the regulation and development of inter-State rivers and river valleys figures in the Union List, they recommend that the Government should take necessary legal and administrative measures for proper planning, implementation and funding of flood control, anti erosion and flood proofing works in all the riparian States of Brahmaputra. The Committee would also like to be apprised of the measures being taken by the Brahmaputra Board to ensure that the targets fixed for completion of the remaining Master Plans in the XI Plan are achieved.

2. The Committee observe that the Brahmaputra Board has a sanctioned staff strength of 626, out of which 245 are technical and the remaining 381 non-technical posts. The Ministry reported that 38 posts – 13 technical and 25 non-technical - are lying vacant. Admittedly, the actual staff strength of 588 is inadequate considering the enormity of the mandate assigned to the Board. The Committee, therefore, recommend that the Government must take immediate measures to provide adequate

manpower to Brahmaputra Board by way of regular recruitment, deputation or on contractual basis keeping in view the short term and long term requirements of the Board.

3. The Committee note that the Ministry had initiated a proposal for restructuring of the Brahmaputra Board in October 2004 which would also have addressed the problem of staff shortage. Another aim of restructuring is, statedly, to redefine and widen the objective of the Board so as to include integrated water resources development involving irrigation, flood management, generation of hydropower, etc. The draft Cabinet note prepared by the MoWR in this regard had been reportedly circulated to all concerned Ministries and the State Governments. Based on such inter-ministerial and inter-governmental consultation, a bill was to be introduced in the Parliament during the Monsoon Session 2009 seeking amendment of the existing Brahmaputra Board Act, 1980. The Committee are surprised to note that the proposal to restructure the Board mooted in October 2004, is yet to take first step in its legislative journey. The Ministry has not furnished any cogent reason for such an inordinate delay. The Committee, therefore, reiterate the recommendation made by them in their 9th Report presented to Parliament on 22 April 2008 and hope earnestly that the Ministry would be able to introduce the Bill at least in the Monsoon Session of Parliament, 2010.

4. The Committee note that the employees of the Brahmaputra Board have certain grievances relating to their promotional avenues and pension. According to the Board, employees are given due opportunities to air their grievances in the meetings with the officials of the Board and representatives of different Associations/Unions. It was also explained that the Assured Career Progression

(ACP) Scheme introduced by the Government has also motivated the employees to a certain extent. Further, the Committee were apprised that the Board has taken some steps such as training of employees in office automation and other technical matters like computer aided design, drawings, data management, etc. to improve their skills. Undoubtedly, the employees of Brahmaputra Board have some genuine grievances particularly these related to service conditions and promotional avenues which need to be addressed to expeditiously by the Ministry. The Committee are of the considered view that a sound grievance redressal mechanism for its employees is a sine-qua-non for the effective functioning of any organization. They, therefore, desire the Ministry/Brahmaputra Board to set up a grievance redressal mechanism so that the genuine grievances of the employees are resolved amicably and the employees are motivated to contribute their best for the smooth functioning of the Brahmaputra Board.

5. The Committee note that the North Eastern Hydraulic and Allied Research Institute (NEHARI) was established under the Brahmaputra Board at Rudreshwara (North Guwahati) as per the Assam Accord and operationalised during 1996 at a cost of Rs.14 crore. Its main functions are material testing, carrying out model studies, etc. It is assisted by the Central Water & Power Research Station (CWPRS), Pune and Central Soil & Materials Research Station (CS&MRS), New Delhi. The Committee were informed that the Institute has successfully completed model studies of (i) Jiadhah River, (ii) River Brahmaputra from Porvita to South Salmara, (iii) Majuli Island, and (iv) Kameng River. It is observed that NEHARI manages its affairs with the funds provided by the Government. It also generates fund by providing services to different agencies. It has, however, been observed that Its earning had drastically declined

from Rs.49.78 lakh in 2002-03 to Rs.6.70 lakh only in 2008-09. It is also noted that in place of required staff strength of 45, only 29 are in place at present. The Committee had recommended earlier (9th Report/14th Lok Sabha) for filling up of posts by reviving the deemed abolished posts. According to the Ministry the posts required for strengthening of NEHARI are being worked out. Since shortage of staff is bound to hamper the smooth functioning of NEHARI, the Committee recommend that MoWR/Brahmaputra Board need to expedite the process of providing adequate staff to NEHARI at the earliest. NEHARI should also take steps to mobilise the available resources to increase their income.

6. The Committee note that the Board is not facing any shortage of funds to carry into execution its assigned mandate. Apart from Grants-in-aid received from MoWR, the Board also receives funds from other Government agencies towards 'deposit works' i.e. works assigned by other organizations to the Board on payment basis. It is noticed that from 2005-06 to 2008-09, the Board received meagre and fluctuating income on account of deposit works rendered to 17 organisations/individuals. In addition, its earnings include interest on loans and advances paid to employees, guest house rent, tender fee, rent of building, laboratory testing charges and license fee recovery. As regards the achievement of targets, the representatives of the Ministry stated that the Board should have proper mechanism for optimal utilization of allocated funds and monitoring the progress of works so that the targets fixed are achieved within the stipulated time. Considering the importance and the necessity of effective monitoring mechanism, the Committee ardently hope and expect the Board to evolve suitable procedural guidelines and time schedule regarding administrative approval, technical sanction and tendering process so that

the allocated funds are utilized within the stipulated time and in the prescribed manner. The Board should also endeavour to raise its own resources to mop up its fluctuating income.

