

**Minutes of the Research Advisory & Monitoring
Committee Meeting of the Botanical Survey of India held
at Central National Herbarium, Howrah
on 4th March 2011**

The Meeting of the Research Advisory & Monitoring Committee (RAMC) was held in Committee Room of the Central National Herbarium, BSI, Howrah, under the Chairmanship of Prof. A.K. Koul, Dean Academic Affairs, School of Biosciences & Biotechnology, Baba Ghulam Shah Badshah University, Rajouri, on 04h March, 2011. The meeting was preceded by a visit of Committee members to the AJC Bose Indian Botanic Garden followed by tree plantation. The list of members who attended the meeting is annexed (Annexure1).

As the members assembled in the Committee room Dr D.K. Singh, Director-in-Charge, extended a warm welcome to the Chairman, Prof. Koul, and other distinguished members of the newly constituted Research Advisory & Monitoring Committee and expressed the hope that the collective wisdom of the Committee and continued support of Ministry of Environment and Forests (MoEF) will help BSI achieve its targeted objectives in efficient and professional manner. He also informed the members that unlike the past, the present Committee is constituted exclusively for BSI on the initiative of Hon'ble Minister of State (I/c), Environment and Forests to ensure more focused appreciation of the issues and evolving appropriate strategies to resolve them.

In his opening remarks, the Chairman expressed his gratitude to MoEF for honouring him to chair the newly constituted RAMC of BSI, and said that constitution of separate committee will provide better opportunity to the experts to go into issues more intensively and incisively. He recalled the glorious past of BSI which has richly been contributing to enrich the knowledge of plant diversity of the country for over 120 years. He, however, felt that BSI should be more proactive in projecting its achievements and strive to enhance its prestige and popularity in academic circles. He requested the members to prepare a small note on the measures required to be taken for image building of BSI. He emphasized the need for expeditious completion of survey and documentation in the areas that are under and unexplored, compilation of data on lower groups of plants, involving experts from outside the BSI system and capacity building in taxonomy of not only angiosperms, but also of embryophytes and thallophytes. He also drew attention of the members to the fact that lot of unattended herbarium specimens are lying in the universities and other institutions which BSI should retrieve. BSI should also influence the Govt. of India to provide financial

assistance to such institutions for proper maintenance of their collections. He also drew attention of members to the Botanic gardens attached to universities many of which are in extremely bad shape. He wanted BSI to take lead in enlisting and linking them for better management.

The Chairman then invited comments from other members as well.

Dr R.R. Rao said that BSI should publicize its output more effectively so that its contributions become known to people. They should send their publications to journals like 'Current Science' for review. He suggested further that BSI should be more aggressive and should publicize the good work it has done. Dr. A. Subramoniam, Director, TBGRI, said that all plant groups, including the lower groups should be documented. He desired that for solving problems of taxonomy knowledge on molecular aspects should also be made use of. Prof. M. Daniel stated that good students are not getting attracted to taxonomy. Therefore, some utilitarian aspects, like bioprospecting, need to be combined with taxonomic research to make it more interesting and application oriented. Prof. S.C. Srivastava said that lack of job opportunities for taxonomists is the main reason why students are shying away from pursuing taxonomy.

Dr. D.K. Singh informed the Committee that the proposal for one time financial assistance to the herbaria outside the Government system, which the BSI prepared on the recommendation of the previous Committee, is currently under process in the MoEF. He told the members that universities/colleges facing difficulties in maintaining their herbaria may deposit the sheets with the nearest regional centre of BSI. He also informed the members about the 'All India Coordinated Project on Taxonomy (AICOPTAX)' operated by MoEF wherein 76 Coordinators/Collaborators from different institutions are involved in building capacity in the taxonomy of different groups of plants, animals and micro-organisms, and the documentation of biota of specific regions.

Thereafter, the Agenda items were taken up in seriatim.

Agenda item no. 1: Confirmation of the minutes of last meeting:

Dr P. Venu, co-opted as Member Secretary, RAMC, informed the Committee that the draft minutes were circulated among the members & no comments were received from them. He therefore, requested that the same may be confirmed. The minutes were later confirmed.

