

Ecology and Sustainable Development.
P. S. Ramakrishnan. National Book Trust,
A-5 Green Park, New Delhi 110 016,
India. 2001. 198 pp. Price: Rs. 70.

The interplay of ecology, environment and sustainable development is being discussed by scientists, economists, politicians, managers and the like in a serious manner. Although the very word sustainable is vague and not exactly defined in a holistic way, many in their own way are defined to address it in a smaller sphere. It means many things to many people. Here is a book that illustrates an example towards developing packages for sustainable development considering agriculture and forestry aspects. The book consists of nine chapters initiating the lay reader to go through the concept of ecosystem and sustainable development. The chapters on traditional ecological knowledge, sustainable agriculture, sustainable forestry and sustainable development in the context of resource ecology, make interesting reading.

The author details presence of abundance of ecological knowledge in various parts of India. The people, mostly tribal, who live in forests and depend largely on it for their livelihoods continue to manage the forests, in their own limited way. The concept of sacred trees, sacred groves, various soil and water conservation practices have been described in this chapter. There are several examples of conservation and enhancement of biodiversity, cropping pattern and soil-moisture conservation practices. It is interesting to note the change in social process, e.g. the advent of Christianity has resulted in loss of several sacred groves in the north-eastern states. However, the question that remains unanswered is how these knowledge systems could be integrated to policy initiatives in the country in order to revive the eroding knowledge to give an impetus to sustainable development. Further, the question arises, whether the technology remains 'sustainable' in view of the cur-

rent living standards and the way 'development' is currently defined.

Energy-intensive methods to enhance agricultural productivity have been promoted in the country to achieve food security. In the process, several ecological imbalances have been created such as erosion of local genetic diversity, toxicity due to pesticides, depleted soil fertility, etc. One of the important suggestions in the chapter on sustainable agriculture is the development of landscape management, enhancement of diversity and productivity of agricultural crops.

Sustainable forestry is another important issue that has been addressed in this book. One of the important questions that remains to be answered is 'Are we managing the forests sustainably?' Our forest policies gave impetus to large-scale plantations, that too of both exotic and timber species that clearing natural forests clearly indicating that the management of forests was only aimed at timber production neglecting the importance of various other goods and services from the forest. Though in the recent past, there has been a ban on clear felling and selective logging, no clear-cut policy has yet been developed to enhance and conserve diversity and more importantly, to manage it. The current trend in plantation forestry on degraded forests continues to be exotic plantations and not any other native mixed species plantations. The book lays more emphasis on the development of secondary forests and their management. Though the management of secondary forests is critical, in the context of sustainable management it may not have much importance. By and large the issues addressed in this chapter on sustainable forestry are far from complete. Principles behind forest conservation and management in the national context as also the possible scheme of management in the future, have not been clearly dealt with in this book.

Sustainable development in the resource context is even more insipid. In fact, an

operational definition of sustainable development should have been made in order to design the scheme for such an approach. Therefore the approach is more anecdotal than scientific. First of all, there are no clear guidelines to indicate what is sustainable in the context of resource regeneration and management. Even among the best-studied species such as bamboo or other important Non-Timber Forest Products, clear indication on sustainable management is not available. Further, the impact of depletion of a given resource on other ecosystem services, apart from its own regenerative capacity, is very unclear. Under this situation, a scheme for ecosystem management may become too far-fetched. Though it is a daunting task to comprehensively model the system, these difficulties should have been addressed in the book for a common man to appreciate the difficulties of planning for sustainable development.

Overall, the book makes a good reading on various issues of sustainability. What is particularly of interest is its overall biological comprehension. Issues of sustainability largely involve societal concerns such as equity, that are largely not addressed. The author ultimately reverts to the path of simplicity to achieve sustainability; a Gandhian philosophy, which is relevant even today. Gandhi had a dream to make each village a self-sufficient entity. In the current scheme of things, though there are many policies and relevant programmes such as watershed development, joint forest management, rural development, etc. their implementation is questionable. Yes, 'Path is the goal', but are we treading the path sincerely even to satisfy ourselves?

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