7. The Committee note that the Board has taken up 14 multipurpose projects in Brahmaputra and Barak Basin and in the south flowing river in Meghalaya for survey, investigation and preparation of DPRs. The number of projects for which DPRs have been completed are five viz. Siang Single Stage & Subansiri Single Stage in Arunachal Pradesh, Tipaimukh in Manipur and Mizoram, Pagladiya in Assam and Bairabi in Mizoram. The Siang and Subansiri Dam Projects have been handed over to the National Hydro Electric Power Corporation (NHPC) for implementation, while Tipaimukh and Bairabi Dam Projects have been handed over to the North East Electric Power Corporation (NEEPCO) and the Government of Mizoram respectively. The Pagladiya Dam Project is under execution by the Board. The Ministry claimed that they keep a tab on the pace of execution of works by calling for the implementation status. The Committee regret to observe that though DPRs have been prepared by the Brahmaputra Board for five projects, these projects are still languishing for want of implementation by the States for one reason or the other. The Committee hope that the Board will make genuine efforts in clearing the bottlenecks in the implementation of these five projects and pursue vigorously with the State Governments to ensure that these are completed without any further time and cost overruns. The Committee would like to be informed of the latest position in the matter.

8. The Committee note that the Brahmaputra Board had identified 41 potential drainage congested areas in the North Eastern Region in the Master plans of which two DDSs have been suspended. DPRs for 20 schemes out of the 39 Drainage

Development Schemes (DDS) have been prepared and 11 of them already implemented by the Board except a few where some difficulty is being faced. 19 other DDS are under various stages of investigations and DPR preparation. The Committee are given to understand that after the DPRs have been prepared by the Board, they are handed over to concerned Departments/agencies/State Governments. Reportedly, the Board sometimes faces delay in execution because of tardy land acquisition process but the Board keeps a watch by calling for the status of implementation by the States. The Committee hope that the Board will exercise their good influence with the State Governments to avoid any delay in land acquisition process which may consequently result in delay in completion of projects.

9. The Committee observe that since 1999-2000, the Board has taken up various construction projects for drainage development and prevention of erosion and flood control. The major components include Pagladiya Dam Project, construction of Drainage Development Schemes (DDSs), anti-erosion and flood control schemes at various places in Assam, and protection of Majuli Island from erosion. The Pagladiya Dam being constructed across Pagladiya river at Thalkuchi, Baksa District, Assam, has a proposed height of 25 m. and 21 km. long earth dam with a spillway. Sanctioned by the Government of India in January 2001 at an estimated cost of Rs. 542.90 crore, the Project is expected to bring flood moderation benefit to 40,000 ha., irrigation benefit to 54,160 ha., and incidental power generation of 3 MW. Till now, works carried out pertaining to this Project include pre-construction survey; investigations, studies, design, drainage, etc.; taking possession of land (956 ha.) for resettlement and rehabilitation purpose, construction of project roads, offices, etc. However, the Committee regret to note that the works for Pagladiya Dam Project are presently held

up due to non-completion of Zirat Survey and land acquisition. To resolve these issues, a discussion in January 2009 between the officials of the Board and Bodoland Territorial Council (BTC) was held. The Committee note that the BTC suggested the possibility of finding an alternative project site way upstream of the present site. Subsequent to a meeting convened by Secretary, MoWR in February 2009, Chief Secretary, Assam had a meeting on 23.10.2009 with officials of Brahmaputra Board and BTC wherein it was decided that the Board should take up investigations for alternate project location near the Assam-Bhutan border, and subsequently, it has carried out reconnaissance and topographic survey in this regard. The Committee, therefore, desire the Ministry to make vigorous and intelligent efforts to resolve all the bottlenecks impeding the construction of Pagladiya Dam. They would like to be apprised of action taken in the matter by the Ministry.

10. The Committee observe that the Board took up the task of the protection of Majuli Island from flood and erosion on the request made by the Government of Assam in November 1999. The Board prepared the DPR for protection of Majuli Island and submitted to the CWC in August 2000 which was revised and approved by CWC in August 2003 with an estimated cost of Rs.86.56 crore to be taken up in three phases. Due to the gravity of erosion problem, and as the Government sanction for Phase-I works was anticipated to take some time, the Board took up several immediate measures from January 2004 and February 2005 to provide relief to the people at an expenditure of Rs.5.92 crore. The immediate measures were followed by the regular flood and erosion protection works under Phase I in March 2005 as per DPR. The Phase I was to be completed by the end of X Plan. However, due to non-availability of construction materials, transport bottlenecks, non-performance of some

contractors, the work programme was re-scheduled for completion by March 2009. Phase II & Phase III of the Scheme estimating Rs.116.02 crore, have also been cleared by CWC in November, 2008, and tender preparation for works have already been started. The works are scheduled to be completed by 2011-12.

