

## **Biomass Studies: Field Methods for Monitoring Biomass.**

Shailaja Ravidranath and Sudha Premnath. Oxford & IBH Publishing Co Pvt. Ltd., 66, Janpath, New Delhi 110001. 615 pp. Price: Rs 1650.

Measurement and documentation are the essence of a growing scientific field and I was hoping this book would guide the large number of lay environmentalists into a new scientific data collection enterprise. Such a mass data collection movement could bring in more scientific temper than the conventional jathas and morchas.

The book may not do this but could be the first small step towards this goal. This book is an outcome of a project for studying environment; that involved college students. This book is well suited to do, but I have my doubts whether it will help NGOs (non-government organizations) or government organizations to undertake such studies. What comes out after going through the book, but is not stated explicitly, is that such a monitoring study is a major expenditure in time and effort and therefore expensive. How can an NGO or a GO justify this? Only understanding the status or creating awareness does not justify the expenditure, if there is no action goal in mind. The book does not attempt to quantify the effort say in man-hours.

The chapter on Applications of Biomass studies should have come first, so that the reader knows how he can use it. More important, this should have applications that help to save or generate wealth, in, whatever form. Unfortunately all such possible applications have been- put in just 35 words.

Some elaboration of how this kind of study leads to income generation or saving would have been invaluable in promoting the use of this technique by NGOs. Though not suitable for use by most NGOs in its present form the book is an excellent resource for educational institutions, to give small projects for students to do. Over a period considerable data about the neighbourhood can be collected. Also the students will (i) learn about problems and opportunities through inter-" acting with the community, (ii) get familiar with the use and meaning of statistical techniques and (iii) be able to write reports for different target groups.

The authors have very comprehensively dealt with all aspects of monitoring and measuring from technique; applications, recording of data, interpretation and writing reports for scientific documentation, for planners and decision makers, local community leaders -1 wish they had also included funding agencies.

The value of the book would have been increased considerably, if the authors had included case studies at least one for each chapter from the field studies already conducted. This omission has made the technique look less significant than it actually is. Also, the illustrations do not supplement the text in explaining the methods.

There are also a few errors (Identifying and using plants for their medicinal value dates back 100,000 years or more; obviously lack of understanding of the time scale of human development). The belief that medicinal plants, locally used take 80% of the health care is also questionable—certainly not true of western Maharashtra.

The moisture content, even approximation seems to have been ignored in the collection of data, as also some units of measurement used locally. For example, dried fodder is sold in bundles not by weight (also some leafy vegetables). If ignored these can produce variations of 200-300% in value or quantity.

Some of the compromises suggested by the authors also give the impression that they have stressed more on the academic part at the cost of the implement able needs. For example, making 60 plots of 0.5 x 0.5 m will not give as good data as compared to one plot of 5 x 3 m. There is not much attention given to the type of soil, which can vary from plot to plot leveling and gradient, weeds, method of irrigation etc. These produce variations that can make the monitoring exercises less meaningful.

If the authors had gone through, the exercise of doing these test in the field by themselves and found logical applications, that data would prove helpful to the readers and the country at large.

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