
CONSERVATION ASSESSMENT AND MANAGEMENT PLAN WORKSHOP ON MEDICINAL PLANTS (23-25 FEBRUARY '95)-- A REPORT

A three day workshop was conducted to assess the status and distribution of certain medicinal plants in southern India. For the first time in India the Conservation Breeding Specialist Group process of Conservation and Assessment Management Plan was adopted and tested out on plants.

Foundation for Revitalisation of Local Health Traditions, a pioneering non-governmental organisation and host for this workshop, is undertaking a massive programme on identifying local health traditions with respect to medicinal plants and their conservation. The organisation had an initial list of 256 species of medicinal plants in the three southern states of Karnataka, Kerala and Tamil Nadu. Of these species, 210 were known to be safe, 10 rare and 36 endangered. Information on the crucial list was gathered either from the Red Data Book or hearsay and there was no reliable information. This therefore needed a rapid subjective analysis. FRLHT initiated the CAMP workshop with Zoo Outreach Organisation/CBSG, India as a co-organiser.

Dr. Ulysses Seal, Chairman of the Conservation Breeding Specialist Group coordinated and facilitated the workshop which was attended by 17 eminent botanists/ecologists/taxonomists from the three states with relative experience in their areas.

At the inauguration, Mr. Vinay Tandon of FRLHT welcomed the participants and the guest Dr. Madhav Gadgil of the Centre for Ecological Sciences, Indian Institute of Science, Bangalore, and also explained the need for such a process.

On the first day Dr. Seal gave a succinct insight into the set up of IUCN, and its branches and the role of CBSG in the present context.

Area-wise status of the plants in general was given by regional representatives, viz. Fr. Cecil J. Saldhana on Karnataka, Dr. M.P. Nayar on Kerala and Dr. Subramaniam on Tamil Nadu. This was followed by Mr. Tandon and Mr. Ved's presentation on the aims and motto of FRLHT. Dr. Seal then gave a talk about the CAMP process, its benefits and the exercise tried out on animals with lucid examples. He also explained the new IUCN criteria for endangerment according to the latest Mace-Stuart version. He however made it clear that the process though tested and tried successfully for animals was at an infant stage as applied to plants. The process had been once before tried with plants and invertebrates at St. Helena's Island and further modifications and refinement in the process was required.

Later the participants were divided into 3 groups and each group was to discuss 12 medicinal plant species out of 36 and thereby fill up a Taxon data sheet for each species. The Taxon Data Sheet has specific questions pertaining to the status of the species with conservation in view rather than

just academics.

On the second day copies of the data sheets of the groups were exchanged and each group had to review the data sheets of the other 2 groups. Once this was done, another revision of the 36 data sheets was done by all groups led by Dr. Seal. This session brought about several heated but informative discussions among the 3 groups. Dr. Seal's facilitation was at its best at this session in view of the fact that the participants were thoroughly engrossed in the process and realised its potential for a consensual approach rather than make individual assessments. Participants were more than willing and enthusiastic to share their academic knowledge into a more applicable conservation oriented one. The working groups also suggested modifications in the CAMP Taxon Data Sheet and the Summary CAMP Table to be better suited for future exercises on plants.

Finally, a concise tabular form of the results were made with the information gathered from each of the taxon reports. This tabulation or the CAMP Summary Data Table is printed. A key also follows the table. All 36 species have been assessed and compiled from the results available from the workshop.

