

# **TO REVIEW AND EXAMINE EXISTING STATE LEVEL REGULATORY AND INSTITUTIONAL FRAMEWORK TO OPERATIONALISE THE NATIONAL WATER POLICY- 2012**

## **STATE REPORT MEGHALAYA**

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## Executive Summary

The state of Meghalaya has a unique legal status as it is a Scheduled VIth state under the Constitution of India. Owing to this unique position, the ownership, control and management of water resources is driven by local customs and traditional practices of local communities. Thus in Meghalaya, there is no defined codified custodian of water resources in the State. Meghalaya does not have any specific law defining ownership and rights over water sources. The rights are derived from customary beliefs and practices which in turn are supported by several legislations. Rights over water in rivers and lakes are exercised by the community/clan and individuals according to the customary laws and beliefs, also derived from the land tenure system.

The policy and regulatory framework aimed at the integrated management of water resources in Meghalaya is at a nascent stage. The state has a draft water policy and has also started the process of adopting a comprehensive water law.

Interestingly, despite the absence of any policy or legislative enactments, the state has a dedicated institutional mechanism for the integrated management of water resources.

At the top in the state is Meghalaya State Water Resource Council (SWRC) which is chaired by the chief minister of the state. The SWRC is the apex body in the state to decide on policy planning relating to water resources in Meghalaya. There is Meghalaya Basin Development Authority (MBDA) which is headed by the Chief Secretary, Government of Meghalaya. It is the Apex Committee for implementing Water Mission. The key functions of the MBDA involve policy planning, co-ordination of efforts of various stakeholders and facilitating convergence of various missions under IBDLP. MBDA therefore is envisaged to bring in the necessary harmony and synergy between the efforts being made by various departments under various missions regarding water governance and management.

There is Meghalaya State Water Resource Agency (MeWDA) which has a governing council and an executive council. The Chief Secretary of the state is the chairman of the governing council and with Commissioner and Secretary (Water Resources) as Chairman of the executive council. MeWDA is housed under Water Resources Department is the executive committee for implementing the Water Mission in the state. The PHE Department has been vested with the responsibility of providing drinking water supply in rural and urban areas of the State.

A number of programs have been initiated by these institutions. However, these have to have the consent or approval of local durbars' and /or the individual land owner to be able to tap surface or ground water. Thus the NWP presents a timely opportunity for the state of Meghalaya to adopt policies and laws on water governance that confirm to the vision of the NWP to create sustainable and equitable water resource governance in the country.

## Introduction

This report is a part of desk-based study undertaken to assess the preparedness of the three study states Meghalaya, Maharashtra and Karnataka to implement the objectives of NWP 2012. The desk-based study undertook a legal and policy audit<sup>1</sup> of these states to understand the existing policy and legal landscape, which could help these states to deliver on the objectives of NWP 2012. The present report contains detailed analysis of the state of Meghalaya with reference to thematic areas<sup>2</sup> culled out from the NWP 2012.

The choice of study states was made mutually with IWP so that a sample of very divergent states in terms of evolution of institutional and regulatory framework in water sector could be showcased within the constraints of a desk-based study.

## Meghalaya: A Background

Meghalaya was carved out of Assam to become an autonomous district on April 2, 1970. It was declared a full-fledged state of the Indian Union on January 21, 1972. The state of Meghalaya comprises Khasi, Garo and Jaintia hills. The state of Meghalaya has been divided into 11 districts. The Districts are further divided into Subdivisions and Blocks. There are a total of 4 subdivisions and 39 blocks in Meghalaya. The Blocks are further subdivided into Gram Sevak Circles. There are 15 Gram Sevak Circles in each Block. The Deputy Commissioner is the head of the district administration. The Urban Local bodies in the State include Municipal Board and Town Committees. Though there are no rural local bodies like the Mahkuma Parishad, the Anchalik Panchayat and the Goan Panchayat but traditional institutions like Syiemship, Daloiship and Nokmas exist in the rural areas. The Municipal Boards and Town Committees are governed by the Assam Municipal Act, 1956, since adopted, and the Establishment and Administration of Town Committees Acts such as the Garo Hills District (Administration of Town Committee) Act, 1956; the United Khasi and Jaintia Hills District (Establishment of Town Committee) Act, 1960; and the Jaintia Hills Autonomous District (Establishment and Administration of Town Committees) Act, 1975.

The state has a 496 km long international boundary with Bangladesh in the south and west. It is bordered by Assam in the north and east. The eastern part is bound by the Karbi Hills which is a continuation of the Meghalaya plateau. On all other sides of the state lies an extensive plain drained by the river Brahmaputra (in the north and west) and the river Surma and its tributaries (in the south).

## Unique constitutional status of Meghalaya

It is pertinent to point out over here that the Constitution of India in Part X contains provisions dealing with the administration of "Scheduled and Tribal Areas". The scheduled tribe populations (mainly belonging to Khasi, Jaintia and Garo tribes) constitute 85.53% of the total population. The Garos inhabit western Meghalaya, the Khasis, central Meghalaya and the Jaintias, eastern Meghalaya.

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<sup>1</sup> This legal and policy audit was done purely on the basis of material which was available in public domain and easily available. No trips to the state for ground trothing were undertaken due to lack of resources.

<sup>2</sup> Important thematic area were culled out of NWP 2012 to ensure that all aspects of the national policy were being dealt with and also to bring out uniformity in the study being undertaken in the three study states.

As per the provisions of Article 244 (2) of the Constitution, administration of the tribal areas in the States of Assam, Meghalaya, Tripura and Mizoram is to be carried out as per the mandate of the Sixth Schedule<sup>3</sup>.

Sixth Schedule provides for declaring those districts included in each item of (Parts 1, II, II A and in Part III) of the table appended to paragraph 20 of the Sixth schedule as autonomous districts and in Meghalaya, it includes Khasi Hills District, Jaintia Hills District and the Garo Hills District. To govern these autonomous districts, a District Council for each one of these autonomous district is constituted. There are three Autonomous District Councils (ADCs) in Meghalaya. They are Khasi Hills Autonomous District Council, Jaintia Hills Autonomous District Council and Garo Hills Autonomous District Council. The ADCs are constituted by the members (Member of District Council) representing the District Council constituencies who are elected to office through a regular election like members of the Legislative Assembly. The leader of the party which gets maximum representation in the District Council is appointed by the Governor of Meghalaya as the Chief Executive Member (C.E.M.) of the District Council. On the advice of the C.E.M., some members are appointed by the Governor as Executive Members who along with the C.E.M. constitute the Executive Committee of the District Council and exercise their executive powers. The District Council has legislative, judicial and executive powers in relations to subjects specified in the sixth schedule.

The District councils have powers to frame laws relating to several enumerated subjects including allotment, occupation or use or setting land apart for purposes of agriculture or grazing or for residential purposes to promote the interests of the inhabitants of any village or town, the management of any forest not being a reserved forest; the use of any canal or water-course for the purpose of agriculture. There are three Autonomous District Councils in Meghalaya. These autonomous councils receive grants from the State Government to take up rural development programs in areas such as construction of drinking wells for rural water supply.

