

Preface

Productivity of plantations, quality of produce and net economic returns from plantations depend to a very large extent on the genetic quality of planting stock and sound silvicultural and management practices. Recognizing the vital and critically important role of genetically improved seed and clonal planting stock for substantial improvements in productivity and benefits from plantations; ICFRE decided to commission a study “Need for an Institutional and Regulatory Mechanism for Certification of Forest Reproductive Material”. After completing due processes of inviting technical and financial proposals from consultants, a Memorandum of Agreement was signed on 10th October 2007 between ICFRE and the consultants. Shri Sarvesh Singhal, Assistant Director General, (Education), signed on behalf of ICFRE and Shri Piare Lal signed the Memorandum of Agreement on behalf of the following three consultants:

1. Shri Piare Lal, Technical Advisor, Pragati Biotechnologies, 25, Sant Sarwan Das Ji Nagar, P.O. Satnampura, Hadiabad, Phagwara-144402, District Kapurthala, Punjab.
2. Shri A.S. Dogra, Retired Principal Chief Conservator of Forests, Punjab, 256, Sector-37 A, Chandigarh.
3. Shri S.L.Dabral, Retired Deputy Director General (Extension) ICFRE, 127, Phase-I Vasant Vihar, Dehradun

The terms of reference given to the consultants are reproduced below:

1. Study the existing seed certification mechanism for agriculture crops/ forestry species available nationally and internationally.
2. Evaluate the imperatives of certification mechanism for forestry seed/ planting material.
3. Establish key principles for sourcing, segregation, labeling, record keeping and testing in order to ensure varietal integrity.
4. Formulate law governing availability and marketing of quality seed/ planting stock material. For this purpose, systematically elaborate the scheme for implementation, setting of minimum standards and control measures and regulatory enforcement mechanism subsequently
5. Identify supportive infrastructure needed to implement/ enforce the proposed legislation outlining the procedure for certification, and defining role and functions of various agencies/ authorities.
6. Suggest proper and effective institutional framework linking all major players at different levels for implementing the provisions of the proposed Act

The time schedule for completing various milestones for completing the study was set as follows:

1. Presentation of methodology developed for the study before Indian Council of Forestry Research and Education by the end of 1st month.
2. Presentation of outcome of preliminary study, desk review and the responses of field study by the end of 3rd month.
3. Organization of workshops/ brainstorming session inviting various stakeholders/experts/ eminent scientists /academicians in the relevant field to

deliberate on various issues formulated during course of preliminary study/research to incorporate their suggestions and recommendations in the draft report, by the end of 4th month

4. Presentation of Draft Report by the end of 4th month
5. Submission of Final Report by the end of 6th month

The consultants completed the assignments as per items 1 and 2 above well in time. However, holding of the workshop/ brainstorming session, which was the responsibility of ICFRE, was abnormally delayed till 11th April, 2008 and the main points raised by the participants were communicated to the consultants by the Dy. Director General (Education), ICFRE vide his letter dated May 5, 2008 (Annexure VII). Consultants were advised to submit the Draft Report by 26th May, 2008.

Draft Report was submitted on 8th May, 2008 well in time and consultants requested ICFRE for their valuable comments and suggestions if any for incorporation in the Final Report. Despite repeated requests including personal visits, consultants received the comments from ICFRE vide e.mail dated 9th September, 2008 (Annexure VIII) i.e. after a lapse of 4 months. Meanwhile, we were constantly advised to hold back the Final Report, which was kept ready well in time.

The consultants while preparing the Final Report had already considered most of the issues raised in comments and suggestions received from ICFRE on 9th September. It has been our endeavour to ensure that all of the valuable suggestions/ comments received from ICFRE and other experts are considered on merits and same have been suitably incorporated in our Final Report submitted to ICFRE on 15th September, 2008.

15.9. 2008

Piare Lal

A.S. Dogra

S.L. Dabral

Acknowledgements

We express our heartfelt gratitude and sincere thanks to the Director General, ICFRE, and all of their colleagues for their confidence in us and their whole hearted support for completing this very important study and report related to development of genetically improved and certified seed/ forest reproductive material. We are extremely grateful to Shri A.K.Wahal, Deputy Director General (Education), Shri Sarvesh Singhal and Shri R.K.Dogra, Asst. Directors General (Education) ICFRE who coordinated this study and provided us every possible support.