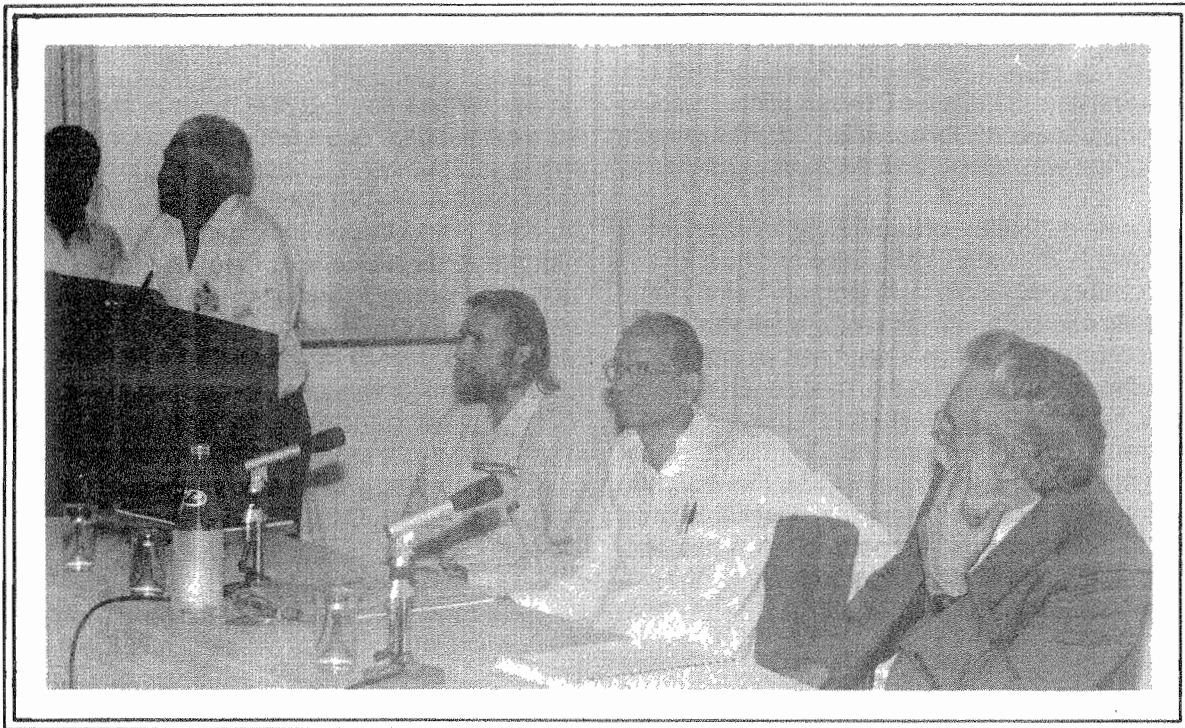
Several recommendations were made by the groups out of which 6 recommendations were chosen as topics for discussion: They were,

1. Management of species for recovery
2. Survey and Monitoring
3. Genetic management
4. Area-wise assessment of distribution
5. Cultivation - role of *in situ* methods
6. Cultivation for local, national, international use.

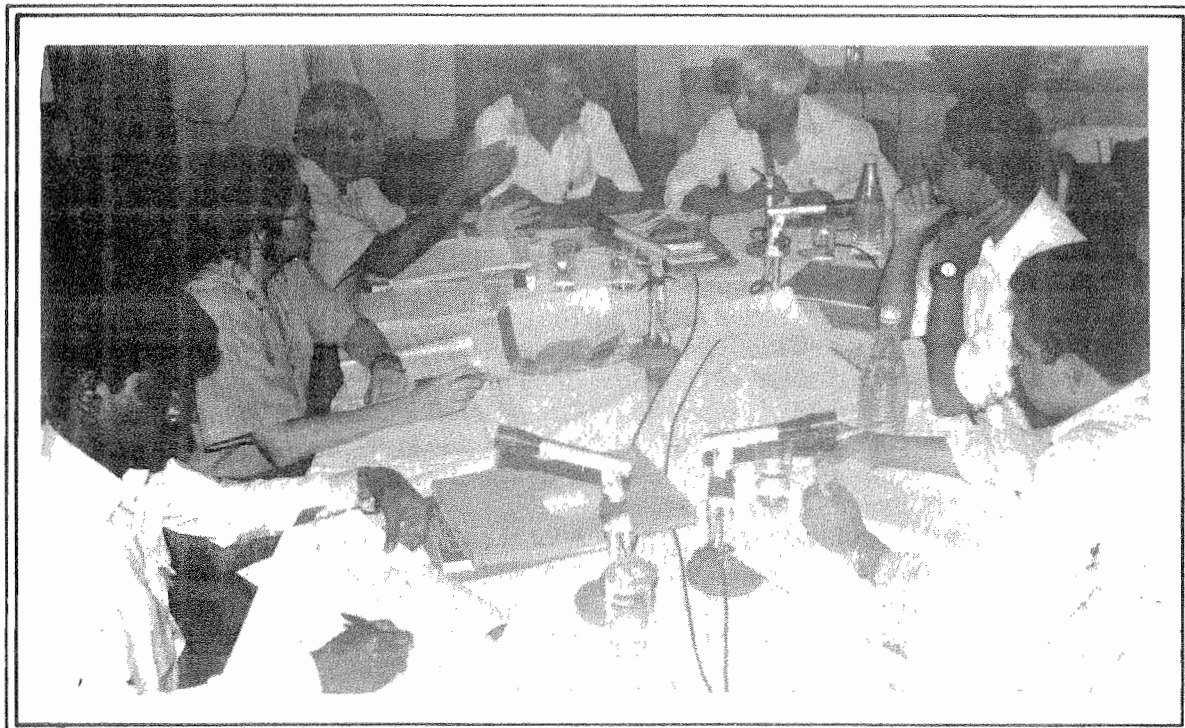
The participants dispersed into groups according to their interests in the above topics. After group discussions, a report was presented by each group.

