
BOOK REVIEW

I. GROWTH AND WATER USE OF FOREST PLANTATION (1992) EDITED BY I.R. CALDER, R.L. HALL AND F.G. ADLAR PUBLISHED BY JOHN WILEY AND SONS LTD, ENGLAND.

The book under review is the proceedings of the International Symposium held at Bangalore, India on 4-7 February, 1992, which was organized by Karnataka Forest Department, Mysore Paper Mills Ltd, India and the Oxford Forestry Institute and the Institute of Hydrology, U.K. It contains 30 papers into 2 parts on social, economic and scientific backgrounds, forest growth, water use and growth and water use of trees by authors from India, Australia, South Africa and Italy. The papers deal mostly with studies initiated in 1987 in the state of Karnataka, southern India by the Karnataka Forest Departments and Mysore Paper Mills and more recently, by the University of Agriculture Sciences, Bangalore and in the U.K., the Institute of Hydrology and the Oxford Forestry Institute. These were funded by the British Overseas Development Administration (ODA). Some studies were also conducted in other parts of the world.

The results of the studies presented in this book as a whole present considerable body of knowledge on growth and water relation of *Eucalyptus* species and are concerned in one way or the other with its planting. Attempts has been made to link growth, light interception and water use by *Eucalyptus* plantations in an effort to resolve controversy on negative environmental impact of these plantations. The linkages amongst these parameters in India and Australia have also been compared. The results are valuable for improving the water use efficiency and management of plantation forestry in the tropics not only from the economic point of view to increase the cash return but also on environmental grounds to increase timber and fuelwood yields

and thus reduce pressure for timber and fuelwood which is currently depleting many natural forests in these regions.

Although the results reported in the book are related to the conditions in southern India and Australia, still, they would prove useful for application of various growth and water use models in many other regions of the world, especially in arid and semi-arid regions, where eucalypts are grown with irrigation water, the latter being quite limiting.

K.M.Siddiqui

II. ILO, (1992). FITTING THE JOB TO THE FOREST WORKER. AN ILLUSTRATED TRAINING MANUAL ON ERGONOMICS. INTERNATIONAL LABOUR OFFICE, GENEVA, SWITZERLAND.

The main objective of the above manual is to transfer the knowledge of ergonomics from industrial countries to developing countries. The manual consists of 8 chapters. Each chapter besides giving an account on relevant topic also effectively conveys the message of ergonomics with the help of sketches and illustrations.

Chapter 1, gives the **introduction** to ergonomics and defines it as the study of relationship between man and work. Ergonomics is a multi-disciplinary subject covering the work of medical doctors, researchers, engineers and forest workers. The ultimate aim of training and research in ergonomics is the improvement of work and the worker. This is achieved through the introduction of better tools and worker's training resulting into higher productivity, better earning, adequate nutrition, good health, increased safety at work and higher job satisfaction among the forest workers. Chapter 2, is concerned with the **body and work**, describing the adverse effects of heavy forestry work upon human body and suggesting suitable body posture during work to minimize damage to body systems. Distribution of work among the workers in accordance with their work capacity, age and sex is also emphasized. Need for adequate nutrition to meet the higher daily energy demands of forest work is stressed. Chapter 3, deals with negative effects of **natural environment**, such as terrain and climatic conditions, on the human safety and health and recommends different measures for the worker's protection against these hazards. Chapter 4, is on **technological consideration**, which explain the need for improvement of tools, techniques and introduction of machines for higher work output, but at the same time warns about the ergonomic impact of new technology on the workers e.g., the

exposure of workers to higher noise levels, vibrations and exhaust gases and also suggests necessary measures for their control. Chapter 5, is on **planning and organization of work**, which is essential to increase productivity through better coordination, proper work sequence and cutting down the time of delays and wastage of material. Chapter 6, is about the **accidents and their prevention**, giving an account of the sources and nature of accidents in forestry. Different measures for the control of accidents and injuries in forest work are also suggested. Chapter 7, is on **working conditions** and emphasizes their development for good health, safety, comfort and efficiency of workers. Chapter 8, highlights the importance of **training in ergonomics** and suggests three levels of training for managers, supervisors and the workers for the propagation of knowledge and practices of ergonomics for the benefit of forest work and the workers.

The manual is a useful teaching aid in ergonomics for managers, supervisors, workers and students in forestry.

M. Ayaz