Review Article

The Future of Large Dams: Dealing with Social, Environmental, Institutional and Political Costs by Thayer Scudder (London and Sterling, VA: Earthscan, 2005)

Reviewed by Hari Mohan Mathur

Large dams are among the most contentious issues in development today. Long regarded as symbols of progress, they are now being increasingly seen as inherently flawed and destructive of ecosystems and societies. Using his extensive knowledge about dams in Asia, Africa, North America and Latin America, Thayer Scudder charts the 'middle way' forward by examining all aspects of the costs, benefits and risks of large dam development projects.

Scudder analyses large dams in this book as a flawed yet still a necessary development option. This was also the conclusion of the Final Report of the World Commission on Dams (WCD 2000) on which he was one of 12 commissioners. In many ways this study is a follow-on volume, providing an account of the impacts of the WCD Report on the dams debate. It may be noted that while UN agencies and some countries in Europe endorsed the report, it was rejected by China and India, the two major large dam building countries.

There are many reasons why large dams are under attack. Large dams are not as beneficial as they are made out to be. Their costs are usually understated. The majority of people whom large dams force to relocate fail to regain their losses, ending up impoverished, in a condition worse than before. Governments and project authorities lack both the commitment as well as the institutional capacity to address the complex resettlement issues. Questions are also being increasingly raised as to the continued appropriateness of the development paradigm of which large dams have become the most visible symbol.

Yet, in spite of the growing criticism against large dams, they remain a necessary development option and continue to be built in many countries. Benefits from large dams are not small either. Large dams provide irrigation to farmers, electricity to run industries, and drinking water to cities. For countries lacking other natural resources, such as Nepal and Laos, large dams with capacity to export hydroelectricity provide a source of foreign exchange for development purposes. There are other benefits associated with them as well

Scudder uses resettlement as an lens through which to examine the entire large-dam building process. A focus on resettlement provides an important mechanism for assessing (a) when dams are an acceptable option and when they are not, (b) how the decision-making process should be structured and (c) should a dam be found a preferred option, how to work out a planning, implementation and asset handing-over process that ensures that the majority of resettlers become project beneficiaries. Other requirements for the process to be sustainable include: attention to impacts on the environment, impacts on downstream communities and a detailed examination of institutional structures required for an acceptable development process to proceed.

The first four chapters of the book deal with the issues of large dam disputes and involuntary resettlement. The first chapter introduces the theme, noting that no accurate figures exist of the number of people displaced by large dams. When data are available, they often turn out to be underestimates and unreliable for planning and budgeting purposes. This is also true of projects financed by the World Bank, known for its meticulous methods of researching and documenting the minutest project details. The multi-dimensional stress of dam-induced resettlement, which often tends to be underemphasized, is discussed in considerable detail under its various dimensions: physiological, psychological and socio-cultural. In this chapter, the author also outlines his own career, to illustrate how and where he obtained the information used in this book and to state his current position on large dams as a development option. He is firmly of the view that the number of new large dams should be reduced by weeding out those for which better alternatives exist and by better management of existing dams.

A substantial body of theory has grown around the study of resettlement processes, discussed in Chapter Two. The first model, a four-stage framework, theorizes on how the majority of resettlers can be expected to behave during a successful resettlement process. Its application was limited to development-induced involuntary resettlement and land settlement schemes. Scudder developed this model in 1979, refining it in subsequent years with Elizabeth Colson. Michael Cernea followed with his Impoverishment Risks and Reconstruction Model in 1991, which also underwent further refinements later. This model is focused on

impoverishment risks that accompany involuntary resettlement and on corrective reconstruction processes. Scudder attempts to combine and broaden the two approaches into a single theory, as the two analytical frameworks can provide policy-makers with a powerful tool for planning and implementing a more successful process of development-induced involuntary resettlement. Although the two models look at the resettlement process from very different angles, they clearly suggest that success is possible, but only if planners adequately involve affected people and provide significant development opportunities for settlers and hosts alike.

The first detailed statistical survey of resettlement outcomes from 50 large dams located around the world is presented in Chapter Three, which concludes that there is no evidence of any improvement for resettlers in recent years (defined as at least restoring living standards). Further, it is contended that such outcomes are unnecessary because positive outcomes have occurred and successful resettlement can be achieved under certain conditions. A number of key factors that the survey found are necessary if a successful outcome is to be achieved include: project staff capacity, funding and political will, implementation of adequate opportunities and resettler participation. But are lessons learned from the small number of successful cases widely applicable? The answer, according to Scudder, is a provisional 'yes', provided issues such as institutional capacity, funds, political will, opportunities and participation are adequately addressed. Chapter Four is devoted to ways by which river basin communities can benefit from many opportunities that arise from the dams-related development process and become project beneficiaries.

Most of this book deals with issues, but a large section, comprising Chapters Five and Six, is devoted to case histories. The case histories are important, as they best illustrate the complexities and the unexpected events that so often prevent large dams from realizing their expected benefits. The initial draft of this volume was intended to provide detailed case histories of eight large dam projects, but while analysis of the Mahaweli Project has been retained as originally planned, the other seven cases appear in this publication in an abridged form. The book discusses environmental and social impacts below dams in a long Chapter Seven. While dams are built, management of their catchments and adverse environmental and socioeconomic impacts seldom receive the attention that they deserve. The author warns that unless adequate attention is paid to these issues, the consequences of this neglect will be serious, more serious in the future than in the past.

The discussion of institutional arrangements in Chapter Eight is perhaps the most exhaustive treatment of the subject in the entire resettlement literature. The record to date suggests that regardless of type, project authorities are incapable of dealing adequately with resettling downstream communities as well as with environmental issues. A large number of institutions need to be involved if water resource development projects are to be sustainable. In addition to central governments and project authorities, these include other government agencies as well as private sector contractors, consultants, other firms and local institutions, including those of affected peoples, NGOs, donors, financial institutions, independent panels, universities and research institutions. Scudder critically considers the role of all players, including the World Bank, in great detail. Recognizing the World Bank contribution in bringing resettlement issues high on the global development agenda, he specially mentions Michael Cernea and Robert Goodland for their pioneering role in pushing new initiatives. But all is not well with the Bank approaches and outcomes. The author finds the Bank's resettlement policy guidelines rather weak, and concludes that it is these guidelines that have played an impoverishing role in the past and that the recently watered down guidelines will continue to play such a role in the future as well.

Should large dams be built? The answer to this question is 'yes'—but it is not an unqualified yes. Dams can be built, but only after a 'best practice' options assessment that takes environmental and social issues fully into account, and only where adequate policies exist and are implemented, and where project authorities, contractors and consultants are under legal obligation to follow contractual conditionalities necessary to implement the project as intended. Those requirements however do not exist anywhere at present, World Bank-assisted projects included. In the final Chapter Nine, supporting WCD's Seven Strategic Priorities, Scudder examines and suggests the procedures that need to be followed for decision-making, planning, implementation and operations and management if large dams are not to be flawed and unsustainable as is presently the case.

This classic work by a world authority reflects 50 years of research and thinking about large dams worldwide. No one concerned with the human costs of development can afford not to read this book.

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References

WCD, 2000, Dams and Development: A New Framework for Decision-Making, Report of the World Commission on Dams, London: Earthscan Publications.