Agenda Item No. 2: Action taken on the decisions of the previous meeting:

(i) Appointment of Drs, V. Singh and H.J. Chowdhery as Emeritus Scientists in BSI, and Dr A.K. Hazra in ZSI, pending since long:

The committee was informed that appointment of Drs. V. Singh and H.J. Chowdhery as Emeritus Scientists in BSI has been approved, but their monthly honorarium, from existing Rs.10,000/- to Rs. 20,000/- p.m. and annual contingency from existing Rs. 20,000/- to Rs. 50,000/- p.a. were yet to be revised. The Chairman expressed concern over such inordinate delay in implementing the recommendations and emphasized that the Emeritus Scientists should be paid the difference from the date of approval of the recommendation i.e., from the date of their joining.

(ii) Remuneration @ Rs. 500/= per species for preparing taxonomic description and Rs. 250/= per species for editing under 'Flora/Fauna of India' series be paid to retired scientists:

The Committee was informed that the proposal is ready for submission to MoEF for administrative approval. The Chairman took exception to the delay on the part of BSI and wanted that definite timeline be given by the Director, BSI for submitting the same to the ministry. Dr Singh assured members that it will be submitted to the Ministry in March 2011 itself.

(iii) Appointment of Drs. K.P. Singh, (Scientist 'F') and J.R. Sharma, (Scientist 'E') as Emeritus Scientists after their superannuation:

The Committee was informed that appointment of Drs. K.P. Singh and J.R. Sharma as Emeritus scientists in BSI is complete. The Chairman once again emphasized the need for expeditious actions on part of the Ministry towards the implementation of the recommendations of the RAMC.

Agenda Item No. 3: Progress report of BSI for the period, October 2009 - December 2010:

The Director-in-Charge, made the presentation, (starting with brief historical perspective of BSI for the benefit of the new Committee) on the progress made by the BSI during the period under review and presented an overview of different activities and achievements in terms of, number of explorations undertaken, documentations done at ecosystem, state,

regional and national levels, new discoveries and new plant records made, ex situ conservation work in IBG, BGIR and associated botanic gardens, of the publications, e-governance initiatives and capacity building programmes during the period.

The Chairman complimented the Director and expressed appreciation of the progress made by BSI. He remarked that in future, presentations should focus only on the progress made during the period under review. He also observed that the 'Map used by BSI to project the status of exploration' undertaken in the country does not depict the correct picture because lot of areas which have been explored by the botanists working in different universities / colleges / institutions in different states are not taken into account by BSI.

The members also complimented the BSI for the work it has done during the period under review. A few observations were made which are listed below:

- i. The members pointed out that while compiling the data on the total area of the Country explored for plant wealth the BSI should include inputs made by BSI as also those made by other institutions, such as University and College Departments and national Laboratories. Such compilations alone can present true picture of the area already covered and that left to be explored. Excellent work done on algae in BHU & Madras Botanic Lab, on fungi in many University Departments, on ferns in Punjab University, on hepatices and mosses in Lucknow University needs to be compiled and reflected in all official documents.

- The members appreciated that preparation of such all – inclusive document will call for additional resources which should be asked for from MOEF
- ii. The members lauded the publication of the Annual compilation of New Plant Discoveries. They suggested giving these discoveries greater visibility and taking them to the door steps of Schools, Colleges and Universities to enthuse young learners by involving EMRCs in preparing documentaries.
 - iii. The members also proposed that BSI must educate people about the wealth of live, pressed and museum specimens and the other diverse heritage it has.
 - iv. Dr R.R. Rao suggested that senior scientists of BSI should also be invited to attend the RAMC meetings to interact with the members of the Committee. He further suggested that in future, instead of the Director, himself presenting the progress report, 'Group

Leaders' should present findings of different scientific projects as is the case in other organizations. Alternatively, the list of scientific projects should be sent to the Chairman in advance, who may pick up few of them for presentation before the Committee during its meetings. Dr Singh agreed to the suggestion.

- v. Dr C.S. Nautiyal, Director, NBRI wanted to know how many papers of BSI scientists have been published in journals like 'Taxon' during the period under review. Dr Singh informed the Committee that out of about 199 research papers published during the period under review 46 were published in foreign journals, with good impact factor including 'Taxon'. Dr Subramoniam and Prof. D.J. Bhat wanted that scientists should publish their findings in journals with high CI. Commenting on the observation, Dr Rao said that taxonomic journals do not normally have high impact factor. Joining him Dr Singh informed that the 'Kew Bulletin', considered one of the best plant taxonomy journals, does not have any impact factor.