The area comprised within the Municipality of Shillong is not within the Khasi Hills District for certain purposes as provided in Sixth Schedule. The Assam Reorganisation (Meghalaya) Act, 1969 which led to the formation of state of made special provisions with respect to application of laws made by the Parliament and the State Legislature to the tribal areas in Meghalaya. It mandates that if any law made by the District Council under paragraph 3, 8 or 10 of Sixth Schedule is repugnant to the law made by the State Legislature, then the law enacted by the District Council, to the extent of repugnancy be void and the law made by the State Legislature shall prevail. With respect to Acts of Parliament, the President has the power to issue notification directing that Act will not apply to the state or will be modified or varied in its application to the state.

## Water in Meghalaya<sup>4</sup>

The river system of Meghalaya comprises mainly of rivers draining to the Brahmaputra Basin in the north and the Meghna Basin in the South. The Average Annual Rainfall in Meghalaya is 2818 MM and Mawsynram in Meghalaya receive the highest rainfall in the world i.e. about 11000 mm annually. This huge rainfall is concentrated only in monsoon months and in contrast during non-monsoon months, most of the rain-fed surface sources and spring sources get dried, leading to water scarcity, which is a major problem as the people living in

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<sup>3</sup> This Schedule was drafted by a Sub-Committee on North-East Frontier (Assam Tribal and Excluded Areas) of the Constituent Assembly headed by Gopinath Bardoloi, the then Premier of Assam

<sup>4</sup> Information taken from the state water mission document.

these areas with highly variable rainfall, experience droughts and floods and often have insecure livelihoods.

As per discussion paper on water mission prepared by state govt. the State requires about 15 BCM of stored water annually for meeting the water requirements for drinking water, irrigation and other livelihood generating activities such as fisheries etc.

Most of the population in the state reside in far flung and widely distributed areas therefore to serve them is a very complicated task. To ensure availability of reasonable amount of water per capita throughout the year as well as to maintain quality of water, both are important issues in the state.

## **Water and land ownership in Meghalaya**

In order to understand water management in the state in the right perspective, it is imperative to have a quick peek in to the prevailing situation in the state vis a vis water and land ownership.

There is no defined codified custodian of water resources in the State. Meghalaya does not have any specific law defining ownership and rights over water sources. The rights are derived from customary beliefs and practices which in turn are supported by several legislations. Rights over water in rivers and lakes are exercised by the community/clan and individuals according to the customary laws and beliefs, a bit of which is coming from the land tenure system. In the state, there exist no land records, and most of the land is owned by the tribal communities/clans and individuals. No reliable and comprehensive study is carried out to know the utilisable quantity of water within the basins in the State.

The land tenure system followed by the indigenous people of the State which grants them freedom to utilise their land in any which manner they deem suitable has affected the lakes and rivers in the State as is amply evident from the present condition of the Wah Umiew river which is the main source of water for the Greater Shillong Water Supply Scheme (GSWSS) at Mawphlang.

In Meghalaya, the PHE Department has been vested with the responsibility of providing drinking water supply in rural and urban areas of the State. A host of programmes framed at the central and state levels are being implemented<sup>5</sup>, however these schemes have to have the consent or approval of local durbars' and /or the individual land owner to be able to tap surface or ground water.

Widespread and perennial conflicts over land are resulting in conflicts over water. Land and water disputes in Meghalaya has been one of the major reasons in non -implementation or inordinate delayed implementation of water related developmental schemes.

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<sup>5</sup> National Rural Drinking Water Programme (NRDWP) under the Rajiv Gandhi National Drinking Water Mission (RGNDWM), Urban Water Supply under Jawahar Lal Nehru National Urban Renewal Mission (JNNURM) a part from other State Plan schemes and externally aided programmes.

## Current institutional framework for water management and governance in the state

The state of Meghalaya is running a very ambitious programme called Integrated Basin Development and Livelihood Promotion programme. Water Mission is one of the eleven missions under this flagship programme of the state government. Key elements of the Water Mission include knowledge management, institutional development and capacity building, water use and water use efficiency, water quality management, ground water management, flood management, promoting multipurpose use of water, water and climate change adaptation, water governance and convergence.

For implementation of water mission the state has created an enviable institutional mechanism and commendable efforts have been made to ensure synergy between the mandate of this institutional mechanism with mandate of the already existing departments. At the top in the state is Meghalaya State Water Resource Council (SWRC) which is chaired by the chief minister of the state. The SWRC is the apex body in the state to decide on policy planning relating to water resources in Meghalaya. The functions of the Council will include policy planning, resource mobilization and coordination of the activities of various departments / agencies of the government as well as civil society organizations.

There is Meghalaya Basin Development Authority (MBDA) which is headed by the Chief Secretary, Government of Meghalaya. It will be Apex Committee for implementing Water Mission. The key functions of the MBDA involve policy planning, co-ordination of efforts of various stakeholders and facilitating convergence of various missions under IBDLP. MBDA therefore is envisaged to bring in the necessary harmony and synergy between the efforts being made by various departments under various missions regarding water governance and management.

There is Meghalaya State Water Resource Agency (MeWDA) which has a governing council and an executive council. Chief Secretary of the state is the chairman of the governing council and with Commissioner and Secretary (Water Resources) as Chairman of the executive council. MeWDA is housed under Water Resources Department is the executive committee for implementing the Water Mission in the state. The authority is created to coordinate the activities of various government and other agencies involved with the water sector and acting as a multi-sectoral autonomous institution having representation of all water sector departments.

There is a council on climate change and sustainable development in the state which also looks at impact of climate change on the availability of water resources. The state planning department liaise with the national ministries and helps in coordination planning while also striving for inter-sectoral coordination.

Following departments deal with different aspects of water management in the state

1. Department of Water Resources (determine water policy, enforce water action plan, regulate water management use and irrigation)
2. Public Health Engineering Department (drinking water)
3. Urban Affairs, Urban infrastructure and urban planning ( Shillong Municipal Board, drinking water supply, waste water treatment, sanitation)
4. Soil and water Conservation Department
5. Power Department and Meghalaya Energy Cooperation
6. Public works Department (medium scale irrigation scheme construction)
7. Mining and Geology Department (ground water investigations)

8. Fisheries Department (aquaculture, open water bodies)
9. Directorate of Tourism (use of water for recreational purposes and usage of water by tourism industry)
10. Forest and Environment Department (catchment protection)
11. Agriculture Department (small/micro scale irrigation, rainwater harvesting, watershed)
12. Community and Rural development Department (watershed development)
13. Pollution Control Board (pollution control and monitoring water quality)

There are district water resource development councils represent MeWDA at the district level, which is chaired by the deputy commissioner and has representatives from all relevant district level sectoral departments e.g. Water Resources / Public Health Engineering / PWD-Roads / Forest / Agriculture / Horticulture / Soil & Water Conservation / C&RD / Power and Tourism and any other officer or expert that may be co-opted by Deputy Commissioner. In every village, there will be an integrated village development committee. Under this committee there will be a village water management sub- committee<sup>6</sup>.

Apart from this the state also has autonomous district councils who are responsible for drinking water supply, water treatment and sanitation apart from irrigation. They are also responsible for endorsing basin management plans and to ensure local level planning and coordination. They also have to take in to account the local decisions taken at Dorbars which is the basic village level customary, traditional institution of local self-governance and deals with all issues related to water in their jurisdiction. The state has water users associations to ensure community's participation in irrigation projects.