Though there appeared to be a degree of success in the efforts of Brahmaputra Board and the resultant mitigation of erosion and flood in several places of Majuli Island, the Committee note that the flood and erosion problem in the Island is far from being contained as the Island was ravaged by the floods during the monsoon season in 2008. The apparent cause of the flood was the breaches that occurred at Brahmaputra dyke and on other embankments at Majuli Island. The seriousness of the erosion and the ravages of floods prompted the Standing Committee on Water Resources of Parliament to make an on-the-spot visit to Majuli Island during 2009. The Committee note that a Standing Committee of Experts was constituted by the Government of India in 2007 which reviews and suggests measures for protection of Majuli Island. The Experts Committee had visited the Island five times from January 2008 to April 2010 and recommended several works to be taken up by the Brahmaputra Board as well as the Government of Assam. The Committee hope that implementation of the suggestions of the Experts Committee would be completed at the earliest so that the people of Majuli Island are not exposed to recurrent nightmare of floods year after year. They also desire to see that works for Phase II & III are completed by the scheduled target of 2011-2012. The Committee would like to be apprised of the recommendation of the Committee of Experts and the action taken to implement them.

11. During their visit to Majuli Island, several representations were received by the Committee pertaining to the problem of annual flood and erosion havoc in East Barpeta District of Assam, including the region from Bahari Satra to Pazarbhanga and the urgent measures needed for rehabilitation of the affected families. The Committee are optimistic that a permanent solution for annual flood and erosion problem at Barpeta District of Assam is feasible, and must be put in place expeditiously. The Committee would like to be apprised to the action taken by the Board in regard to detailed field survey and studies for hammering out an effective long term solution to annual flood and erosion havoc in Barpeta District of Assam.

12. The representatives of the NGOs/resident welfare association complained to the Committee during their field visit about the limited time period available for work i.e. 2-3 months to carry out for the erosion control and flood control works due to long time span of floods, delay in release of funds, delay in payment to contractors, etc. The Committee are not happy with this situation and desire that the Board should plan the works and sanction and release of funds in such a way that the limited available time is utilized by carrying out the maximum work possible.

13. The Committee note that the Ministry has approved 148 schemes for flood management in the North Eastern States at an estimated cost of Rs.948.84 crore. The Board has also chalked out a long term strategy for Flood Management and Erosion Control in Brahmaputra river. The Board has also prepared a concept Note on Bank stabilization on river Brahmaputra and forwarded it to IITs, CWC, CWPRS, Government of Assam, etc. The modalities are also being worked out for carrying out mathematical model studies to ascertain the feasibility of the proposed channelization of the river Brahmaputra. Though the representative of the Board in his oral

testimony before the Committee described complete immunity from perennial floods as 'utopian', the Committee are optimistic that with the speedy implementation of various structural and non-structural measures planned by the Board, the problem of recurrent floods and land erosion can be contained to a great extent and resultant human misery mitigated substantially.

14. The Committee observe that China reportedly proposes to construct a dam on the upstream of Brahmaputra inside the territory under its suzerainty. The Committee were informed that this issue was raised several times with China but each time China denied the media reports but conceded that there exists an MoU under which China is required to provide flood season data on river Brahmaputra to facilitate better flood management by India. In the absence of an international treaty or convention between India and China, the issue of construction of dam and diversion of waters of Brahmaputra by China was taken up through the Ministry of External Affairs which only met denial by China. However, according to subsequent media reports, China has conceded construction of dam but denied diversion of water of Brahmaputra. The Committee, therefore, recommend that the matter be taken up at the highest level with China through diplomatic channels to clear the misgivings of the people of India in this behalf.

15. To a query of the Committee, it was stated that the flow of water in Brahmaputra river when it enters India, as per a survey conducted by the Central Water Commission (CWC), is 78 Billion Cubic Meter (BCM). The Committee were also informed that the CWC has established a site of the near Indo-China Border to observe the flow of water in the Brahmaputra river. The Committee observed that in spite of the substantial expenditure on the Brahmaputra Board since its inception

over the last three decades, there has been little achievement in the field of erosion control, irrigation and hydro-power in the region. The Committee note that on being sought information about position of erosion control, increase in area of irrigation and in hydropower in the region from the period when Brahmaputra Board was established, the representatives of the Ministry assured the Committee that the relevant information will be made available to the Committee. Regretably, the desired information is yet to be furnished to the Committee. The inability of the Board to compile, maintain and supply such vital statistics speaks volumes about the functioning of the Board. They, therefore, desire that the requisite information be compiled and furnished to the Committee without further loss of time.

16. The Committee note that the works of Brahmaputra Board are monitored by the MoWR and also by the High Powered Review Board under the Chairmanship of Minister of Water Resources and Chief Ministers of North Eastern States as Members. The Brahmaputra Board does not have manpower to collect data regarding mathematical modeling of Brahmaputra basin. The Board has, therefore, approached CWPRS, Pune for the purpose while contact has been established with the IIT, Guwahati in this behalf. The work will be assigned after receiving the detailed work plan from the said institutes. As regards the cost of the work, the Board has requested CWPRS, Pune to estimate the probable cost for the same. The Committee desire that the evaluation studies being carried out by Assam Engineering College and IIT Guwahati of the schemes of Brahmaputra Board be completed in a time bound manner for the speedy evaluation of the schemes of the Board. CWPRS, Pune may also be asked to estimate the probable cost of the project at the earliest.

