

BAMBOOS OF MEGHALAYA_RESOURCE SURVEY

G S RAJU, IFS (RETD)

CONSULTANT (PM)

BAMBOOS OF MEGHALAYA

- According to the survey of Chester John Nongkynrih et al, 2017 a total of thirty species (30) under fourteen genera (14) are found in different districts of Meghalaya (Table 1).
- The genus **Bambusa** recorded the highest number of plant species (11), followed by **Dendrocalamus** (4), **Chimonobambusa**, **Phyllostachys**, **Schizostachyum** (2 each) and the remaining species are **monospecific**.
- The highest numbers of species were found in Khasi hills followed by Jaintia hills and lastly Garo hills.

TABLE I: BAMBOO SPECIES OF MEGHALAYA AND THEIR DISTRIBUTION.

Species	Vernacular Name	Distribution
Bambusa balcooa Roxb	Wahiong (K) Beru, Borua	K, J & G
Bambusa bambos (Linn.) Voss	Wahkanteh (G)	K & G
Bambusa cacharensis R.B Majumdar	Ba (J)	K & J
Bambusa jaintiana R.B.Majumdar	U shken (K), wathibok (G)	K, J & G
Bambusa mohanramii P.Kumari & P. Singh	Seij (J)	K & J
Bambusa multiplex (Lour.) Raeusch	-	Bambusa multiplex (Lour.) Raeusch
Bambusa pallida Munro	Skhein, u sken (K), Wago (G)	K, J & G
Bambusa polymorpha Munro	-	K

BAMBOO SPECIES OF MEGHALAYA AND THEIR DISTRIBUTION (2)

Species	Vernacular Name	Distribution
Bambusa tulda Roxb.	Wati (G)Thengrangai (J), Rnai	K, J & G
Bambusa vulgaris var. vittatta Riviere & C. Riviere	Siej stem (K)	K
Bambusa vulgaris var. vulgaris Schrad. ex Wendl.	Wamannah (G), Shken shilot (J)	K, J & G
Cephalostachyum capitatum Munro	Ternap (K)	K
Chimonobambusa callosa (Munro)	U Skong, U Spar (K)	K
Chimonobambusa quadrangularis (Franseschi) Makino	U Spar bah (K)	K
Chimonocalamus griffithianus (Munro) J.R. Xue & T.P.Yi	U Spar iong (K)	K & J
Dendrocalamus giganteus Munro	U Ktang (K)	K
Dendrocalamus hamiltonii Nees & Arn. Ex Munro	Wanoke (G), Siej heh (K)	K, J & G

BAMBOO SPECIES OF MEGHALAYA AND THEIR DISTRIBUTION (3)

Species	Vernacular Name	Distribution
<i>Dendrocalamus hookeri</i> Munro	Siej iong, Seij sai, U ktang (K)	K
<i>Dendrocalamus longispathus</i> Kurz	-	K
<i>Drepanostachyum suberectum</i> (Munro) R.B. Majumdar	Nam-iong (K) Lom bnag (J)	K & J
<i>Gigantochloa albociliata</i> Kurz	-	K & G
<i>Melocanna baccifera</i> (Roxb.) Kurz	Watrai (G), Tyrlaw (K)	K & G
<i>Neomicrocalamus prainii</i> (Gamble)	Beneng (J)	K & J
<i>Phyllostachys mannii</i> Gamble	Shken, Siej Naga, Siej Naka,(K)	K & J
<i>Phyllostachys nigra</i> (Lodd. Ex Lindl.)	Naka iong (K)	K
<i>Pseudosasa japonica</i> (Sieb & Zucc. ex Steud)	-	K

BAMBOO SPECIES OF MEGHALAYA AND THEIR DISTRIBUTION (4)

Species	Vernacular Name	Distribution
Schizostachyum helferi (Munro)	Wati (G), Tuma (J), Tmar (K)	K, J & G
Schizostachyum mannii R.B. Majumdar		K & J
Yushania nutakayamensis (Hayata)		K