### Analysis of regulatory and institutional framework of Meghalaya under the identified thematic areas of NWP 2012

	Thematic Areas as per NWP	What is to be explored	(Status based on the Desk based Research)
1.	Public Policy on water resources to be informed of basic common principles	a. Whether state has a water policy	State has a water policy called "Integrated state water policy Meghalaya" which is still in a draft state and has not been finalised. Latest version being draft of 2014 which is 7 <sup>th</sup> draft and is still under discussion. GIZ is helping the state in formulating this draft.

<sup>6</sup> It has not been ascertained whether these village development committees have been constituted in all villages or not.

		<p>b. Whether the state water policy is updated in view of NWP-2012?</p>	<p>The state water policy 2014 draft has been prepared keeping in mind the NWP 2012 and is an unduly lengthy document. This draft policy follows an unusual format for a policy and is unlike any other policy made by other states.</p> <p>Key Elements of draft state water policy 2014 (7<sup>th</sup> darft)<sup>7</sup> are</p> <ul style="list-style-type: none"> <li>• There are some guiding social, environmental and good governance principles on which the draft policy is based upon.</li> <li>• Meghalaya State Water Policy move towards an integrated and more sustainable management of the State's water resources applying an integrated water resources management (IWRM) approach.</li> <li>• Water allocation prioritisation is recommended by the draft policy and mandates that drinking water for humans and cattle is the first charge on available water.</li> <li>• It recognises that access to Access to safe and adequate water to meet basic human needs is a fundamental right of all people without discrimination. The supply of drinking water must be given the highest priority, over any other use<sup>8</sup>.</li> <li>• Recognises that fresh water is a finite and vulnerable resource. Minimum ecological water needs must be given higher priority than other uses, except drinking water</li> <li>• Serious and irreversible damage to integrity of water resources must be prevented.</li> <li>• Recognises that water has both social and economic value but meeting social needs is a priority.</li> <li>• Equitable allocation of water resources is recommended</li> <li>• Integration of water supply and sanitation is recommended in both rural and urban areas, which need to be managed professionally, equitably and transparently in an economically viable manner. Interests of vulnerable groups however are required to be taken care of.</li> <li>• More crop per drop principle is to be pursued to enhance productivity in agriculture. Supplementary irrigation and micro irrigation to be promoted.</li> <li>• Recognises the likely impact of climate change on water availability and proposes coordinated approach to flood and dry spell management.</li> <li>• Fisheries has been identified as one of the most important water use, both wild fish stock in natural water bodies and fish reared in aquaculture ponds are to be supported.</li> <li>• Recommends that when water uses are in conflict, the greatest common good to society will be given priority.</li> <li>• Recognises polluter pays principle</li> <li>• Stresses the need to assess and improve the collection of hydrological and meteorological data and establish water stations across the state.</li> <li>• Calls for peaceful resolution of water related disputes</li> <li>• Decentralised decision making regarding water management is being recommended</li> <li>• Policy calls for an inclusive and gender sensitive water management</li> <li>• Policy recognises The basic unit for water resource management</li> </ul>
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<sup>7</sup> The above mentioned draft can be had on request from IELO office.

<sup>8</sup> Section 1.2 of draft MWP 2014

			<p>is the river basin or sub-basin, using an integrated water resource management approach</p> <ul style="list-style-type: none"> <li>• Equitable water sharing with neighbours both domestic and international is recommended by the policy</li> </ul>
		c. Whether the sentiment articulated in NWP is echoed in state policies?	Yes the proposed draft state policy is by and large in consonance with the NWP. The policy document is very lengthy and thus verbose. The intent of the government is at places lost in the details.
		d. Any concrete action is taken?	So far since the policy is at a draft stage no concrete action as per the mandate is taken. However there are a lot of activities being undertaken which are in spirit in furtherance of the mandate of the proposed draft policy( being mentioned at appropriate places below in the table)
2.	Raising Awareness about criticality of water as a natural resource	a. Does water policy of the state say anything about water being a scarce, natural resource?	Yes, there is an acknowledgement of water being a finite and scarce resource at multiple places in multiple contexts in the draft policy. One of the principles under environmental principles is conservation consciousness principle. The sustainability principle also recognises water as a finite and vulnerable resource.
		b. Does the state have a campaign running or any engagement with its citizens to create and foster this sentiment?	The State has taken up an initiative to implement "Mission Green Meghalaya" through the Integrated Basin Development and Livelihood Promotion Programme. One of the objectives of Mission Green Meghalaya is Environment protection which includes mass afforestation of streams and water catchments which will also protect water sources. To collectively implement the objectives of "Mission Green Meghalaya", a Green campaign has been launched. Meghalaya Water Mission which runs on the line of national water mission does talk of mass awareness. Moreover, various trainings provided to the farmers/villagers by different water sector related departments which includes Participatory Irrigation Management (PIM) training and water quality monitoring training amongst others, do provide mass awareness on water highlighting water scarcity problem. Once the water mission is launched, water campaign to be taken up will address the issue.

3.	Water quality and quantity	a. Does the state water policy include a provision on right to access to minimum quantity of potable water for health and hygiene?	Yes the draft policy does recognise this as a primary and foremost principle for water management in the state (Section 1.2 social principle, section 1.4 <sup>9</sup> ) this is also been mentioned as one of the objective of the water policy.
		b. Is there any law to guarantee this?	None, however the main Thrust of the Department in the Rural Water Supply Sector during the 12th Plan period would be to cover all the remaining Partially Covered Habitations as well as Quality Affected Habitations with 40 Lpcd of potable safe water. Under Rural Drinking Water Supply, as of April 2011, 5041 nos. of habitations have been fully covered (54 %) while 4285 nos. of habitations have been partially covered (45 %) both in terms of coverage and per capita availability, out of a total of 9326 nos. Habitations in the state. Provision of safe drinking water supply to the remaining Partially Covered Habitations, including other Newly Identified Partially Covered Habitations (slipped back from fully covered category due to various reasons including drying up of sources etc.) will be taken up as per the guidelines of Govt. of India during the 12th Plan period.
		c. Does the State Water Policy contain an article or a position which places responsibility on citizens about protection and conservation of water sources in their immediate vicinity?	All citizens are obliged to contribute to the solution of common water related problems as per the mandate of solidarity principle enumerated under section 1.2 in the 7 <sup>th</sup> draft integrated water policy 2014. Water users and public authorities have the shared responsibility of maintaining the integrity of water resources. Hence, the "polluter pays" concept is to be adopted to curb uncontrolled discharge of pollutants as per the responsibility principle enumerated in the draft policy. As per section 1.4, one of the objectives of the water policy is that water resources are protected, maintained, improved and utilised sustainably, so that future generations can enjoy them. The overall objective of the policy among other things is to ensure that water is used efficiently. The catchment area protection act 1990 is under revision which also addresses this issue.

<sup>9</sup> All the sections referred to in this document are to the sections of 7<sup>th</sup> draft of "Integrated State Water Policy Meghalaya".