NEW DELHI
22 July, 2010
31 Asadha, 1932(Saka)

BENI PRASAD VERMA,
Chairman,
Standing Committee on Water Resources

APPENDIX- I
(Para 3.2)

FUND RECEIVED BY BRAHMAPUTRA BOARD FOR DEPOSIT WORKS

Sl. No.	Name of Agency	Particulars of Work	Fund received during 2005-2006 (in Rs.)	Fund received during 2006-2007 (in Rs.)	Fund received during 2007-2008 (in Rs.)	Fund received during 2008-2009 (in Rs.)
1.	NHPC Ltd., Arunachal Pradesh	Construction Material Testing of Middle Siang Project	1,70,000	--	--	--
2.	NHPC Ltd., Arunachal Pradesh	Testing of Coarse & Fine Aggregates of Dibang M.P. Project	6,33,415	--	--	--
3.	NHPC Ltd., Arunachal Pradesh	Construction Material Testing of Lower Siang Project	63,149	--	--	--
4.	NHPC Ltd., Arunachal Pradesh	Laboratory Testing Work	--	--	--	3,93,300
5.	NHPC Ltd., Arunachal Pradesh	Laboratory Testing Work	--	--	--	2,76,865
6.	North-Eastern Council, Shillong	Investigation Work	--	--	--	1,00,00,000
7.	North Eastern Council, Shillong	Survey & Investigation of Kynshi (Jadukata) Stage-II, M.P. Project	--	60,00,000	1,00,00,000	--
8.	L&T Ltd.	Testing of Geo-Mechanical properties of Sand Stone for Subansiri H.E. Project	68,570	--	--	--
9.	M/s AKD Construction & Suppliers	Testing of Sand for Majuli Model	--	7,986	--	--
10.	M/s AKD Construction & Suppliers	Testing of Sand for Jia-Bharali Model	--	--	--	--
11.	Mr. Tapan Bora, Contractor	Testing of Sand for Jia-Bharali Model	--	2,662	--	--
12.	CWC, Itanagar, Arunachal Pradesh	Construction Material Testing of Micro Hydel Project of Tawang District	--	5,75,491	--	--
13.	CWC, Itanagar, Arunachal Pradesh	Construction Material Testing of Kundill Irrigation Project	--	--	4,69,985	--
14.	CWC, Itanagar, Arunachal Pradesh	Foundation Soil Testing of Kundill Irrigation Project	--	--	6,35,947	--
15.	CWC, Itanagar, Arunachal Pradesh	Construction Material Testing of Nyukcharangchu H.E. Project	--	--	1,10,963	--
16.	M/s Lloyd Insulation (I) Ltd.	Cube Testing of Hanger No. II	--	--	24,908	--
17.	Mr. P. Buragohain	Private Job	--	--	958	--
	Year-wise Total		9,35,134	65,88,801	1,12,42,761	1,06,70,165

LIST OF FUNCTIONS ASSIGNED TO THE BRAHMAPUTRA BOARD

The main functions of Brahmaputra Board stipulated in the Act are :-

- (i) To carry out survey and investigations in Brahmaputra Valley and to prepare Master Plan for the control of floods, bank erosion and improvement of drainage in the Brahmaputra Valley and activities connected therewith.
- (ii) To prepare the Master Plan in parts with reference to different areas of the Brahmaputra Valley or with reference to different matters relating to such areas and may as often as it considers necessary so to do, revise the Master Plan or any part thereof.
- (iii) To prepare Master Plan for development and utilization of water resources of the Brahmaputra Valley for irrigation, hydropower, navigation and other beneficial purposes.
- (iv) To submit Master Plan / revised Master Plan to the Central Government after consultation with the State Governments concerned and approve the same subject to such modifications as it may deem fit.
- (v) To prepare detailed project report and estimates in respect of the dams and other projects in the Master Plan as approved by the Central Government and indicate in each case the cost attributable to different purposes or uses.
- (vi) To draw up standards and specifications for constructions, operation and maintenance of such dams and other projects.
- (vii) To construct with the approval of the Central Government, multipurpose dams and works connected therewith as proposed in the Master Plan approved by the Central Government and maintain and operate such dams and works.
- (viii) To prepare in consultation with State Government concerned, a phased programme for construction by the State Government of all dams and other projects proposed in the Master Plan as approved by the Central Government other than those referred in (vii) above.
- (ix) The Board may maintain and operate any dam or project for so long as it deems necessary to do so.
- (x) To perform such other functions as are supplemental, incidental or consequential to the functions specified above.