We have received very valuable advice and support from a large group of people. Many experts have made most valuable contributions both orally and in writing while many others have functioned as resource persons during our visits to the eleven sampled State. We received appreciation, encouragement and very valuable suggestions during the presentation of our preliminary report to ICFRE and subsequent brainstorming workshop at New Delhi on April 11, 2008. We are enormously grateful for the extensive, constructive and very thoughtful feedback from ICFRE on our preliminary report as well as the draft final report.

We also acknowledge the helpful comments and valuable suggestions from learned friends and scientists from many countries and reputed organizations like the World Bank, CSIRO, Salwood Asia Pacific- Services in Forestry, Ballarpur Industries Ltd., ITC Ltd and JK Paper. We greatly appreciate, recognize and acknowledge the extremely valuable contributions of all scientists, individuals and organizations listed in Annexure – VI-1 to VI-4. We convey our sincere appreciation and deep sense of gratitude to all those who supported our efforts but for whose unstinted support, we would not have been able to do full justice to this critically important subject. It is possible that some sources may not have been specified and acknowledged through oversight and we sincerely regret those instances and offer our apologies. However, any remaining errors of fact or judgments are our own.

We would like to take this opportunity to make an earnest appeal to the Director General, ICFRE, the Director General, Forests and Special Secretary to Govt. of India, the Ministry of Environment and Forests, State Governments as well as the State Forest Departments to kindly ensure prompt follow up action on this report and implement the accepted recommendations soonest possible. That will usher in a new era of unprecedented high productivity of our forest resources and plantations on degraded forest lands, waste lands and under Agroforestry system with very significant improvements in quality of produce and economic returns.

15.9. 2008

Piare Lal

A.S. Dogra

S.L. Dabral

Abbreviations

AOSCA	Association of Official Seed Certification Agencies
APCCF	Additional Principal Chief Conservator of Forests
AP	Andhra Pradesh
AP	Asia Pacific
ATREE	Ashoka Trust for Research in Ecology and Environment, New Delhi.
BAIF	Bhartiya Agro Industries Foundation, Pune
CCF	Chief Conservator of Forests
CGIAR	Consultative Group on International Agricultural Research.
CFRE	Council of Forest Education and Research (currently ICFRE).
CF	Conservator of Forests
CSO	Clonal Seed Orchard
DGF	Director General of Forests
DCF	Deputy Conservator of Forests
EU	European Union.
FRM	Forest Reproductive Material
FREEP	Forestry Research, Education and Extension Project.
FAO	Food and Agriculture Organisation
FDC	Forest Development Corporation
FSC	Forest Stewardship Council.
FRI	Forest Research Institute.
GDP	Gross Domestic Product
GOI	Government of India
GCIA	Georgia Crop Improvement Association.
ICFRE	Indian Council of Forestry Research and Education.
ISO	International Standards Organization
ISTA	International Seed Testing Association.
IPCC	International Plant Protection Convention.
ICRAF	International Centre for Research in Agroforestry
IFGTB	Institute of Forest Genetics and Tree Breeding
ITC	ITC Limited
KFD	Kerala Forest Department
MoA&C	Ministry of Agriculture and Cooperation.
MoEF	Ministry of Environment and Forests.
NAEB	National Afforestation and Eco-Development Board
NBPGR	National Bureau of Plant Genetic Resources
NFC	National Forest Commission

NTFP	Non-Timber Forest Products
NWFTSCA	Northwestern Forest Tree Seed Certifiers Association.
NWFP	Non-Wood Forest Products
OECD	Organisation for Economic Cooperation and Development
PPV & FR	Protection of Plant Varieties and Farmers' Rights
RM	Reproductive Material
SSO	Seedling Seed Orchard
STBA	Southern Tree Breeders Association.
SPA	Seed Production Area
SFD	State Forest Department
STBA	Southern Tree Breeders Association (Australia)
TERI	The Energy Research Institute, New Delhi.
TRIPS	Trade-Related Intellectual Property Rights
UP	Uttar Pradesh
UPOV	International Union for the Protection of New Varieties and Plants.
UNO	United Nations Organisation
WB	World Bank
WTO	World Trade Organization
WCFS	World Commission on Forests and Sustainable Development.

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