	<p>d. Is the institutional mechanism geared up to deliver this?</p>	<p>Institutional capacity at the state level of the Public health engineering Department (PHE) which is primarily responsible for water supply in the state and of Department of Water Resources is severely restricted by the fact that almost all land in the state is owned by the people. There are no land records. There is no codified custodian of water resources in Meghalaya. Since the state has no land records and since customary laws are not codified, there are no reliable and comprehensive records on water resources.</p> <p>The Meghalaya State Water Resources Agency is for proper and efficient implementation of Integrated Basin Development and Livelihood promotion Program to ensure the protection and conservation of the water sources and the recharge of ground water. The agency would look into aspects of providing clean safedri nking water, irrigation, hydro power generation, protection of forest, issues related with industries and their effect on water bodies and similar other matters.</p> <p>The District Water Resources Councils coordinate the management measures within each river basin district. They include representatives of public authorities, municipalities, traditional bodies and nongovernmental organizations. Their functions include coordinating stakeholders; reviewing management plans and programmes; evaluating application for ground water exploitation/ drilling; carrying out economic analyses of water resources use; ensuring public participation in management planning processes; coordinating program implementation; developing budget proposals for programs.</p>
	<p>e. Does the state provide the rights or powers to the Panchayat Raj Institutions, or citizens to independently initiate actions for protection and conservation of water sources in their immediate vicinity (article 48(a)(g) and 58 (a) of the Indian constitution specifically referred to these responsibilities related to</p>	<p>Due to unique constitutional position of the state, PRIs as understood in the rest of the country are not present in the state. The state below the state government has autonomous district councils with executive, legislative and judicial powers. Below the district councils are the secondary administrative levels called the Syiems/Dolloi's/Nokmas who govern, control and administer the Syiemship/Ilaka/Aking lands respectively being discussed in detail herein below, and at the primary level are the village durbars and dongos which are the administrative units at the village level.</p> <p>In Khasi Hills the traditional governance structure consists of the Syiemship at the top and the Dorbar Shnong/Dorbad Raid at the grassroots. At the village level, we have the Dorbar Shnong or village council headed by Rangbah Shnong (village headman) who is elected by adult male residents of the village and heads the village administration. Every adult male member of each household in the village is a member of the village council and is required to actively participate in the deliberations of the council and facilitate in decision making. In some areas, we also have another tier above the village council which is known as the Dorbar Raid which is the council of cluster of villages presided over by Basans or Lyngdohs. At the top of this structure is the Hima (comprising of villages/Raid) which is governed and ruled by Dorbar Hima (council of adult male members from every constituent village and Raid). The Syiem (chieftain) is the head of the Hima and is generally elected by a small electoral college from a particular clan (syiem clan). Similarly , his assistants (myntri) are elected from a particular clan.</p> <p>In the Jaintia Hills, the traditional governance structure is similar to that existing in Khasi Hills, except that in place of the Syiemship we</p>

		<p>water, and other natural resources)?</p>	<p>have the Dalloiship (Nongkynrih, 2002; Gassah, 2002). The Garos have a much simpler institutional set up which is clan based village community. The system of governance consists of Akhing land which is equivalent to village or a group of villages. All the land within the Akhing belongs to a particular clan or lineage and the Akhing functions under the supervision of the Nokma who is the head of the clan. The Nokma regulates the political, social and economic life of the people under an Akhing with the common consent of the Akhing elders who function as his council of advisers. There is no political unit above the Akhing and no authority higher than the Nokma (Bose, 1936).</p> <p>The Syiems, Daloi and Nokmas perform both executive and judicial functions. They manage markets and forests under their jurisdiction and also administer justice. They also perform functions associated with the indigenous religious practices of the tribals of the state. At the village level, the village headman and the village council play an important role in local dispute resolution and for the welfare of the village (Prasad, 1998; Gassah, 2002).</p> <p>Under the Schedule, the councils are empowered to appoint and remove Syiems and headmen of the traditional institutions in the state. In 2006, an important order was passed by the Supreme Court whereby the Dalloi was recognised not only as an administrative head of an area but also as religious functionary who must be conversant with indigenous religious practices and perform the accompanying rituals and practices according to customs.</p> <p>An important development which will increase the accountability in the functioning of the traditional institutions in the state is the applicability of the Right to Information Act of 2005 to Syiemships. The Guwahati High Court in 2010 upheld the decision of the State Information Commissioner who had earlier ruled that the Syiem (chieftain) was an administrative officer of the KHADC as enshrined in the Sixth Schedule and by the Supreme Court in a case between T Cajee and Jormanik Syiem.</p> <p>An important and sensitive issue with regard to the existing structure and functioning of the traditional institutions is the exclusion of women in decision making process, hereditary nature of chieftaincy and exclusion of non-tribal members from the governance system even in a place like Shillong where they account for a sizeable proportion of the population.</p>
4.	Maintaining and sustaining Ecological needs and flows in a river	a. Is there any law or policy in the state which makes it mandatory to undertake a scientific study to determine the ecological requirement of water for a river?	<p>The draft water policy does mention ecological needs and states that minimum ecological water needs must be given higher priority than other uses, except drinking water (section 2.1.Principles). The policy however is silent on scientific study to be undertaken for determination of ecological needs.</p>

		b. If yes what is the implementation and monitoring of the same?	Draft water policy is silent on these aspects. None was discovered while undertaking the desk based research.
5.	Adaptation to climate change	a. Has the state formulated state action plan for climate change and has the concerns regarding effect of climate change on water resources been integrated in to these plans. Are there district level climate change action plans being formulated within the regulatory framework	State has an action plan on climate change. To ensure judicious use of water in the State in a way that safeguards the natural environment, establishment of a State water use policy has been accorded prime importance. Studies on water budgeting, water scarcity and assessment and maintenance of water quality, etc. would be taken up to enable formulation of an integrated water resource management policy. This policy would ensure efficiency of water use and incorporate polluters pays principle to ensure prevention of water pollution. Integrated river basin management would be taken up under the proposed State River Basin Authority. Traditional water conservation methods would be revisited and propagated, alongside restoration of existing water bodies and monitoring of surface and ground water quality.
		b. Has the state begun to integrate the concerns of climate variability in to water resource management and planning by doing the following (this is only an illustrative list based on NWP-2012?	Factual information reflecting ground reality in this regard was very difficult to source. The state climate action plan envisaged setting up of nine sectoral working groups and one of them was on Water Resources. These working groups were supposed to formulate key priority action points for adaptation and mitigation. The state climate action plans for each financial year was required to incorporate actions needed to be taken for adaptation and mitigation in each of these identified sectors. Meghalaya has also established a Climate Cell led by the Planning Department to address issues and activities for combating the effects of climate change. In order to have policy convergence, the State has set up a State Council on Climate Change and Sustainable Development (MSCC&SD) under the Chairmanship of the Chief Minister, as well as a Steering Committee on Climate Change chaired by the Chief Secretary that would coordinate the State Action Plan for assessment, adaptation and mitigation of climate change. The Department of Planning being the Nodal Department to handle all inter-sectoral issues relating to climate change and sustainable development including liaison with other States, Central Government and its Agencies, and International Bodies/Organisation, has established a Cell on Climate Change under the Charge of the Principal Secretary. This Cell acts as a Coordinating Unit for formulation and implementation, collection and dissemination of information relating to the Climate Change Management. Further, a