LIST OF MASTER PLAN APPROVED BY CENTRAL GOVERNMENT

Sl. No.	Name of Basin/Sub-Basin	Status
A.	Main River	Approved by Government of India.
1.	Brahmaputra Main Stem – Master Plan Part - I	
2.	Barak & its tributaries - Master Plan Part - II	
B.	Tributaries	
1.	Buridehing	
2.	Dikhow	
3.	Dhansiri	
4.	Kopili Kolong	
5.	Puthimari	
6.	Ranganadi	
7.	Gumti	
8.	Pagladiya	
9.	Noa-nadi	
10.	Dikrong	
11.	Muhuri	
12.	Jia-Bharali	
13.	Manu	
14.	Champamati	
15.	Disang	
16.	Jinary	
17.	Na-Noi	
18.	Juri	
19.	Burima	
20.	Dhalai	
21.	Jiadhal	
22.	Bharalu	
23.	Lohit	
24.	Majuli Island (Special Case)	
25.	Khowai	
26.	Ghiladhari	
27.	Jinjiram	
28.	Dhaleswari	
29.	Moridhal	
30.	Jhanji	
31.	Subansiri	
32.	Gaurang	
33.	Haora	
34.	Gabharu	
35.	Gadadhar	
36.	Bhogdoi	

37.	Belsiri	
38.	Kulsi-Deosila	
39.	Depota	
40.	Dhansiri (North)	
41.	Barnadi	
42.	Buroi	
1.	Beki-Manas-Aie	Under Preparation
2.	Brahmajan	
3.	Tipkai	
4.	Bargang	
5.	Sankosh	
6.	Dudhnol-Krishnal	
7.	Tangani	
1.	Simsang	Under Survey Investigation
2.	Kynshi	
3.	Um-n-got	
4.	Tista	
5.	Jaldhaka	
6.	Torsa, Kalijani & Raidak	

**NOTES ON THE PROBLEM OF FLOOD, EROSION OF BARPETA
DISTRICT OF ASSAM**

14 (i) The Brahmaputra dyke was constructed from 1954 to 1959 from Adabari to Baghbar hills in phases for length of 70.35 Km. to protect a vast area of homestead and cultivated land on the right bank of river Brahmaputra from chronic flood devastation from time to time since 1960. The Brahmaputra started eroding its right bank at downstream of Bahari by Northern swing. The progress of erosion got aggravated and the dyke from Bahari to Baghbar had to be retired on many occasions. The B/dyke from 36 Km. to 71.35 Km. falls under the jurisdiction of Barpeta W.R. Division.

The entire 5.643 Km. length of B/dyke from Kurkarjan to Bahari is in a dilapidated condition with inadequate section all through due to non-maintenance of the dyke over a long period due to paucity of fund. It was observed during successive floods of last years that the dyke could not resist onslaught of flood after tough battle with flood fury with man and materials in various reaches. The entire B/dyke from Kukrajan to Bahari covering as many as two reaches is in urgent need of bank protection works for the safety of the dyke as well as large homestead and cultivable land situated behind it. As such raising and strengthening of the entire length of the dyke along with A/E measures is urgently necessary.

Due to dilapidated condition with inadequate section of the whole dyke due to active bank erosion, the reaches as mentioned above are badly threatened causing danger to the nearby homestead and cultivable land in addition to making entire situation grave. This has warranted taking up raising and strengthening work along with anti-erosion works.

The dyke is the only way of communication link of these villages so implementation of the scheme is of paramount importance. The Barpeta District is the worst flood affected district in the State of Assam. No development works is possible unless the dyke system could be protected.

The Brahmaputra dyke around Pazarbhanga area was subject to onslaught of flood of 2006 which inflicted severe injury to the embankment section right from the beginning of the flood season. Massive bank erosion took place towards the end of April 2006 culminating in the resultant breaches of embankment near Pazarbhanga at ch. 50.00 Km. and at ch. 47.00 Km. on 13.4.2006 in spite of temporary palliative measures taken up to

avoid any flood during 2006. The opening of the breach was about 100 M in length at the beginning. In order to protect the village and cultivable land closing of breaches has become very urgent and essential.

14 (ii) One estimate under the nomenclature 'Immediate measure to protect Bahari Satra and its adjoining area from the erosion of river Brahmaputra to close the breach at Bar-Baradi for 2006-07' under CRF for Rs. 2,25,21,500.00 with provisions of construction of 3.40 Km. of retirement an anti-erosion works consisting of launching of R.C.C. porcupine in the eroded reach of length of launching of R.C.C. porcupine in the eroded reach of length 2.0 Km. was sanctioned by Revenue (General) and Disaster Management Department, Assam vide letter No. RGR105/2007/15 dated 12.6.2007. In the meantime flood water of river Brahmaputra was rising alarmingly so the scheme could not be implemented before the flood of 2007, though scheme was inaugurated by the Hon'ble MLA of Chenga Legislative Assembly Constituency.

During the year 2007 the Barpeta District was badly affected by the three wave of flood. The Brahmaputra basin experienced unprecedented flood and the active erosion from up-stream of Bahari Satra to Pazarbhanga and Bar-Baradi was observed and about 300 m (average) depth of erosion was recorded all along the river reach and the further erosion took place at Bar-Baradi from where the retirement for closing of breaches caused during 2006 was proposed to be started. Though the opening of breach gap of 2006, flood water of 2007 entered to country side and created heavy devastation at many revenue villages around the breach site namely, Bar-Bahari, Pazarbhanga, Palhaji etc. with a large number of population and many private and public institutions of importance. The opening of the breach extended about 2 Km. in length.