Centre of Excellence
for NRM and
Sustainable Livelihoods



THE WORLD BANK
IBRD • IDA



BAMBOO RESOURCE INVENTORY OF MEGHALAYA

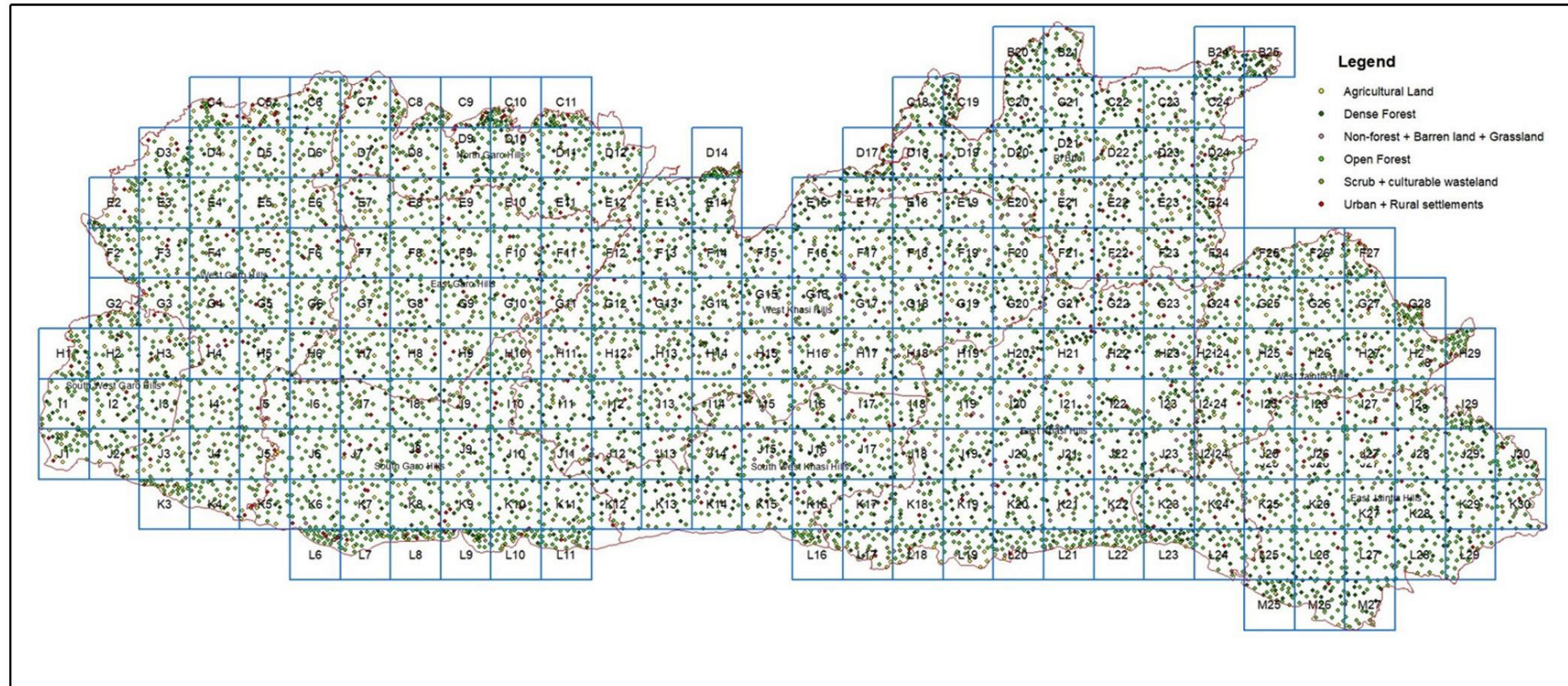
Summary



Centre of Excellence

for Natural Resource Management and Sustainable Livelihoods
MBDA, Shillong

7267 SAMPLE PLOTS DISTRIBUTED IN THE GRIDDED STRATIFIED RANDOM SAMPLING DESIGN STRATA WISE DISTRIBUTION OF SAMPLE PLOTS



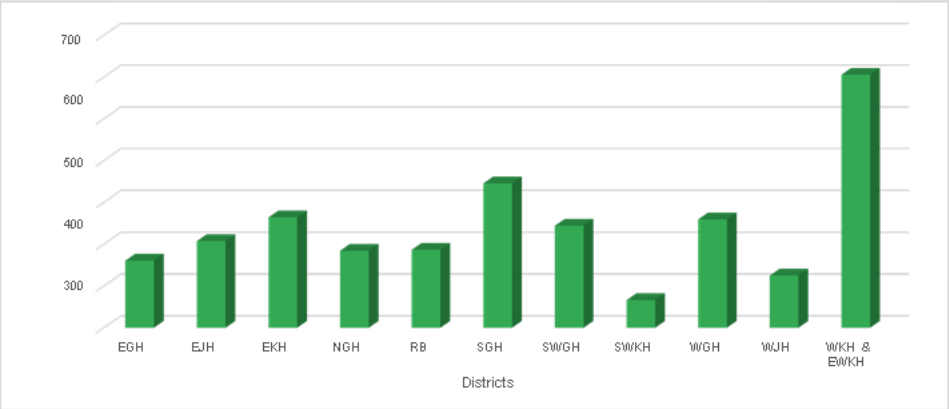
GRIDS FOR SURVEY

- Grid size- 10 km x 10 km
- Strata
 - **Dense Forest**
 - **Open Forest**
 - Scrub + Culturable wasteland
 - Agricultural Land
 - **Urban + Rural settlement**
 - Non Forest + Barren land +Grassland
- ❖ Species wise enumeration done on all the sample plots
- ❖ Herbarium of all the species have been prepared