The process was well appreciated and the enthusiasm and success has prompted the organisers to hold other such CAMPs for rapid assessment of plants on a wider scale. For this, a CAMP Facilitator's Training programme has been contemplated to involve more and more people to conduct such exercises regionally.

A lot of preparation had gone into the workshop such as compiling articles on medicinal plants, CITES regulations, etc. The briefing book with all these articles had an added feature on plant education aimed at botanical gardens and conservation centres. It was decided much before the CAMP process to conduct botanical education workshops in different botanical institutes. This idea was well supported at the meeting and Zoo Outreach Organisation is contemplating the idea of such a workshop in the month of November '95.



Mr. Vinay Tandon explains the need for a Conservation Assessment Management Plan Workshop. Drs. Darshan Shankar, Madhav Gadgil and Ulysses Seal at the Inauguration



A working group in session

CAMP
Summary Data Table - Plants

#	Species	Location	Habit	Family	Area sq.km.	Occup sq.km.	Locs /Frg.	% Dec	Yr/ Gn	Mat Incl.	Qual	Tree	UJCH	Recs	Cult
1	<i>Adhatoda beddomei</i> C.B. Clarke	Agasthyamalai, Gingee hills	Herb	Acanthaceae	7500	< 1	5	Unk	Unk	Unk	2	I, L	CR	P, R, S, C	Yes
2	<i>Aerva wightii</i> Hook. f	Unk	Herb	Amaranthaceae	Unk	Unk	Unk	Unk	Unk	Unk	4	Unk	DD	NP, S	No
3	<i>Ampelocissus araneosa</i> Planch	Southern peninsular India	Climber (w)	Vitaceae	1,00,000	< 10,000	Yes	50	20	Unk	3	L, Ice	VU	NP, R, NC, G	No
4	<i>Aristolochia bracteolata</i> Lam.	Peninsular India	Herb	Aristolochiaceae	> 5,00,000	< 1,00,000	Nil	No	Nil	Unk	3	Nil	LR	NP, NR, NC, NG	No
5	<i>Aristolochia tagala</i> Cham.	Throughout India	Climber (f)	Aristolochiaceae		< 1,00,000	Nil	20- 50	Unk	Unk	2	I, Ov	VU/N	P, R, NS, C, G	No
6	<i>Asparagus roffii</i> Bak.	Unk	Herb	Liliaceae	Unk	Unk	Unk	Unk	Unk	Unk	Unk	L	DD	S, C	No
7	<i>Buchanania lanzan</i> Spreng	Indo-burma	Herb	Anacardiaceae		> 1,00,000	Nil	?	Unk	Unk	3	Unk	DD	NP, S, C, G	Yes
8	<i>Cleome burmanni</i>	Peninsular India	Herb	Capparidaceae			Yes	Yes	Unk	Unk	3	L	DD	NP, R, S, C	No
9	<i>Commiphora wightii</i> (Am.) Bhandari	Ards of Deccan, western, NW India	Tree	Burseraceae	Unk	Unk	Unk	Unk	Unk	Unk	2	I	VU/R	P, C, G	No
10	<i>Coccinidium fenestratum</i> (Gaertn)	Indo-malaya	Woody Climber	Menispermaceae	Unk	Unk	Unk	80	10	Unk	2	I, L	CR	P, R, C, G	Yes
11	<i>Cycas circinalis</i> L...	All India	Tree	Cycadaceae	Unk	Unk	Unk	50	20	Unk	3	I, L	VU/N CR/R	P, C, R	Yes
12	<i>Cycas fissicalyx</i> Dunn.	Southern Western Ghats	Climber (w)	Menispermaceae	Unk	Unk	< 5	Unk	Unk	Unk	4		E	P, S	No
13	<i>Elaeagnus conferta</i>	Hills of peninsular India	Shrub	Elaeagnaceae	50,000	5,000	Yes	25	10	Mary	2	I, L	LR	NP, S	No
14	<i>Embelia ribes</i> Burm. f	Central and southern Western Ghats	Liana	Myrsinaceae	50,000	< 10,000	Yes	25	10	Unk	4	I, L	LR	NP, R	No

