

*Draft for kind approval please:*

## **Umbrella Program for Natural Resource Management (UPNRM) - Energy Plantation of Bamboo in Tamil Nadu on a PPP basis**

### **Meeting minutes**

A meeting was conducted by the Commissioner of Horticulture and Plantation Crops on 02-02-2013 at the Conference Hall by 5.00 p.m. Principal Secretary to Government, Finance Department Chaired the meeting. Agriculture Production Commissioner and Secretary to Government, Agriculture Department co-chaired the meeting. Dr. Santhosh Babu, I.A.S., Commissioner of Horticulture and Plantation Crops welcomed the gathering and expressed thanks to all the participants for having taken pain to come to Directorate of Horticulture and Plantation Crops, Chepauk, Chennai – 600 005 for attending this meeting. The list of participants is enclosed in the annexure. The details of deliberations are furnished hereunder:

<b>Sl. No.</b>	<b>Issues</b>	<b>Action to be taken by</b>	<b>When?</b>
1.	Dr. Bharathi explained the genesis of the Bheema Bamboo, history of its invention, its importance, specialities and all other details in a power point presentation.	-	For information
2.	The salient points of Dr. Bharathi's presentation are 200 Ha of Bheema Bamboo plantation is sufficient to produce one MW of power. Planting materials requirement is 1000 plants per acre. It's yield is 40 M.T. / Acre, 3 <sup>rd</sup> year from planting and after that annually. The projected value of bamboo biomass after three	-	For information

	years would be Rs. 3,000/M.T.		
3.	Tmt. Padmapriya, Deloitte gave a detailed presentation about UPNRM and how Deloitte is associating with GIZ and NABARD. The project cost is worked out to Rs.431.18 lakhs (Rs.1.43 lakh/acre) availing Rs.65.14 lakhs (0.21 lakh/acre) as subsidy from NMMP & NBM and Rs.366.03 lakhs (Rs.1.22 lakh/acre) as loan from GIZ – UPNRM through NABARD.	-	For information
4.	Principal Secretary to Government, Finance Department wanted to know the necessity of a Producer Company for this project. It was explained that, Producer Company will be very effective in absorption and distribution of funds from NABARD. Moreover, this structured organization shall professionally manage the project and produce better results thereby making the project sustainable.	-	For information
5.	Thiru. Aravind Balaji, JMD, LUCAS TVS, has opined that, the area proposed, 500 acres as pilot project, is very low and will not be much useful. It has to be scaled up to a larger area and volume of biomass	-	For information

	production.		
6.	P.S. to Government, Finance Department instructed to rework the cost assumptions taken into account for the per ton rate for the biomass and other factors in order to make the project viable. The relationship between the producer company and power generation units should be fair and sustainable. Sustainability of this project is very important.	Tmt. J. Padmapriya, Consultant, Deloitte	15-02-2013.
7.	P.S. to Government, Finance Department has opined that, Government should fix a fair price to the biomass produced by the farmers. We have to work out and appraise the Government an agreeable price to buy biomass. Government has to regulate the biomass production. A biomass commissioner can be appointed. Like Sugarcane Control Order, we can have Biomass Control Order. Necessary proposal has to be sent to Government.	A.G.M. (NBM).	15-02-2013.
8.	Thiru. Deepak Chamole from GIZ, New Delhi has explained about Eucalyptus clonal plantatin with intercrop on wasteland in Koraput District of Odisha State. BILT Paper	-	For information

	board company is the anchoring agency for this project. Eucalyptus is being cultivated in about 20000 – 30000 acres. After five years of planting, farmers are realizing a Gross sum of Rs. 60,000/Acre. Net realization would be around Rs. 40000 per acre. This model is working very well.		
9.	Commissioner of Horticulture and Plantation Crops has requested the Principal Secretary to Government, Finance Department to issue a Government Order for taking up this project in 500 Acres. 200 Acres of land shall be taken up from State Horticulture Farm and 300 Acres from Farmer's holdings. A detailed proposal has to be submitted to Government.	AGM(NBM)	15-02-2013
10	Agricultural Production Commissioner and Secretary to Government, Agriculture Department has raised three vital issues during the presentation.  1. Monoculture – For this biomass based power generation, monoculture bheema bamboo alone will be sufficient or do we need to have some other alternative	Dr. Bharathi, M.D., Growmore Bio tech.	Immediately