			<p>Project Implementation Unit (PIU) would be set up for implementing and monitoring specific programs identified under the Meghalaya Climate Change Action Plan on a mission mode. The PIU would be led by a senior officer from the State Government and supported by a team of experts including government officials on deputation and external thematic experts<sup>10</sup>.</p> <p>What has actually been achieved could not be ascertained due to constraints of resources as no actual travel to the state could be undertaken due to the project being a desk based study.</p>
	c.	<p>Is there any special impetus to increasing water storage capacity?</p>	<p>Yes the state has taken up implementation of Jalkunds and multi-purpose reservoirs which addresses this issue. This also includes schemes being undertaken under Repair, Renovation and Restoration (RRR) of water bodies.</p>
	d.	<p>Increase water use efficiency across all water using groups, agriculture, domestic, commercial and industrial?</p>	<p>Participatory Irrigation Management (PIM) being implemented through WUAs' invariably looks after this aspect in the Agriculture/Irrigation sector.</p>
	e.	<p>Are sustainable agricultural practices being adopted/reshaped as per the water availability in a particular state or a region of</p>	<p>This information was repeatedly sought from the state government agencies but could not be obtained from Agriculture Department/Horticulture/Soil &amp; Water Conservation Department)</p>

<sup>10</sup> Info taken from <http://www.megplanning.gov.in/plan/aplan/2013-14/sector/10.pdf>

		a state?	
		f. Is climate change variability included as criteria for water development projects?	Water body mapping exercise is being undertaken to assess in the first leg which subsequently is proposed to be a periodical phenomenon after every 5 (five) years for adoption of the climate change variability as per information received from the state.
		g. Are stakeholders being involved inland-soil-water management planning for evolving different agricultural strategies, reducing soil erosion and improving soil fertility	Yes to a great extent through PIM is being taken care of as also through engagement of MGNREGA manpower in creation of water bodies and canal embankments.
6.	Augmenting water Supply and sanitation	a. Are the states doing any of the following to augmenting water supply and provide access to	State is running a water mission under IWRMP which is part of Integrated Basin Development & Livelihood Promotion (IBDLP) programme. The stated vision of the water mission is to promote Integrated Water Resources Management in the State of Meghalaya and to conserve and use water judiciously

	sanitation	
	Made recycling and reuse mandatory	
	b. its Rain water harvesting potential	<p>The aquifer systems of Meghalaya done by CGWB have identified priority areas where water conservation and rain water harvesting should be immediately implemented.</p> <p>Under the IWRMP, Jalkund/water harvesting structures are being built and the various schemes under this programme are being implemented by Water Resources Department, by Soil &amp; Water Conservation Department. The schemes are being implemented through the District Water Resources Councils (DWRCs).</p> <p>State is also proposing to implement Roof Top Rain Water Harvesting projects in Government and School buildings, PHCs and CHCs and accordingly the District Water Resources Councils have been instructed to identify and submit proposals<sup>11</sup>.</p>
	c. Desalination techniques	Not required
d. Made water use efficiency mandatory	<p>There is no mandate in the law for water use efficiency but is one of the objectives of the water mission in the state.</p> <p>Objectives of the water mission under IWRMP being run under IBDLP are</p> <ul style="list-style-type: none"> <li>• To promote judicious utilization of water resources in the state in all the three sectors surface water, ground water and rain water.</li> <li>• To integrate water resource planning so as to pool the resources as well as to develop water grid.</li> <li>• To promote water bodies for irrigation, drinking water, fisheries, etc.</li> <li>• To promote water use efficiency in all water sectors.</li> <li>• To ensure adequate capacity building and training to all sections of stakeholders, technical officers and users.</li> <li>• To develop and improve water bodies including rejuvenation of springs for enhancement of water storage so as to preserve water for adaptation and mitigation of climate change effect.</li> <li>• To develop small multiple reservoirs and micro-hydels.</li> <li>• To set up institutional structures for integrated water resource management.</li> </ul>	

<sup>11</sup> [http://mbda.gov.in/Water\\_Mission.html](http://mbda.gov.in/Water_Mission.html)

	e. Are there subsidies and incentives for recovery of industrial pollutants and recycling / reuse	No information from Industry Department/Meghalaya State Pollution Control Board (MSPCB) could be accessed.
	f. Are sewerage charges being put/removed in urban areas	No information could be obtained from Urban Affairs Department from sources which could be accessed for desk based research.
	g. What steps are undertaken to augment rural water supply?	Under water mission whose objectives are stated above, various steps are proposed to be taken to augment water supply. To achieve these objectives following interventions have been identified <sup>12</sup> <ul style="list-style-type: none"> <li>• Awareness and Sensitisation Programme for efficient water use.</li> <li>• Development of Small and Multipurpose Reservoirs.</li> <li>• Value chain development linked to water resource.</li> <li>• Legislation and policy farming.</li> <li>• Water quality control.</li> </ul>

<sup>12</sup> [http://mbda.gov.in/Mission\\_Overview.html](http://mbda.gov.in/Mission_Overview.html)

7.	Ground water use and management	a. Have the states done Aquifer mapping to know the quality and quantity of ground water	Under the National Aquifer Mapping Program, Central Ground water Board has generated data on aquifers <sup>13</sup> in the state and has recently published an atlas on aquifer systems of Meghalaya. Groundwater is the largest accessible and yet underdeveloped resource in Meghalaya. The information provided in this document defines the extent of principal and major aquifer systems of the State with their characterization on regional scale. The information helps depict aquifer wise ground water scenario along with major issues and challenges in terms of quality and quantity which need immediate attention for sustainable management of ground water resources.
		b. Does the state have a ground water law	No. Draft Ground Water Act is in the process of obtaining approval and the state is also in the process of drafting a comprehensive integrated water law. There is no clarity as to what will the state finally adopt.
		c. Is there a authority mandated to manage and conserve groundwater	The proposed Ground Water Cell in Water Resources Department will be the authority for the purpose. At present, District Level Committees on Ground Water Resources, with the Deputy Commissioners of the concerned Districts as the Chairman, have been constituted for all Districts and one of the functions of the committee is to take up measures for the sustainable development of ground water.
		d. Does the law protect over exploited aquifers, how?	No law as of now.

<sup>13</sup> The aquifer maps presented in the atlas are on the 1:250,000 scale and will form the base of the detailed aquifer mapping to be taken up on 1:50,000 scale.

		e. Is extraction of ground water linked with recharge of the same?	Meghalaya is endowed with plenty of ground water. The annual gross dynamic ground water recharge of Meghalaya has been estimated as 1.234 billion cubic meter (BCM). Annual allocation for domestic & industrial water requirement upto year 2025 is estimated as 0.096 BCM as per census 2001. 1.014 BCM of ground water potential may be utilized for irrigation. The level of ground water development in the state is 0.15%. This will be guided by Ground Water Act as and when there is one enacted by the state.
8.	Integrated Watershed development	a. Specific steps states are taking to ensure integrated watershed development.	The Meghalaya Catchment Area Protection Act 1990 has set up a catchment area advisory board to advise government on protection of catchment areas <sup>14</sup> . The Act has defined critical catchment areas which are envisaged to be protected under this act and the advisory board advises the government on all matters connected with their management and protection <sup>15</sup> . This Act is under revision due to poor implementation.
		b. Have statutory / administrative / departmental steps been taken in order to integrate / align the objective functions which may differ	No such steps could be ascertained on the basis of desk based research.
		c. Are water sources and their catchment areas being looked at in totality?	As per the mandate of section 6 of Meghalaya Catchment Area Protection Act 1990, once an area is declared as catchment area, by notification, after having had a written agreement with land owners in that area in this regard, government shall take such activities or measures as it deems necessary including the following. <ul style="list-style-type: none"> <li>• Planting or advising planting of trees and taking others steps to regenerate forests.</li> <li>• Testing of soil samples</li> <li>• In case of critical catchment areas prohibiting activities within</li> </ul>