#	Species	Location	Habit	Family	Area sq.km.	Occup sq.km.	Locs /Frg.	% Dec	Yr/ Gn	Mat Ind.	Qual	Thre	IUCN	Reco	Cult
15	<i>Gardenia gummifera</i> L.f.	Peninsular India	Tree	Rubiaceae	Unk	Unk	Unk	Unk	Unk	Unk	4	Unk	LR	NP, R	No
16	<i>Glycosmis macrocarpa</i>	S. Western Ghats of Kerala and T.N.	Shrub	Rubiaceae	> 5,000	Unk	Unk	Unk	Unk	Unk	2	U	LR	NP, R	No
17	<i>Holostemma annulare</i> (Roxb) K	C. And S.W. Ghats and deccan Plateaux	Liana	Asclepiadaceae	< 50,000	5,000	Yes	35	10	Unk	2	I, Ov	VU	P, C	Yes
18	<i>Hydrocarpus macrocarpa</i>	South Western Ghats	Tree	Flacourtiaceae	< 20,000	Unk	Yes	50	20	Unk	5	Ov, Lf	VU	NP, R	No
19	<i>Kaempferia galanga</i> Linn	Indo-malaya	Herb	Zingiberaceae	Unk	Unk	Unk	Unk	Unk	Unk	4	Unk	CR/R	P, R, S, G	Yes
20	<i>Kingiodendron pinnatum</i> (Roxb. ex DC.)	Evergreen forests of Kerala	Tree	Caesalpiniaceae	< 10,000	Unk	Unk	50	10	Unk	2	Ov, I	E	P, R, C, G	Unk
21	<i>Madhuca diplostemum</i>	Found only under cultivation	Tree	Sapotaceae	Unk	Unk	Unk	Unk	Unk	Unk	4	Unk	E	S	No
22	<i>Madhuca insignis</i> (Radlk) Lam.	Found only under cultivation	Tree	Sapotaceae	Unk	Unk	Unk	Unk	Unk	Unk	4	Unk	EX	S	No
23	<i>Myristica malabarica</i> Lam.	Dakshina Kannada to Kanya Kumari	Tree	Myristicaceae	40,000	10	Yes	> 30	10	Unk	2	L, I	E	P, R, C, G	No
24	<i>Ochreinauclea missionis</i> (Wall ex G. Don)	Dakshina Kannada, Top Slip, Pethamthitta	Tree	Rubiaceae	> 5,000	Unk	Yes	50	10	Unk	2	L, I	VU	P, R, C, G	Yes
25	<i>Operculina turpethum</i> (L.) Silva Manso	Indo-malaya, T.N., Kerala	Climber (h)	Convolvulaceae	> 5,000	Unk	No	Unk	Unk	Unk	2	Ov	LR	NP, S	No
26	<i>Piper barberi</i> Gamble	Kerala	Shrub	Piperaceae		1	Yes	Unk	Unk	Unk	1	L	CR	P, R, C, G	Yes
27	<i>Piper longum</i> L.	Kerala, T.N.	Shrub	Piperaceae	> 5,000	< 1,000	No	Unk	Unk	many	2	L, Ov	LR	NP, R, G	Yes
28	<i>Plectranthus verticillatus</i>		Shrub	Lamiaceae	Nil	Nil	Nil	Nil	Nil	Nil	4	Nil	EW	P, G	Yes
29	<i>Pterocarpus santalinus</i> L.f.	South Easter Ghats	Tree	Fabaceae	< 5,000	< 1,000	No	No		Unk	2	Ov	E	P, R, G	Yes
30	<i>Rauwolfia serpentina</i> Benth	Moist deciduous and evergreen forests	Shrub	Apocynaceae	> 10,000	< 500	No	50	10	Very few	2	I, L, Ov	E	P	Yes

