

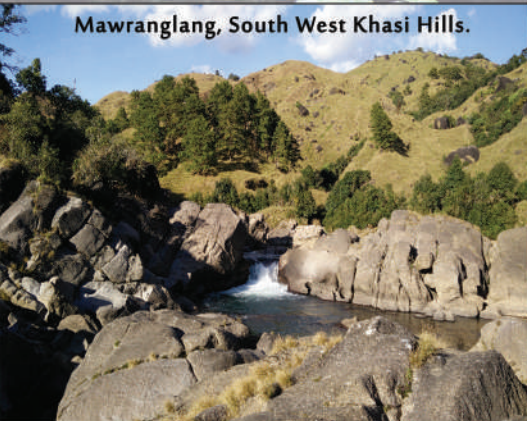


Green Pages

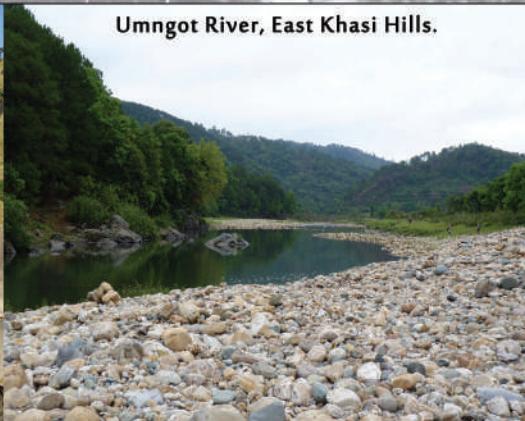
Newsletter of Meghalaya Institute of Natural Resources

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Mawranglang, South West Khasi Hills.



Umngot River, East Khasi Hills.



Kynshi River, West Khasi Hills.

About MINR

The Meghalaya Institute of Natural Resource (MINR) is one of the three Institutes established under the overall umbrella of MBDA. The Institute's main objective is to manage and strengthen knowledge for natural resources and sustainable livelihoods.

This Institute shall facilitate the required knowledge services through the Centre for Bio-Resources, Centre for Water Resources, Centre for Land Resources, Centre for Climate Change and Centre for Real Time Monitoring of Weather.

Vision

Enriching and empowering all the stakeholders with Clean And Green Technologies.

From Editor's Desk

In the last two months we have witnessed week-long spells of incessant rains in the State. People's general perception is that the rains this year have been significantly higher than the normal. Brimming Barapani supports this observation. But every year is not like 2015, roster of power cuts due to inadequate water in Umiam reservoir has been a usual feature in the past. People may debate over the trend of temperature and rainfall as a result of climate change but there is reasonable consensus about the emerging erratic pattern of weather in Meghalaya over the years. Climate change is expected to manifest in various ways apart from warming. Even a slight variation in the climate pattern will have a cascading effect on the ecosystems and consequently on agriculture and host of allied livelihood activities. Threat looms large. Rural people are severely exposed to adverse impacts of climate change as their livelihood is at stake. Adaptation to climate change cannot happen overnight; this has to be a long and steady process. It would require equipping ourselves with the necessary knowledge, assess vulnerability and accordingly strategise adaptation measures. Mass awareness among all stakeholders will be a prerequisite to participation of the communities and successful implementation of the programmes. Every green concept and way of life will count in this long battle.

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Langshiang falls, West Khasi Hills.



Laitkor falls, East Khasi Hills.



Weinia falls, West Khasi Hills.



Green is the Colour

H. H. Mohrmen



Green is often describe as a sign of hope and now in common parlance the term green is also taken to describe the environment around us and the issues pertains to nature. The five letter words therefore; is not just that which describe a certain colour of the rainbow, but it carries meaning beyond the colour that it represents. Therefore there is more to Green than the colour that it represents.

If we are to assign any colour to IBDLP; it should be Green, because the program is not only a symbol of hope to help improve livelihood of the people in the state, but in doing so; it is also the program's endeavour to make sure that the state natural resources is sustainably used. So, in a way the program hopes to achieve the twin goals to create livelihood opportunity as well as sustainably use the abundant natural resources including water with this single program.