<sup>14</sup> Section 3 ad 4 of the Catchment Area protection Act 1990

<sup>15</sup> Section 5 ibid

			<p>200 mts from the periphery thereof</p> <ul style="list-style-type: none"> <li>✓ Felling of trees, destruction or clearance of grove or any vegetative cover</li> <li>✓ Jhumming or cultivation or any use of pesticide or insecticide</li> <li>✓ Quarrying of sand or stone</li> <li>✓ Excavation of earth</li> <li>✓ Construction of roads or</li> <li>✓ Of carrying of any activity which in the opinion is likely to damage springs, streams rivulets, or water sources in the area.</li> </ul> <ul style="list-style-type: none"> <li>• In case of non-critical catchment areas the above named activities can be regulated or prohibited with a distance of 100 mts from the periphery thereof.</li> </ul> <p>It was discovered that such areas were notified in the past few years and no steps could be taken to protect these catchment areas due to non-participation and lack of cooperation from the people of the state who own most of the land in any case in the state.</p>
		<p>d. Have steps been taken to avoid duplication of overhead costs in order to create synergies</p>	<p>Natural Resource Management Plan and Integrated Water Resources Management Plan envisages this aspect.</p>
		<p>e. Are developmental laws harmonised with the need of integrated watershed development.</p>	<p>No such information was discovered while desk based research which indicated this.</p>
		<p>f. Have other development related laws been amended or harmonised in order to avoid</p>	<p>Meghalaya comprehensive Water Act or Meghalaya Ground Water Act once in place shall be followed with an appropriate law. Moreover, there are certain provisions in the GHADC and KHADC administering this aspect to some extent.</p>

		contradictions (e.g. The Indian Easement Act 1882 and the confusion regarding ownership of groundwater, and / or surface water)	
9.	Demand Management and Water use efficiency	a. Is there any specific law mandating quantum of water for a particular use i.e. benchmarking of water usage for different uses in industrial water usage	None
		b. Any penalty for wastage of water and incentive for water use efficiency	No.
		c. Any efficiency benchmark at which irrigation projects have to perform and function	No. At present, Department is working on it.
		d. What the existing schemes providing incentives for engaging in cropping pattern using micro irrigation (drip, sprinkler, etc.),	<p>Pertinent to mention here that merely 25 per cent of the cropped areas in the state are covered under irrigation, while remaining 75 per cent are still under rain fed cultivation<sup>16</sup>.</p> <p>Increasing use of drip and sprinkler Irrigation done by Horticulture Department for cultivation of fruits and flowers under High Value Low Volume crops.</p>

<sup>16</sup> Info sourced from state water mission

		automated irrigation operation, evaporation-transpiration reduction, etc.	
		f. Any scheme being used in the state which encourages people to use water use efficient gadgets	No Information could be found on this aspect while undertaking desk based research.
		g. Is there a mechanism to conduct water audits –voluntary or mandatory	No.
10.	Water pricing	a. Is there a mechanism for water pricing?	<p>The mechanism for water pricing in municipal areas is by levy of water tax<sup>17</sup> under Meghalaya Municipal Act, 1973. The water tax forms part of the annual value of holding/house for supply of water by the Municipality. The taxes that are levied are assessed as per the Act and the Meghalaya Assessment of Annual Rental Value of Holding Rules 2004 on the basis of unit area value of the property and rates recommended by Valuation Committee of the Municipal Board and approved by the state government. Presently, there is no metered connection in the state, though as part of Phase III of Greater Shillong Water Supply scheme for Shillong under JNNURM the new connections are going to be metered.</p> <p>The draft Meghalaya state Water Policy, 2014 (7<sup>th</sup> draft) aims at Developing a tariff and fee system which will ensure recovery of full operation and maintenance cost for providing water and sanitation services.</p>

<sup>17</sup> Section 68. Taxes - (1) Subject to the provisions of this Act and the rules made thereunder the Board may, from time to time, at a meeting convened expressly for the purpose, of which due notice shall have been given, impose within the limits of the municipality the following taxes, fees and tolls, or any of them

(a) a tax on holding situated within the municipality assessed on their annual value, payable by the owner

(b) a water-tax payable by owner or occupier, on the annual value of holdings.

Section 2(38) "Rates" as used in Section 14 means: (a) the tax upon the annual value of holdings, (b) license fees, (c) the water-tax on the annual value of holdings,

	b. Has Water Regulatory Authority been established	There is no water regulatory authority in the state.
	c. What is the water pricing methods being followed?	The method presently being followed is by levy of water tax which is assessed on the annual value of the holding/house for supply of water by the Municipality as per Meghalaya Municipal Act, 1973. Other than this, there is water tariff being implemented by PHE Department.
	d. Has water pricing been rationalised? If yes how? If no why?	There is no rationalisation of water pricing there is no metered connection in the state, though as part of Phase III of Greater Shillong Water Supply scheme for the city of Shillong under JNNURM the new connections are going to be metered.
	e. Are water charges being recovered from the consumers?	There is levy of water tax which forms part of the annual value of house for domestic supply of water by the Municipality. Yes by PHED also.
	f. Are Water Users Associations (WUAs) are involved in the process of fixing rates of water	The Water Users' Association (WUA) are not directly involved in the process of fixation of water rates/charges, but are encouraged to have the system in place according to section 3 (c) of Cabinet Memorandum on Participatory Irrigation Management (Nov' 2008)
	g. Are Water Users Associations (WUAs) given statutory powers to collect and retain a portion of water charges, manage the volumetric quantum of water allotted to them and to maintain the distribution system in their jurisdiction?	<p>The maintenance of completed Minor Irrigation (MI) schemes is being looked after by the Water Resources Department. The implementation of Participatory Irrigation Management (PIM) is still in the initial stage. The achievement so far made in this respect is formation and registration of WUAs in the completed project areas. Presently, Water Users' Association (WUA) has been registered in 254 Minor Irrigation Projects.</p> <p>At present, the Draft Memorandum of Understanding (MOU) between the WUAs and the Department for handing over the operation, maintenance and management of MIPs to the WUAs has been submitted to the Government and the Cabinet's Approval in this regard is awaited. Regarding the realization of water rates, Government's approval is needed as it is a policy matter.</p>