	<p>crops also.</p> <p>2. One source supply – Depending on a single source of supply may affect the quality of the programme.</p> <p>3. Pest and Disease management in Bamboo. It has to be thoroughly studied and a composite package of practice has to be evolved.</p>		
11.	<p>APC also raised a valid question of types of soil for Bamboo cultivation. It was explained that, red loamy soil would be very ideal. Even, alkaline soil is also suitable to grow this crop. Noyyal river basin can be planted with Bheema bamboo. There is a proposal of establishment of arboretum (tree clusters) utilizing treated sewerage water in every Panchayats. Pollution control board chairperson to be consulted in this regard. Possibility of inclusion of Bheema bamboo can be explored for this purpose.</p>	-	For information
12.	<p>Principal Secretary to Government, Finance Department has suggested a constructive idea of having a tripartite agreement of detecting the loan amount of farmers while disbursement of</p>	AGM(NBM)	15-02-2013

	payment from the power generation companies.		
13.	Thiru.C.K.Sridharan, Deputy Chairman (SST),TVS has requested the Government to allot puramboke lands for development of these types of energy plantations. Besides power generation, carbon sequestration is be additional benefit that can be reaped and carbon credits can be accumulated. This shall fetch additional revenues to the local bodies.	-	For information
14.	Thiru. Aravin Balaji requested to refine the project and work out a good model in such a way that, both farmers and power generation companies should have a win-win situation.	Tmt. J. Padmapriya, Consultant, Deloitte	15-02-2013.
15.	Principal Secretary to Government, Finance Department instructed to send a proposal to de notify Bamboo from Forest Act for easy felling, chipping and transportation.	AGM(NBM)	15-02-2013

The meeting concluded with a vote of thanks by the Commissioner of Horticulture and Plantation Crops.

**Commissioner of Horticulture**

## Annexure

### List of participants

S.No.	Name	Designation
1	Thiru.K. Shanmugam, I.A.S.,	Principal Secretary to Government, Finance Department, Secretariat, Chennai – 600 009.
2	Thiru. Sandeep Saxena, I.A.S.,	Agricultural Production Commissioner and Secretary to Government, Agriculture Department, Secretariat, Chennai – 600 009.
3	Dr. Santhosh Babu, I.A.S.,	Managing Director, TANHODA and Commissioner of Horticulture and Plantation Crops.
4	Thiru.C.K. Sridharan	Deputy Chairman (SST), TVS.
5	Thiru. Aravind Balaji	JMD, LUCAS, TVS.
6	Thiru.R. Amarnath	LUCAS/TVS.
7	Dr.N. Bharathi	Growmore Bio-tech Limited, Hosur.
8	Tmt.J. Padamapriya	Deloitte, Bangalore.
9	Thiru. Ramdoss Nambi	Grow more Bio-tech Limited, Hosur.
10	Thiru.R. Sundhar	General Manager, NABARD, Chennai.
11	Thiru.R.M. Sundaram	Sakthi Synergy Renewable Energy Limited.
12	Thiru.K. Suresh Kumar	Deputy General Manager, NABARD, Chennai.
13	Thiru.S.S. Vaseekaran	Asst. General Manager, NABARD, Chennai.
14	Thiru.Deepak Chamole	GIZ., New Delhi.
15	Thiru.J. Halthorai	Joint Director of Horticulture, Chennai.
16	Thiru.K. Periasamy	Joint Director of Horticulture, Krishnagiri (On special duty at CH&PC Office).
17	Tmt.K. Kalaiselvi	Deputy Director of Horticulture, Dharmapuri. (On special duty at TANHODA).
18	Thiru.G. Kandasamy	Deputy Director of Horticulture, Kodaikanal (On special duty at TANHODA).
19	Thiru.A.J. Jagadeesh Kumar	Deputy Director of Horticulture, Ooty (On special duty at TANHODA).
20	Tmt.S. Padma	Chief Accounts Officer, TANHODA, Chennai.
21	Thiru.P. Pandian	Executive Engineer, TANHODA.

22	Thiru.V.Ravi	Assistant Director of Horticulture, TANHODA.
23	Thiru.A. Jeyapandi	Assistant Director of Horticulture and Executive PA to MD.
24	Tmt.P. Premavathi	Assistant Director of Horticulture.
25	Tmt.R. Latha	Assistant Director of Horticulture.
26	Tmt.D. Santha Celine Marry	Assistant Director of Horticulture.
27	Tmt.M. Ponmalar	Assistant Director of Horticulture (Farms).
28	Tmt. Shanthi Swaminathan	Assistant Director of Horticulture (Farms).
29	Thiru.P. Sureshkumar	Assistant Director of Horticulture (NBM).
30	Tmt.P. Janaki Rani	Assistant General Manager (IAMWARM).
31	Tmt.R. Lakshmi	Horticulture Officer
32	Tmt.N. Jeevarani	Horticulture Officer
33	Tmt. Kokila Sakthi	Horticulture Officer
34	Tmt.A. Kopperum Devi	Horticulture Officer
35	Thiru.R. MahendraSkumar	Horticulture Officer
36	Tmt.T. Kayarkanni	Horticulture Officer