As per decision of High Powered Meeting two separate estimates as below were prepared one for closing of breach in the Brahmaputra dyke caused during flood of 2006 and 2007 and other for anti-erosion measures to check erosion for entire erosion affected reach covering 11 Km.

Anti-erosion measures from Bahari Satra to Balartari under C.R.F. for Rs. 7.03 crore.

Construction of retirement for closing of breaches at Phulbari and Bar-Baradi under NREGA for Rs. 3.25 crore.

The construction of retirement was to be executed by Barpeta District Administration and anti-erosion works was executed by Barpeta W.R. Division.

Implementation of the scheme under CRF (Rs. 7.03 crores)

As brought out above, the estimate with nomenclature "Immediate measures to protect Bahari Satra, Fulbari, Bhogerper and its adjoining area from the erosion of river Brahmaputra for 2007-08 under CRF amounting to Rs. 7.03 crore was prepared and submitted to Deputy Commissioner, Barpeta for his necessary recommendation and the estimate was recommended by the Deputy Commissioner, Barpeta District vide his letter No. BRR-59/2007/38 dtd. 12.11.2007 and sanctioned by Revenue and Disaster Management Deptt.

The Deputy Commissioner, Barpeta District inaugurated the scheme on 20.2.2008.

The work of pile screen No. 1 to 5 progressed satisfactorily and were completed successfully before flood and saved the area from Bahari Satra to Gumafulbari.

The Deputy Commission, Barpeta District visited the site frequently and reflected his satisfaction at the progress of pile screen No. 1 to 5 vide his letter No. BRR-59/2007/59 dtd. 16.04.2008 to the Secretary to the Govt. of Assam but displeased at the progress of pile screen No. 6 to 9.

The concerning contractors of pile screen No. 6 to 9 started their works lately in the last week of March 2008. In the meantime, monsoon started in the April 2008 and water level started rising and the river current become furious. Works of pile screen No. 6 to 9 could not be achieved in spite of best effort of department.

During the last week of April 2008, water level increased further and due to turbulent current of the river, part of the pile screen from 6 to 9 so far constructed mostly washed away.

Deputy Commissioner (DC) Barpeta and Additional Chief Engineer Water Resources Department visited the site on 2.05.2008 and 4.05.2008 respectively and in a joint meeting it was decided to stop with the work in pile screen from 6 to 9 further and from the saving of the pile screen RCC porcupine suggested from ch. 45,250.00 m to 47,500 m. During the month May and June 2008, the work has been executed and fruitful result obtained.

One meting was held on 4.1.2009 with the Deputy Commissioner, Barpeta, officials of Water Resources Deptt. and local public and as per decision modified estimated amounting to Rs. 5.54 crores submitted to D.C., Barpeta for actual work dune out of the

sanction of Rs. 7.03 crore. One separate estimate was prepared for the balance amount (7.03-5.54) Rs. 1.49 crore with provision for renovation pile screen No. 1 to 5, construction of new pile screen in the down stream and armouring of PWD road and accordingly works taken up.

Payment of the scheme-As per CRF norms fund will be released for payment on the basis of completion certificate from the concerning Deputy Commissioner. No completion certificate issued till now.

Performance of the scheme-Desire result has been obtained in nabbing the erosion in between ch. 40.20 Km. to 47.50 Km. during flood time i.e. from June, 2008 to October, 2008. Sand casting has been observed in between pile screen No. 1 to 5 i.e. from Bahari Satra to Gomafulbari ara and bank erosion is totally stopped between 45.25 Km. to 47.50 Km.

Implementation of the scheme under NREGA (Rs. 3.25 crore) :

As estimate for closing of breaches by construction of retirement at Brahmaputra bank from Bahari to Bagbar at Pazarbhanga, Dongra PG, Bhogarpar area amounting to Rs. 3.25 crore was submitted to D.C. Barpeta to be taken up by D.C. Barpeta under supervision of W.R. Department. Accordingly, D.C. Barpeta sanctioned the estimate and NOC issue by WR Deptt. and work was completed. But due to progressive erosion of river Brahmaputra, newly constructed retirement was eroded away during the flood of 2008. The payment for this is made Civil Administration.

14 (iii) For permanent solution of the problem, proposals sanctioned are :

1. Flood Management Programme :

Raising & strengthening of Brahmaputra dyke from Bahari to Baghbar and construction of retirement at Betortari and Chesra including A/E measures at different area around Babari, Pazarbhanga, Chesra and Baghbar from the erosion of river Brahmaputra for Rs. 7.45 crore.

2. Under CRF

Immediate measures to protect Fulbari, Bhogarper and its adjoining area from the erosion of river Brahmaputra for 2008-09 (including breach closing) CRF for Rs. 22.36 crores.

The above schemes are being taken up.

In addition to above proposal for one new scheme "Protection of Fulbari, Bhogarper, Pazarbhanga and its adjoining area from the erosion of Brahmaputra (construction of land

spur at ch. 44.30 Km., 44.65 Km., 45.00 Km. and 45.35 Km.)” amounting to Rs. 67.90 crore is recommended in the 45th Technical Advisory Committee, preparation of detailed estimate is under process.