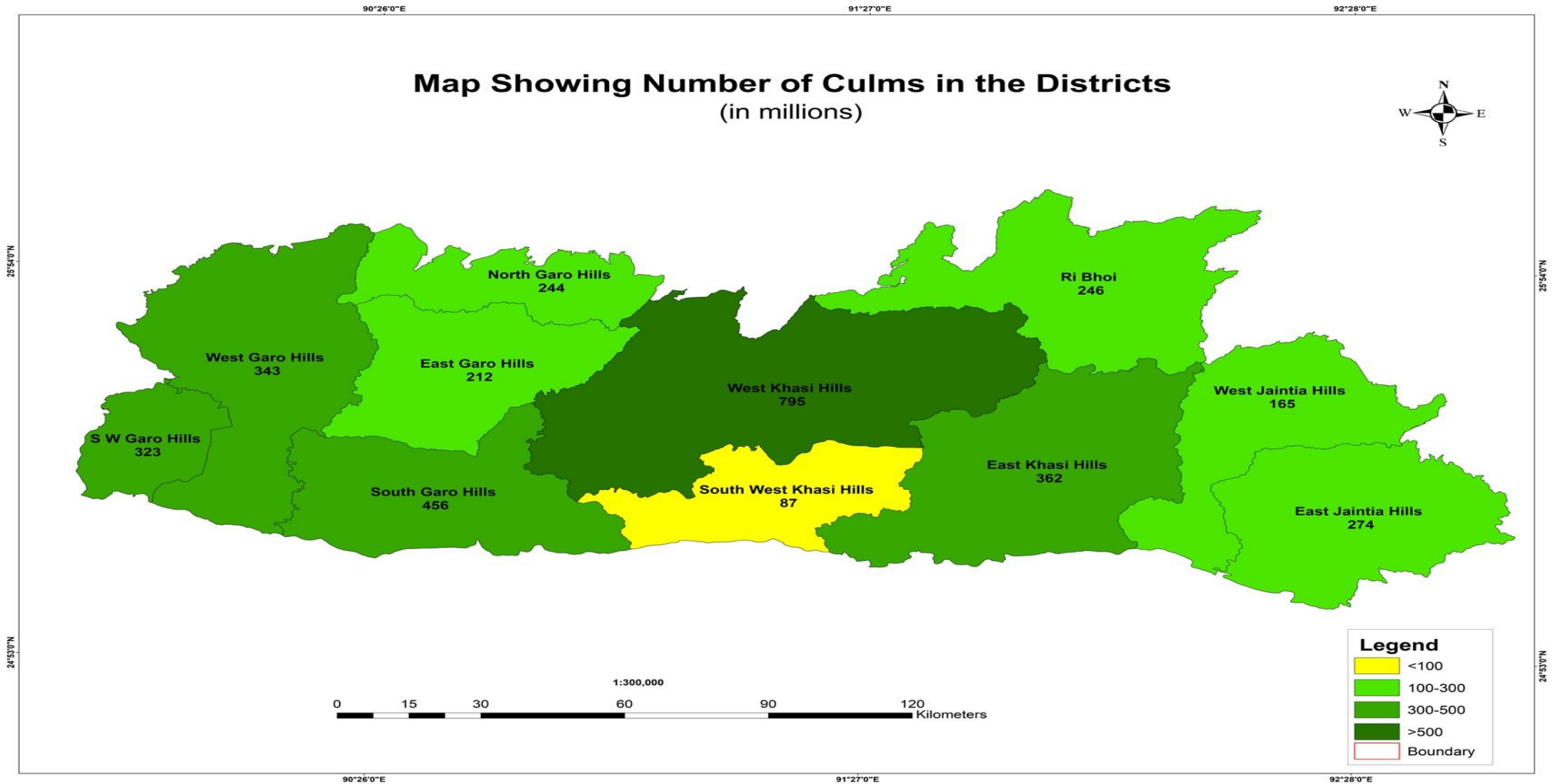
DISTRICT-WISE ESTIMATES OF NUMBER OF CULMS AND WEIGHT OF BAMBOO

SI No.	District	Numbers of Culms(in millions)	Green Weight(in tonnes)	Dry Weight(in tonnes)
1	East Garo Hills	161	1296664	617848
2	East Jaintia Hills	207	1613883	866016
3	East Khasi Hills	264	1599942	831496
4	North Garo Hills	184	1234293	583174
5	Ri-Bhoi	187	2613347	1358063
6	South Garo Hills	345	2405873	1080852
7	South West Garo Hills	244	1491323	665741
8	South West Khasi Hills	66	355330	173866
9	West Garo Hills	259	1040263	434588
10	West Jaintia Hills	125	1102025	557151
11	West Khasi Hills & Eastern West Khasi Hills	605	8189191	4309232
Total		2649	22942134	11478027

TOTAL NUMBER OF CULMS ON ‘Y’ AXIS VS DISTRICTS



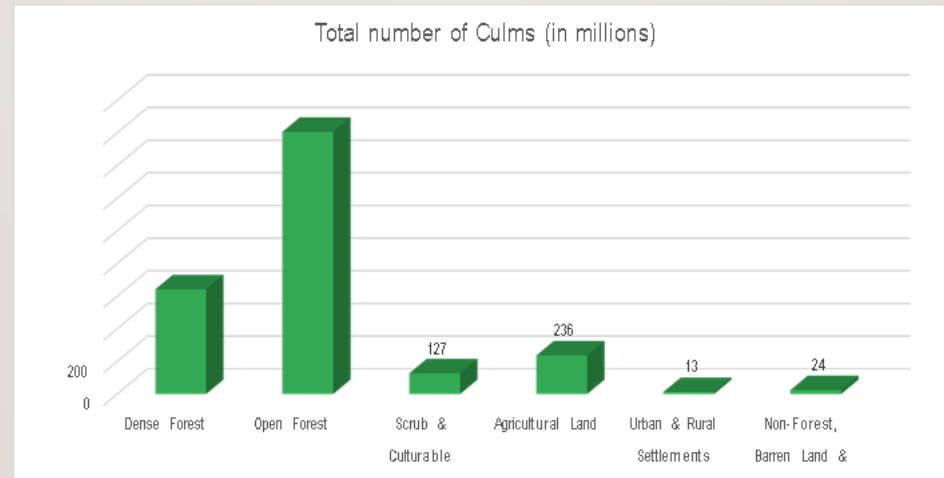
MAP SHOWING NUMBER OF CULMS AVAILABLE IN DISTRICTS



STRATA-WISE ESTIMATES OF NO. OF CULMS

Strata	Number of Culms (in millions)											Total
	EGH	EJH	EKH	NGH	RB	SGH	SWGH	SWKH	WGH	WJH	WKH & EWKH	