11.	Scientific assessment of water resources and Database, information systema.	a. Institutions involved in the scientific assessment of the water resources	<p>An initiative has been taken by the MBDA under natural resources management plan to carry out the assessment and creation of database information. Meghalaya Water Resources Department is in the process to have a system to monitor and assess through the Water Resources Information System (WRIS). Besides, the North Eastern Space Application Centre (NESAC) for water resource mapping in Meghalaya, Central Water Commission &amp; Central Ground Water Board for Surface Water and Ground Water Monitoring and Assessment respectively.</p> <p>The in house data is used by the respective Department to decide the project according to the potential availability of water resources. Adding to it, external data generated by the Departments other than Meghalaya state is also being used for the purpose.</p>
		b. How is the state organising its hydrological database and using it for decision making.	<p>As mentioned against 'a' above</p>
		c. Which institutions and regulatory bodies are involved in the collection of Data	<p>1. CGWB- i) Monitors the ground water regime of Meghalaya through selected hydrograph stations. Ground water data is collected 4 (four) times a year through these selected stations for recording the behaviour of the ground water level and the annual fluctuation. These valuable data is also utilized for estimation of ground water resource block-wise by using the norm of Ground Water Estimation Committee (GWEC). These resource is estimated every 5 (five) years. ii) Ground water exploration has been carried out in all the districts of Meghalaya to assess the ground water potential. While doing it the valuable hydraulic parameters of the various geological units are also calculated. The valuable parameters computed are Transmissivity, Permeability, Storativity, Porosity etc. These valuable parameters decide the potential zone suitable for ground water development in a particular area.</p>
		d. What are the different types of Data being collected at the state level	<p>2. Central Water Commission – i)Central Water Commission has gauging stations at the major rivers of Meghalaya like Umngot, Myntdu, Kupli, Umiam, Rilang, Kynshi, Simsang, Ganol, Bhugi, Jinjiram etc. CWC records the water level of the river throughout the year for flood forecasting.</p> <p>3. Water Resources Department- i) Discharge of rivers and streams for preparation of DPRs of projects. ii)Command Area for irrigation purpose both for agriculture and horticulture crops. iii)Identification of agricultural areas being affected by flood for the purpose of providing Flood Control works.</p>
12	Allocation and uses of water	a. Is there a mechanism for water allocation amongst different competing uses	<p>There is no mechanism for water allocation amongst different competing uses.</p>

	b. If yes, the criteria and principles followed for allocation	-NA-
	c. Are principles of equity and social justice being followed for water allocation	The draft Meghalaya state Water Policy, 2013 states that water allocation in irrigation systems would be equitable and socially just and distributed on a rotational and volumetric basis. There is
	d. The existing mechanism for dispute resolution in allocation of water	There is presently no mechanism for dispute resolution in allocation of water
	e. Have the water uses have been prioritized, and has the basic needs principle been adopted; e.g. Reservation of water for drinking (inclusive of cattle) drinking and domestic purposes	The draft Meghalaya state Water Policy, 2014 (7 <sup>th</sup> draft) lays the Water allocation priorities are broadly as follows: <ul style="list-style-type: none"> <li>- Drinking water minimum ecological needs</li> <li>- Irrigation</li> <li>- Hydropower</li> <li>- Agro-industries and non-agricultural industries</li> <li>- Transport and other uses</li> </ul> However, the priorities may be modified or added if warranted by the area/region on the basis of specific relevant considerations.

		f. Has the state policy defined the procedure of allocation of scarce water between sectors? e.g. Drinking and domestic, agriculture, industry, Hydro-power etc, in order to achieve optimal use	There is no procedure prescribed in the draft Meghalaya state Water Policy, 2013 for allocation of water between sectors.
		g. Between the principle of satisfying basic needs and the principle of ability to pay (pricing), which one will be given preference and / or priority?	The draft Meghalaya state Water Policy, 2014 lays the Water allocation priorities are broadly as follows: <ul style="list-style-type: none"> <li>- Drinking water minimum ecological needs</li> <li>- Irrigation</li> <li>- Hydropower</li> <li>- Agro-industries and non-agricultural industries</li> <li>- Transport and other uses</li> </ul> However, the priorities may be modified or added if warranted by the area/region on the basis of specific relevant considerations.
13	Management Of Flood & Drought	a. What is the regulatory mechanism to prevent loss of land eroded by the river, which causes permanent loss, revetments, spurs, embankments, etc.,	The draft Integrated State Water Policy 2014 emphasises the need to establish flood control/management plans for flood prone water basins. It also provides for strict regulation of settlements and economic activities in flood plain zones to minimise the effects of floods.
		b. Is there an institutional setup for flood forecasting using real time data acquisition system and linked to forecasting models?	There is no institutional setup for flood forecasting using real time data acquisition. Though, draft integrated state water policy, 2013 talks about the need for establishment of modernised flood and drought forecasting models.

14	Integrated Water Resources Management	a. Has the state incorporated river basin / sub-basin as a unit as the main principle for planning, development and management of Water resources.	<p>The Water Resources Department is implementing one new initiative which is the Integrated Water Resources Management Programme (IWRMP) which covers the activities under the Water Mission under the aegis of the Integrated Basin Development &amp; Livelihood Promotion (IBDLP) <sup>18</sup> through the Meghalaya Water Resources Development Agency (MeWDA).</p> <p>It is also pertinent point out here that the autonomous district councils are not involved in implementation of any of the development schemes of the state government or the centrally sponsored schemes. For example, the employment programme (MGNREGS) is being implemented in the villages in the state through the Village Employment Council, a parallel structure to the traditional village council, constituted under the Meghalaya Rural Employment Guarantee Scheme 2006.</p> <p>IBDLP was launched as a State Flagship Programme during 2010-11 with the aim of 'promoting optimal and effective development and utilization of basin resources for ensuring livelihood security and inclusive growth within a sustainable framework'<sup>19</sup>. The implementation period of the programme is co- terminus with the XII plan period, 2012-17.</p> <p>Under IWRMP, activities for management and maximum utilization of the available water resources through the implementation of water harvesting structures, Jalkunds and Multipurpose Reservoirs are being taken up. Further, other Programmes relating to water quality, capacity building and awareness, monitoring and evaluation of projects, policy and regulation have also been initiated.</p>
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<sup>18</sup> Info sourced from <http://www.megplanning.gov.in/plan/aplan/2013-14/sector/10.pdf>

<sup>19</sup> The IBDLP is designed around four pillars- Knowledge Management, Natural Resource Management, Entrepreneurship Development and Good Governance and will be implemented in a Mission mode through nine missions- Aquaculture Mission, Horticulture Mission, Livestock Mission, Sericulture Mission, Tourism Mission, Forestry & Plantation Crops Mission, Apiculture Mission, Energy Mission and Water Mission. Each mission is designed to leverage the natural advantages that the state has in the sector and to generate livelihood opportunities for every household and to accelerate growth. The District Basin Development Units (DBDU) has been set up in all 11 districts in the office of the Deputy Commissioner. The DBDUs are the implementation agencies for the various interventions under the programme. Convergence of the activities of the department is achieved under the aegis of the DBDUs. Enterprise Facilitation Centres (EFC) are set up at the block level as first points of contacts and grass root interface with citizens. 26 EFCs are currently functioning.

