

PROCEEDINGS OF THE NATIONAL WORKSHOP ON TREE SEED TECHNOLOGY

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A National Workshop on Tree Seed Technology was held at the Pakistan Forest Institute on November 21-26, 1992 with the financial assistance of Winrock International Office of Forestry Planning and Development Project, Islamabad. The Workshop was attended by a large number of Officers of Ministry of Food, Agriculture and Cooperatives, provincial and Azad Jammu and Kashmir Forest Departments, members of Technical Assistance Team of Winrock International, USAID Office in Islamabad, Capital Development Authority and some retired senior forest officers. Services of Dr.W.W. Elam, Mississippi State University and Dr.J.A. Vozzo of USDA Forest Service were also provided by the Winrock International, Forestry Planning and Development Project for both planning and for presentation during the Workshop.

The Workshop was inaugurated on 21st November, 1992 by Mr.Abdur Rehman Khan, Vice Chancellor, NWFP Agricultural University, Peshawar. It was followed by presentation of reports in the working sessions on the work done by different institutions and departments regarding tree seed technology and the problems faced by them. On the third day groups were formed for each province for determining their current and future seed requirements, preparation of plan of action and recommendations. The groups consisted of officers of provincial forest departments and they were assisted in their deliberation by the officers of the Pakistan Forest Institute, Winrock International Team etc. The group discussions were continued on the 4th day of the Workshop.

The recommendations of the individual groups were presented on 5th day of the workshop in the general meeting chaired by the Inspector General of Forests, Government of Pakistan. After discussions, these were approved by the general meeting on the last day of the workshop. These are reproduced below:

1. The provincial forest departments should set up an independent system of seed collection, processing storage and distribution on priority basis. This programme should be given top priority in 8th Five Year Plan and PC-1 scheme be prepared immediately for the purpose and processed with the concerned authorities. The tree seed research should be included in the provincial forest research units/PFI research programme.

While the establishment of independent organization for seed collection is being processed by provincial governments, they should in the meantime ensure the collection and use of quality seed by entrusting marking of plus trees and selection of tree stands of each species to the field officers. This should be ensured by the CCFs by issuing immediately necessary orders for this purpose. The progress of implementation of these recommendations should also be ensured through periodical reports of the field officers.

2. The P.F.I. should prepare guidelines for selection of plus trees and identification of seed production areas and forward these

guidelines to the field officers through provincial governments for implementation and arrange training programmes on the request of the provincial forest departments.

3. Establishment of seed orchards of priority tree species alongwith the selection of plus trees should be taken up by each province in collaboration with their respective research units and with the guidance of PFI if necessary.
4. Development of uniform procedure for seed testing should be taken up jointly by PFI, PFRI and research units and these should be sent to provincial forest departments for their comments.
5. There should be close coordination and cooperation among the provincial/regional seed centres and P.F.I.
6. Pending the compilation of seed manuals it is recommended that the provincial forest departments should take immediate step, to review the rates of seed collection keeping in view the recommendation that it has to be collected now from only plus trees and selected tree stands. At the same time the quality of good and clean seed required per unit area of each species should be entrusted to the existing research units of the province.
7. There should be strong coordination of the Tree Seed Technology Workshop recommendations with the recommendations of the proposed tree improvement conference.
8. Short-term training in tree technology for the field officers, technicians and farmers

should be arranged by P.F.I./Provinces. The P.F.I. should chalk out a programme of training in consultation with provincial forest departments/research units.

9. The curriculum on tree seed technology should be strengthened in forestry degree programmes. While the students are on tour to different provinces, identification of plus trees and selection of seed stands/tree orchards should be given top priority during their field visit.
10. Seed testing of prioritized tree species should be taken in hand by the PFI and research units particularly on the following aspects:
 - i. Maturation indices
 - ii. Pretreatment of seeds
 - iii. Germination capacity
 - iv. Viability of trees seeds
 - v. Storage requirements
 - vi. Determination of storage potential of different seed lots and species.
11. Preparation of tree manual for Pakistan and its version in an abridged form in Urdu should be made a regular and continuous activity. The PFI should prepare 3-6 months report and publish it on yearly basis.
12. Identification and determination of suitable measures for the control of stored trees seed pests and diseases. The Forest Entomologist and Forest Pathologist of the PFI should prepare a report for this purpose.
13. Investigation of measures and techniques for enhancing yield of good quality seed from seed stands should be started by the research Institutes/Units.

14. Investigation into economics of quality seed production should be carried out by the PFI and PFRI.

15. Study on the feasibility of introducing tissue culture should be carried out by PFI, PFRI and other research units.

16. Tree and technology research should be conducted on the priority species indicated by provinces in their respective reports presented by them in the Workshop.

17. The PFI should prepare a working paper examining the possibility of having the tree seed legislation at federal/provincial level.

18. In order to assess the progress of implementation of the recommendations of this Workshop, a review group should be continued after one year by the PFI to review the progress and give further direction which may be appropriate in the light of the achievements made.