APPENDIX-V

MINUTES OF THE TWELFTH SITTING OF THE STANDING COMMITTEE ON WATER RESOURCES (2007-2008) HELD ON MONDAY, 09 JUNE 2008

The Committee sat from 1500 hours to 1700 hours in Committee Room 'B', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri R. Sambasiva Rao – Chairman

MEMBERS

LOK SABHA

2. Shri Bhanwar Singh Dangawas
3. Shri Bikram Keshari Deo
4. Shri Prakash B. Jadhav
5. Smt. Preneet Kaur
6. Shri Raghuvveer Singh Kaushal
7. Smt. Manorama Madhavraj
8. Shri Shankhlal Majhi
9. Shri Abu Ayes Mondal
10. Shri Harilal Madhavajibhai Patel
11. Dr. Arun Kumar Sarma
12. Smt. Minati Sen

RAJYA SABHA

13. Kumar Deepak Das
14. Shri K.E. Ismail
15. Shri Bharatsinh Prabhatsinh Parmar
16. Dr. Gyan Prakash Pilonia
17. Smt. Vasanthi Stanley

SECRETARIAT

1. Shri N.K. Sapra - Additional Secretary
2. Shri P.V.L.N. Murthy - Deputy Secretary

REPRESENTATIVES OF MINISTRY OF WATER RESOURCES

1. Shri S. Manoharan, Additional Secretary MoWR
2. Shri A.K. Bajaj, Chairman, Central Water Commission

3. Shri Rajan Nair, Chairman, Brahmaputra Board
4. Shri Narender Kumar, Commissioner (B&B), MoWR

At the outset, the Hon'ble Chairman welcomed the members to the sitting and congratulated to Dr. Gyan Prakash Pilia for his re-nomination to the Committee and also welcomed Smt. Vasanthi Stanley and Shri Bharatsinh Prabhatsinh Parmar, MPs, Rajya Sabha who were nominated for the first time to the Committee. Then he invited attention of the Members towards the provisions of Rule 259 of Rules of Procedure & Conduct of Business in Lok Sabha relating to quorum of the sittings of the Committee.

2. Thereafter, the representatives of the Ministry of Water Resources were called in and the Hon'ble Chairman welcomed the Additional Secretary, Ministry of Water Resources, Chairman, Central Water Commission and Chairman, Brahmaputra Board as well as their colleagues to the sitting of the Committee and requested them to introduce themselves to the Committee.

3. After the introduction, the Chairman, Brahmaputra Board gave a brief power point presentation on different aspects of the 'Working of Brahmaputra Board'. Thereafter, the Hon'ble Chairman and the Members of the Committee sought certain clarifications on various aspects of the subject and the Additional Secretary, Ministry of Water Resources and other representatives gave clarifications thereto.

4. A verbatim record of the proceedings of the sitting of the Committee has been kept.

The Committee then adjourned.

**MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE ON WATER
RESOURCES (2008-2009) HELD ON FRIDAY, 13 MARCH 2009**

The Committee sat from 1515 hours to 1630 hours in Committee Room 'B', Ground Floor,
Parliament House Annexe, New Delhi.

PRESENT

Shri R. Sambasiva Rao – Chairman

MEMBERS

LOK SABHA

2. Shri Bhanwar Singh Dangawas
3. Shri Raghuveer Singh Kaushal
4. Shri Abu Ayes Mondal
5. Shri Harilal M. Patel
6. Smt. Minati Sen
7. Shri Anurag Singh Thakur

RAJYA SABHA

8. Kumar Deepak Das
9. Smt. Vasanthi Stanley

SECRETARIAT

- | | | | |
|----|----------------------|---|----------------------|
| 1. | Shri N.K. Sapra | - | Additional Secretary |
| 2. | Shri C.S. Joon | - | Director |
| 3. | Shri P.V.L.N. Murthy | - | Deputy Secretary |

REPRESENTATIVES OF MINISTRY OF WATER RESOURCES

1. Shri S. Manoharan, Additional Secretary (WR)
2. Shri Rajan Nair, Chairman, Brahmaputra Board
3. Shri R.C. Jha, Member (RM), CWC
4. Shri Indra Raj, Commissioner (PR), MoWR

At the outset, the Hon'ble Chairman welcomed the Members to the sitting of the Standing
Committee on Water Resources.

2. Thereafter, the representatives of the Ministry of Water Resources were called in and the Hon'ble Chairman welcomed the Additional Secretary, Ministry of Water Resources and his colleagues to the sitting of the Committee. He drew their attention to the provision of Direction 55(1) of the Directions by the Speaker, Lok Sabha and requested them to introduce themselves to the Committee.

3. After the introduction the Committee took oral evidence of the witnesses. The Additional Secretary, Ministry of Water Resources gave a brief introduction on "Working of Brahmaputra Board." The Chairman, Brahmaputra Board then gave a power point presentation on different aspects of the "Working of Brahmaputra Board." Thereafter, the Hon'ble Chairman and the members of the Committee sought certain clarifications on various aspects of the subject from the representatives of the Ministry of Water Resources and the Brahmaputra Board. The representatives of the Ministry responded to the queries raised by members.