#	Species	Location	Habit	Family	Area sq. km.	Occup sq. km.	Locs /Frg.	% Dec	Yr/ Gn	Mat Ind.	Qual	Thre	IUCN	Recs	Cult
31	<i>Saraca asoca</i> (Roxb.) Wild.	C. And S. Western Ghats, Sri Lanka	Tree	Caesalpiniaceae	< 5,000	Unk	Yes	Unk	Unk	125	2	L, I	VU E/R	P, R, C, G	Yes
32	<i>Syzgium travencorium</i> Gamb.	T.N. and Kerala	Tree	Myrtaceae	> 5,000	Unk	No	Unk	Unk	< 200	2	L, I	CR	P, R, C, G	No
33	<i>Trichopus zeylanicus</i>	Extreme South Western Ghats	Herb	Dioscoriaceae	< 5,000	< 1,000	Yes	Yes	Unk	< 1000	2	I, Ov	CR	P, R, C, G	Yes
34	<i>Uleria salicifolia</i>	Grassland slopes of south India	Shrub	Asclepiadaceae	< 1,000	< 50	Yes	50	20	Unk	2	I, Ov	CR	P, R, C, G	Yes
35	<i>Vateria indica</i> L.	Karnataka, T.N., Kerala	Tree	Dipterocarpaceae		> 5,000	Yes	50	20/2	Unk	2	L, I, Ov	LR	P, R	Yes
36	<i>Woodfordia fruticosa</i> (L.) Kurz	All India	Shrub	Lythraceae			No	No		Unk	2	Nil	LR	NP, R	Yes

Key:

- Area sq. km. Area of distributional range
 - Occup sq. km. Effective area occupied
 - Locs/Frg. Number of locations or fragmented populations of the species
 - % Dec Percentage decline in the wild population
 - Yr/Gn Decline in years or generations
 - Mat. Ind. Number of mature individuals living
 - Qual. Data quality of the source of reference
 - Thre. Treats afflicting the population/s
 - IUCN Threat categorization according to the latest Mace-Stuart criteria
 - Recs. Recommendations
 - Cult. Species under cultivation either for commercial, propagation or conservation
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- Unk. Unknown
 - I Human interference
 - L Habitat loss
 - Ice Interspecific competition
 - Ov Over exploitation
 - Lf Loss of habitat due to fragmentation
 - CR Critically Endangered
 - E Endangered
 - VU Vulnerable
 - DD Data Deficient
 - LR Low Risk
 - EX Extinct
 - EW Extinct in the wild
 - /R Threat category at Regional level
 - /N Threat category at National level
 - P/NP PHVA recommended / not recommended
 - S/NS Survey recommended / or not
 - R/NR Research recommended / or not
 - G/NG Genetic mgmt recommended / or not
 - C/NC Cultivation recommended / or not