Dense Forest	28	47	66	45	98	60	49	17	66	21	146	642
Open Forest	116	147	122	129	65	276	146	39	171	78	318	1606
Scrub & Culturable Wasteland	16	4	6	7	7	2	9	3	19	5	48	127
Agricultural Land	2	8	64	3	13	6	39	5	3	20	74	236
Urban & Rural Settlements	0.02	2	2	1	1	1	1	0	1	1	2	13
Non-Forest, Barren Land & Grass Land	0	0.10	3	0.03	3	0	0	1	0.02	0.05	17	24
Total	161	207	264	184	187	345	244	66	259	125	605	2649

STRATUM-WISE NO. OF CULMS



SUSTAINABLE HARVESTABLE 10 COMMERCIAL BAMBOO SPECIES

Sl. No	Species	Sustainable Annual Yield	
		Number of Culms (inmillions)	Green Weight (in tonnes)
1	Bambusa balcooa	0.5	4919
2	Bambusa jaintiana	8.5	88344
3	Bambusa nutans	0.4	3677
4	Bambusa tulda	25.9	378281
5	Dendrocalamus hamiltonii	45.8	995572
6	Dendrocalamus hookeri	4.9	92862
7	Bambusa vulgaris	0.6	25810
8	Melocanna baccifera	77.1	214885
9	Bambusa bambos	0.3	10337
10	Bambusa pallida	1.7	14754
Total		165.7	1829441

SUSTAINABLE ANNUAL YIELD NUMBER OF CULMS (IN MILLIONS)