Water is the centre of the IBDLP therefore when we talk about water; we cannot forget forest because forest is the source of water. Water and forest are like two sides of the same coin one cannot exist without the other. IBDLP is therefore a forward looking program which looks at ways to improve the economy of the people of the state with sustainable use of the state's natural resources. The program is not only a step in the right direction but it is also futuristic in its approach because it is addressing the current need by keeping in mind the future of the state too. With emphasis on sustainable use of the state's natural resources, the program also attempt at the addressing a major global problem of climate change by initiating environmental friendly activities at the grass root level. It is putting into practice the saying "think globally act locally." The program's attempt to sustainably use natural resources to create livelihood by introducing environmentally friendly activity will hopefully have a little but not insignificant impact on climate change.

This program is also unique because it is looking at the target group of intervention as equal partner(s) in promoting livelihood and development of the state. For so long, educated people especially those who are in the helm of power assumed that since the farmers or the rural folks are illiterate or semi-literate they know nothing about themselves and what is there around them. We also assume that they remain poor because they lack knowledge of how to improve their livelihood. Since they are ignorance they need to be spoon fed and somebody needs to decide on their behalf. They need to be told what needs to be done to help them grow economically. Various government programs and livelihood intervention failed because we do not see the need to take the target group on board as equal partner(s). This change of approach and attitudinal change towards the rural people and the economically poor section of the society will usher a new dawn in the government's relationship with its people.

IBDLP also has a huge young force to back this program, it is not every day to have large group of young people committed to livelihood promotion. It is now upon the Agency to make the best use of this committed and energetic young force to promote livelihood in the state and to help the state develop economically. The advantage of having a young work force not only implies that the program is gear for the future but young people are open to change too, so it is an added benefit at no extra cost to have a huge young people behind the program. The state should take care and groom this group young people who have taken livelihood promotion as their profession. One should also bear in mind that in mind many of these young men and women; money is not a criterion when they decided to join this noble profession. Their main desire is to bring change in the individual live of a partner in particular, their respective families and in general; the society in the rural areas. Equally importantly they also want to be part of the wheel that helps develop the economy of the state. In short the MBDA has in its disposal the whole young workforce ready to work with open mind and with a one goal and that is to bring change to the live of the poor section of the society.

IBDLP still has a long way to go; but what is important is to acknowledge that we have embarked on this trip, that the first step in the journey of a thousand miles has begun.



Nongjrong, East Khasi Hills



Mawkyrwat, South West Khasi Hills

Green Initiatives

WEATHER FORECASTING

Climate variability leads to economic and food security risks because of its major influences on agriculture. Accurate forecasts of climate ahead of time can potentially allow farmers and others in agriculture to make decisions to reduce unwanted impacts or take advantage of expected favourable climate.

Agriculture is highly vulnerable to climate variability. One reason that climatic variability is often so devastating to agriculture is that we do not know what to expect in the next growing season. Thus, farmers and other decision makers in agriculture, unprepared for the weather conditions that do occur, make decisions based on their understanding of general climate patterns for their regions. Climatic uncertainty often leads to conservative strategies that sacrifice productivity. Putting in a robust weather forecasting system would help the farmers in mitigating problems due to climate variability. The initiatives of Water Resources Department along with MBDA and other agencies is the step in right direction.

JALKUNDS

Jhumming has been a common practise in the hills of Meghalaya. However, this practise has dire environmental consequences as large forest areas are cut down to make room for cultivable land. In order to cease the practise of Jhum cultivation, it is imperative to facilitate farming communities to take up settled cultivation practise.

To facilitate settled cultivation it becomes important to assure water supply in the dry season so that different varieties of crops can be grown or harvested. Jalkunds are small water harvesting structures that increase the irrigation coverage especially on hill slopes where perennial water sources are not available. They also provide water for domestic purposes and rearing fish. Jalkunds are currently being implemented by the Soil and Water Conservation and Water Resources Department on the need assessment of the farmer in consultation with the District Water Resources Council.