A verbatim record of the proceedings of the sitting has been kept separately.

The Committee then adjourned.

**MINUTES OF THE FOURTH SITTING OF THE STANDING COMMITTEE ON WATER
RESOURCES (2009-10) HELD ON TUESDAY, 27 OCTOBER 2009**

The Committee sat from 1400 hours to 1600 hours in Room No. 62, First Floor, Parliament House, New Delhi.

PRESENT

Shri Beni Prasad Verma – Chairman

MEMBERS

LOK SABHA

2. Shri Ghanshyam Anuragi
3. Shri Sher Singh Ghubaya
4. Shri Badri Ram Jakhar
5. Shri Haribhau Jawale
6. Shri K.R.G. Reddy
7. Shri S.P.Y. Reddy
8. Shri Arjun Roy
9. Shri G.M. Siddeshwara
10. Dr. P. Venugopal (Tiruvallur)
11. Shri Sajjan Verma

RAJYA SABHA

12. Smt. Syeda Anwara Taimur
13. Dr. Gyan Prakash Pilonia
14. Shri Anil Madhav Dave
15. Shri Ranjitsinh Vijaysinh Mohite-Patil
16. Shri Mangala Kisan
17. Shri Kumar Deepak Das

SECRETARIAT

- | | | | |
|----|---------------------|---|----------------------|
| 1. | Shri N.K. Sapra | - | Additional Secretary |
| 2. | Shri Devender Singh | - | Joint Secretary |
| 3. | Shri B.S. Dahiya | - | Director |

REPRESENTATIVES OF THE MINISTRY OF WATER RESOURCES

1. Shri S. Manoharan, Additional Secretary
2. Shri A.K. Bajaj, Chairman, Central Water Commission
3. Shri Narender Kumar, Commissioner (B&B)
4. Shri Rajan Nair, Chairman, Brahmaputra Board

At the outset, the Chairman welcomed the Members to the sitting of the Committee. Thereafter, the Chairman welcomed the representatives of the Ministry of Water Resources and Brahmaputra Board to the sitting of the Committee convened to have briefing on the subject “Working of Brahmaputra Board” by the officials of the Ministry of Water Resources and Brahmaputra Board.

2. After the introduction, the Additional Secretary, Ministry of Water Resources gave a briefing on the subject. Thereafter, Chairman, Brahmaputra Board gave power point presentation on the working of the Brahmaputra Board. The Members sought clarifications on various issues relating to the working of Brahmaputra Board including the erosion control works undertaken at Majuli Island and reported construction of a dam by China in the upper course of the Brahmaputra river which were replied to by the Additional Secretary and other representatives of the Ministry and Brahmaputra Board. The Committee decided to hold another meeting for detailed discussion on the Brahmaputra Board.

3. The witnesses then withdrew.

4. The Committee decided to hold next sitting on 13 November, 2009 for consideration of the draft Report on ‘Demands for Grants’ (2009-10) pertaining to the Ministry of Water Resources.

5. The verbatim proceedings of the sitting were kept for record.

The Committee then adjourned.

**MINUTES OF THE FOURTEENTH SITTING OF THE STANDING COMMITTEE ON
WATER RESOURCES HELD ON TUESDAY, 22 JUNE 2010**

The Committee sat from 1500 hours to 1600 hours in Committee Room 'D', Ground
Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Beni Prasad Verma – Chairman

MEMBERS

LOK SABHA

2. Shri Ghanshyam Anuragi
3. Shri Mahendrasinh P. Chauhan
4. Shri Sher Singh Ghubaya
5. Shri Badri Ram Jakhar
6. Shri Haribhau Jawale
7. Shri Virender Kashyap
8. Shri Ramashankar Rajbhar
9. Shri K.R.G. Reddy
10. Shri S.P.Y. Reddy
11. Shri Arjun Roy
12. Smt. J. Shantha
13. Smt. Annu Tandon
14. Dr. P. Venugopal (Tiruvallur)
15. Shri Sajjan Verma

RAJYA SABHA

16. Shri B.S. Gnanadesikan
17. Dr. Gyan Prakash Pilonia
18. Shri Anil Madhav Dave
19. Shri Mangala Kisan
20. Shri Kumar Deepak Das

SECRETARIAT

- | | | | |
|----|---------------------|---|----------------------|
| 1. | Shri N.K. Sapra | - | Additional Secretary |
| 2. | Shri Devender Singh | - | Joint Secretary |
| 3. | Shri B.S. Dahiya | - | Director |

At the outset, the Chairman welcomed the Members to the sitting of the Committee convened for consideration and adoption of draft Report on “Working of Brahmaputra Board”.

2. Thereafter, the Committee took up the draft Report on “Working of Brahmaputra Board” for consideration. After some discussion, the Committee adopted the Report with the minor amendment/modification arising out of discussion.

3. The Committee then authorized the Chairman to finalize the Report in view of the consequential changes arising out of factual verification and present the same to both the Houses of Parliament in the ensuing Session.

The Committee then adjourned.