



International Training Course
*Designing Green Landscapes to
Provide Multiple Services*

Arid Forest Research Institute, Jodhpur

11th January 2010 to 15th January 2010



Presented by Dr. Klaus v. Gadow and Dr. Vindhya P. Tewari

Dr. Klaus von Gadow is professor of Forest Management at the Faculty of Forest Sciences and Forest Ecology, Georg-August-University in Göttingen, Germany and an extra-ordinary Professor at the Department of Forest and Wood Science, Stellenbosch University, South Africa. He retired from regular duties in Göttingen on 30th September 2006, but continues to be active in research. His special interests include tree modelling and sustainable use of forested landscapes.

Dr. V.P. Tewari is Scientist-F and Incharge, Forest Management Unit of Silviculture Division at the Arid Forest Research Institute, Jodhpur. His special interests include Forest Mensuration, especially modelling growth and yield in forest plantations.

Introduction

Virtually all green landscapes are utilized by humans and many are subject to some kind of planned management. People harvest trees to utilize the timber, fruits or leaves and to improve the growing conditions of the remaining ones; they change the species composition to attain some desirable structure and adapt rotation ages to improve the runoff from water catchments. Thus, the dynamics of a forest ecosystem is not only determined by natural processes, but to a considerable extent by human interference.

Forested landscapes provide many services. They are important carbon sinks and play a significant role in the climate system. Wood is the dominant source of renewable energy in rural households and is being increasingly used as a source of energy with a potential to substitute fossil fuels. The requirements for forest services are manifold and they are not constant over time.

About the Course

The course presents the latest thinking in adaptive management for forest ecosystems. The presentations will introduce some of the most important tools which enable landowners to estimate tree mortality, tree growth and yield, to evaluate their options, identify optimum solutions and monitor harvest events. These tools will be applied to specific examples of even-aged plantations and uneven-aged natural forests. The planned course extends over a period of one week. The tentative outline of the course programme is as follows:

day/ date	time	topic
Monday, 11th Jan. 2010	9:00-12:00	Introduction, Program <i>Forest Science and Forest Management</i> <i>Principles of Forest Design in a changing world</i> <i>Introduction to LP with Examples</i>
	14:00-16:00	<i>Software (Lindo, R) and examples</i>
Tuesday, 12th Jan. 2010	9:00-12:00	Data Collection & Modeling <i>Forest Assessment</i> <i>Analysing Forest Density and Structure</i> <i>Estimating Forest Growth and Yield</i>
	14:00-16:00	<i>Software (GESMO, R, Excel)</i>
Wednesday, 13th Jan. 2010	9:00-12:00	Balancing objectives <i>Multicriteria Analysis (examples)</i> <i>Formulating LP models (examples)</i>
	14:00-16:00	<i>Software (Lindo, Expert Choice)</i>
Thursday, 14th Jan. 2010	9:00-12:00	Generating Management Paths <i>Standard Management Regimes (Plantations)</i> <i>Alternative Management Paths (Pl & Natural Forests)</i>
	14:00-16:00	<i>Software (GESMO, Excel)</i>
Friday, 15th Jan. 2010	9:00-12:00	Sustainable Use and Multiple Paths Design <i>Harvest Potential (Plantations and Near Natural Forests)</i> <i>Risk Analysis</i>
		<i>A Forest Farm with multiple Products</i>

Course Participants

The course is aimed at forestry professionals & researchers, professors and senior students of forestry, geography, agriculture, ecology and related disciplines. The number of participants in the batch is limited to 30. Digital lecture notes and software will be provided. A limited number of computer sites can be made available by the Institute, however, it is recommended that participants bring their own laptops.

Venue, Registration and Accommodation

The course will be presented at the Arid Forest Research Institute, Jodhpur. The weather in Jodhpur during January is normally pleasant, temperature ranging between 18°-22°C during day times. Nights may be colder requiring woolen clothing. The course fee is as follows:

Indian participants	INR Rs. 7, 500
Foreign participants	USD 300
Indian Students	INR Rs. 5, 000

The course fee includes lodging & boarding. The participants will be accommodated in the AFRI Guest house and Scientist Hostel. Foreign participants have to arrange for their travel, visa formalities etc. to attend the course on their own. Good hotels including star accommodations are also available in the city. The participants interested to stay in the hotels have to bear the cost. Registration for the course closes on 15th September, 2009. Course fee should be sent through demand draft drawn in favour of Director, AFRI payable at Jodhpur. Outstation cheque will not be accepted.

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