	<p>b. Are there river basin<sup>20</sup> management authorities established by the state government</p>	<p>MBDA is set up The MBDA (Meghalaya Basin Development Authority) had been set up in March, 2013 to implement IBDLP<sup>21</sup>.</p>
	<p>c. What are the functions and powers of the river basin management authorities</p>	<p>The aims and objectives for which the Authority (MBDA) is established are as under:</p> <ul style="list-style-type: none"> <li>• To sustainably develop the river basin resources, which shall ultimately lead to promoting the sustainable livelihood and gainful employment opportunities for the residents of river basins, independent or through the convergence of initiatives.</li> <li>• To, without any motives to earn profit, enhance and improve the livelihood for the poor in the state of Meghalaya.</li> <li>• To increase sustainable income generating cultivation systems and establishment of micro/small scale/ medium scale bio-industrial units.</li> <li>• To enable people's participation to select livelihood activities most suited to their resources, skills and interest.</li> <li>• To address the felt needs and priorities of women and increase their participation in local institutions and decision making process.</li> <li>• To promote micro finance including saving and thrift and micro insurance projects.</li> <li>• To provide business development service including demonstration, training, consultancy and advisory service on all matters relating to technical, organisational, management commencement and expansion of the enterprise, purchasing techniques, production, purchases, sales, material and cost, quality control, marketing, advertising, publicity, personnel' information technology services, development and transfer, backward and forward business linkage promotion and horizontal linkage among enterprises, export and import to and for institutions/concerns/bodies/associations/corporations/public and local authorities/trusts/cooperative societies.</li> <li>• To help in promoting sustainable enterprises at micro and small scale especially to the poor by way of providing equity, debt financing, leasing, insurance and other means and mechanisms</li> </ul>

<sup>20</sup> Hydrologically the State comprises of two basins, viz., the Left Bank of Brahmaputra Basin (11220.11km<sup>2</sup>) and the Brahmaputra Tributaries Basin (11208.89km<sup>2</sup>), three catchments viz., Kalang to Dhansiri Confluence (about 4499.61km<sup>2</sup>), Bangladesh Border to Kalang Confluence (About 6720.50km<sup>2</sup>) and South Flowin Drainage of Meghalaya (11208.89km<sup>2</sup>), eight sub catchments with a size range of 2.08 to 2.46 lakh hectare 35 watersheds with a size range of 0.05 to 2.67 lakh hectare and 179 watersheds with a size range of 0.03 to 0.22 lakh hectare.( [http://mbda.gov.in/about\\_IBDLP.html](http://mbda.gov.in/about_IBDLP.html))

<sup>21</sup> The IBDLP programme is implemented through the following Institutional Frameworks, The Meghalaya Basin Development Council (MBDC) is headed by the Chief Minister and is responsible for policy planning and coordination, innovation, resource mobilisation and for synergising the efforts of the various stakeholders. The members of MBDC are Ministers and Chief Executive Members of Autonomous District Councils and other distinguished experts. The Meghalaya Basin Development Authority (MBDA) is headed by the Chief Secretary, government of Meghalaya and is responsible for the strategy ad steering the overall implementation of programmes

			<p>that may be necessary for promoting livelihoods on the basis of basin resources.</p> <ul style="list-style-type: none"> <li>• To rotate and utilize the resources of the authority for ongoing building up of new enterprises by exciting the enterprises that has achieved the sustainable scale and viability, through appropriate mechanisms.</li> <li>• To act as a catalyst in facilitating mobilization of financial resources to micro/small/medium scale enterprises to benefit the poor.</li> </ul>
15	Planning and Implementation of water resource projects	a. What is the level of participation of local governing bodies like Panchayats, Municipalities, Corporations, etc., and Water Users Associations, in planning of Water resource projects.	<p>Each district of the state has constituted a District Planning &amp; Development Council (DPDC). The DPDC is headed by the Chairman who is a Cabinet rank minister from the district. The Deputy Commissioner of the district is the Vice Chairman with MLAs of the district and Chief Executive Member of ADC of the district as the members. The district plan formulated by the council is based on departmental proposal submitted by the district offices with no framework for developing of plans from villages upward (Umdor, 2009).</p> <p>WUA's at the planning and implementation; Autonomous District Councils prepares the district level plans; urban local bodies manages domestic water distributors system but does not engage themselves in planning water projects with an exception of Shillong Municipal Board which is involved in planning level also.</p>
		b. Are the needs and aspirations of the Scheduled caste and Scheduled Tribes, women and other weaker sections of the society being taken into consideration in the planning process	<p>The entire water sector projects are meant for meeting the needs and aspirations of ST/SC, women and weaker sections.</p>
		c. Is there an institutional mechanism in the form of a single window clearance for all clearances, including environmental and investment clearances, required for implementation of projects to avoid the economic losses	<p>The State level Empowered Committee set up for this.</p>

16	Conservation of river corridors, water bodies and wetlands	a. What is the prevalent institutional structure for conservation and management of river corridors, water bodies, wetlands within the state?	Meghalaya water mission states as one of its objectives to Conserve wet-lands/ rivers/ lakes and rejuvenate & restore different water bodies, and promote need-base, ecological and economic development. Institutional mechanism to implement water mission is MBDA which is responsible for carrying out IBDLP.
		b. Is there community participation in the conservation of river corridors, water bodies, wetlands?	Stakeholders participation is emphasised in every water related project. However information on the details of their participation and engagement could not be found.
		c. What are the institutional and regulatory measures to deal with encroachments and diversion of water bodies, wetlands in rural and urban areas?	None were found as per our desk based research.
		d. Besides participation, has the community or an individual being given the right (duty and responsibility) to protect and conserve water sources?	The draft integrated State Water Policy 2013 provides for active participation of the communities in the management and protection of the water resources.

### State's preparedness to implement NWP 2012

In Meghalaya water ownership is different from the rest of the country as has been discussed above; however despite the peculiarity in water and land ownership in the state, there is an acute awareness among the state government departments and policy circles to take some meaningful and effective steps to ensure equitable, sustainable and transparent water management. This however can only be done with the help of community participation. The state is making commendable efforts in implementing integrated basin development and livelihood programme which in spirit aims to achieve what NWP 2012 espouses. Though the state does not have a water policy as of today as it is in the process of being formulated and is at the draft stage. We have analysed the state's preparedness in

view of the 7th draft of integrated state water policy which is in public domain for comments and discussions. The proposed draft policy document as has been pointed in the state report is a very comprehensive and infact a laborious document which by and large covers all aspects covered under the NWP expect ones that are not required in the existing context of the state like having a water regulatory authority. The main objectives of this draft policy are clearly articulated in section 2 which are:

- Ensure that utilisation and management of water resources is equitable.
- Prevent overexploitation of water resources
- Achieve environmentally sustainable management of water resources and protect ecosystems
- Ensure efficient and optimal utilisation of available water resources to the maximum possible extent
- Ensure efficient integrated basin-wide water management plans are developed and implemented
- Safeguard Meghalaya's interests in the governance of water resources of shared river basins.

There are no laws as of now which obligates the state to provide drinking water to all in the state though all programmes sand schemes of both central and state government aims to achieve that objective. It is pertinent to mention here that the state is also in the midst of making an effort for formulating a comprehensive water law which is attempting to look at water in an integrated manner and will look at all aspects of water management holistically. Water conflict in the state is a very critical issue as most of the surface and ground water in the state is owned by the community or clans or individuals as per customary laws and the new proposed law aims to put in place a water dispute redressal system where people themselves and their traditional institutions of local self-governance like dorbars would be entrusted with the task of dispute settlement.

A great deal of sensitisation among the people in the state is required for the state to be able to do anything meaningful with water management in the state. No law regarding water can succeed in the state if the tribal people and their age old traditional governing systems are not co-opted in the new scheme of things. However while doing so the rights of women and non tribals (though very small numbers) will have to be guarded as they don't have any role to play in the traditional decision making process.

In terms of state's preparedness to implement the objectives of NWP 2012 the state has a long way to go but it is amply evident that the state is acutely aware and keen to have a system in place in near future. The state however will face many challenges due its sixth schedule status which protects the customary belief system and traditional governance systems of tribal communities in the state. Unfortunately water has also been a part of this system and it would need a lot of persuasion on the part of the state to convince these communities that it would be in their best interest to ensure that water is being used sustainably equitably and its sources protected not polluted, conserved and preserved.