MULTIPURPOSE RESERVOIRS

Under the Integrated Water Resources Management (IWRM) one of the most significant activities undertaken is the creation of multipurpose reservoirs (MRs). It was in 2013 under the Special Plan Assistance that MRs' were sanctioned to be built. A multipurpose reservoir is a water body that will cater to the different water needs of the community. The reservoirs are created keeping in mind that there should be a combined component for storage and use of drinking water, irrigation, fisheries, livestock, micro hydel (less than 100kw).

The District Water Resource Councils have been instructed to identify suitable sites in the State where IWRM could be implemented. The Department of Soil and Water Conservation and Water Resources are the implementing agencies. The village of Mawlyngbna has been a shining example of the success in the implementation of MRs.

MEDICINAL AND AROMATIC PLANTS

Meghalaya has around 850 species of medicinal plants, 377 of which are used by 70 to 80 per cent of the state's population for primary healthcare needs. Also, of the 3,200 medicinal herbal plants found in India, 1,200 are in Meghalaya. With a variety of medicinal plants, Meghalaya is naturally a home to traditional healers.

However, despite its long history, the art of traditional healing has largely remained undocumented and is in danger of being lost. The medicinal and aromatic plants are also under threat as large patches of forests are cleared regularly to accommodate for farmland.

The Bio Resources Development Centre (BRDC) is working in conjunction with the Central Institute of Medicinal and Aromatic Plants (CIMAP) to document the practise of traditional healers, generate knowledge on how to preserve and cultivate medicinal and aromatic plants.



Automated Weather Station at CTI, Byrnihat Ri Bhoi District.



Jalkund at Jaintia Hills



Multipurpose Reservoir at Mawlyngbna



Curcuma aromatica - extract of Rhizome used for gastric ailments

Moving towards a Greener Meghalaya



6-8th July, 2015: Orientation on Community Nurseries for Community Based Organisations (CBOs).

Orientation cum training for CBOs who have joined the community nursery initiative of the Meghalaya Basin Development Authority (MBDA) was organised. The CBOs were trained in nursery techniques, accounting etc., for creating nurseries in their respective villages .

14-15th July, 2015: Comic Strip Workshop . The workshop was organised to sensitize students on the importance of water conservation. Students were invited to display their art skills by drawing comic strips on the themes related to water conservation. Subsequently a comic book has been released. It has always been viewed that participation of the youth in environmental conservation is critical.



18th June, 2015: Media Meet on Meghalaya Springs Protection Initiative.

Media persons look on at the presentation on water springs in Meghalaya. The Indian Water Portal was a joint partner in sensitising the local media on the 'Springs Initiative'. The 'Spring Initiative' is a vital component of the Natural Resource Management (NRM) initiatives of MBDA.



8th July, 2015: Workshop with Traditional Healers in Meghalaya.

Dr. A.K. Tripathi, Director CIMAP, Lucknow, who is an eminent expert in this field, along with other senior scientist visited Shillong on the invitation of MBDA. The panel of experts addressed traditional healers from around the state on the importance of their practise and conservation of the medicinal and aromatic plants. An MoU was signed between the Government of Meghalaya and CIMAP to undertake documentation of the traditional healers.

9th June, 2015: Inauguration of Geographic Information System (GIS) Laboratory.

A demonstration on the landscape dynamics of Meghalaya using geospatial technology. The GIS Laboratory has been set up by the MBDA to capture, manage, analyse and display all forms of geographically referenced information. This information is vital for implementing the various initiatives under the IBDLP.



AUGUST 20, 2015: Launch Of Agar And Bamboo Plantation Programme.

Chief Minister of Meghalaya Dr. Mukul Sangma launched the Agar and Bamboo Plantation Programme at Betasing in South West Garo Hills. This is part of Green Economy Initiatives of the Government to create sustainable livelihood as well as to address the concerns of global warming. Saplings were distributed to registered farmers at the launch of the programme .



5th June, 2015: World Environment Day. The annual celebration was organised by the Forest and Environment Department and the Meghalaya Basin Development Authority. Several individuals and groups who initiated conservation efforts in the State were honoured on the occasion by the Chief Minister of Meghalaya, Dr. Mukul Sangma. The launch of "Green Pages" a quarterly Newsletter of MINR, was also a part of the celebrations.