Agenda Item No. 4: Approval of the Annual Action Plan 2011-12 and consideration of proposals for extension:

Action Plan programmes for 71 projects, including 17 new ones, were approved by the Committee for 2011-12. Seven projects requiring extension ranging from 6 months to one year beyond March 31, 2011 for completion were considered by the Committee. The Committee observed that extension of time for completion of projects should normally be discouraged as it reflects that either the planning or the execution of the projects has been faulty. It was also suggested that applications for extension should be accompanied by valid justification. It was agreed that BSI will circulate the justification for extension of the projects under reference to the members of the Committee through e-mail for final decision.

Agenda Item No. .: Appointment of Emeritus Scientists in BSI:

Dr P. Venu informed the Committee that two applications were received for the position of 'Emeritus Scientist' in BSI. The 2 applications and the comments of reviewers thereupon were placed before the Committee. The programme on "Endemic Angiosperms

of Jammu and Kashmir State: Diversity, Distribution and Threat assessment” was approved for following reasons:

- i. Two of the three referees to whom it had been referred have recommended it.
- ii. Although it is not based on revisionary work it concerns endemics which represent a high priority group of flowering plants.
- iii. The area proposed to be explored for exploration is studded with serious problems that have made exploration very difficult.
- iv. Professor Dar’s track record, quality of publications and work experience in the field of taxonomy are of high order.

The second programme on “Revision of subtribe Euinuleae (Asteraceae) in India” was not considered by the Committee as the reports from all the three reviewers were negative.

Dr Singh informed the Committee that Junior and Senior Research Fellows working under BSI Scholarship Scheme at present are paid Rs. 3000/= and Rs. 4000/= per annum respectively as contingency to meet the expenses related to project work, including travel, field assistance, transport, food and lodging while on field work. Often, the areas covered by scholars are remote and expenditure incurred there is very high. He said that as taxonomy is field intensive science, the amount is too meager to meet the obligatory requirements of the project. He therefore, proposed to increase the annual contingency of JRF to Rs. 15, 000/= p.a. and that of a SRF to Rs. 20, 000/= p.a. The Committee appreciated the need for enhancement of the contingent grant attached to BSI research scholars.

Recommendations

The following recommendations emerged from the deliberations.

1. Emphasis needs to be given on survey in more challenging biodiversity rich areas that are left uncovered. New explorations should focus on areas from where higher numbers of new discoveries are being made. **[Action: BSI]**
2. Unattended materials in universities and other institutions should be retrieved by BSI and funding for herbaria outside Govt. system be encouraged and facilitated by BSI. **[Action: BSI, MoEF]**

3. The contingency for research fellows under 'BSI Scholarship Scheme' should be enhanced to Rs. 15, 000/= p.a for the first two years and Rs. 20, 000/= p.a for third year and thereafter.

[Action: BSI, MoEF]

4. Expeditious action on part of the ministry towards implementation of the recommendations of the RAMC.

[Action: MoEF]

5. BSI should make documentaries to popularise its achievements and get its publications reviewed in well circulated journals, like 'Current Science' and 'Everyman's Science'.

[Action: BSI]

6. A Mechanism be evolved to include work done by institutions, other than BSI, towards Survey and documentation of the plant diversity of the country, so that an integrated picture on the survey status can be brought out.

[Action: BSI]

The meeting ended with vote of thanks by Dr P. Venu.

Annexure 1 List of Participants

1.	Prof. A.K. Koul	Chairman
2.	Prof. M. Daniel	Member
3.	Dr. R.R. Rao	Member
4.	Prof. S.C. Srivastava	Member
5.	Prof. D. Jayarama Bhat	Member
6.	Dr. C.S. Nautiyal,	Member
7.	Dr. A. Subramoniam,	Member
8.	Dr D.K. Singh	Member
9.	Mr A.K. Pathak, Scientist F, BSI	Special invitee
10.	Dr P. Singh, Scientist E, BSI	Special invitee
11.	Dr P. Lakshminarasimhan, Scientist D, BSI	Special invitee
12.	Dr P. Venu	Member Secretary

A.K. Koul