

### **Our Common Journey: A Pioneering Approach to Cooperative Environmental Management**

BY PAUL E. DE JONGH, WITH SEAN CAPTAIN

xiv + 298 pp., figs. & tables, 21.5 × 13.4 × 1.7 cm, ISBN 1 85649 73 9 paperback, £15.95, London and New York: Zed Books, 1999.

In *Our Common Journey*, de Jongh and Captain promise the reader a new approach to cooperative environmental management by developing an integrated environmental policy framework involving government, the private sector and civil society actors, particularly non-governmental organizations (NGOs). At a more practical level, the book is an overview of the evolution of The Netherlands National Environmental Policy Plan (NEPP) and the twists and turns that were at play in producing one of the world's pioneering experiences with negotiated integrated environmental management. De Jongh, the leading author, brings the full thrust of his 20 years' experience as the project leader of the Netherlands' first NEPP and Deputy Director-General for Environment. In this sense the book contains an insider account of the Netherlands' national environmental policy and how it has been able to integrate divergent interests of various stakeholders. However, the authors (p. 6) argue that, although the book is concerned mainly with the Netherlands, it has much wider relevance to countries with similar environmental history, context, institutions and problems.

The book is divided into 14 short chapters. Chapters 1 & 2 set the scene. Here the authors give a brief account of the evolution of the Netherlands' environmental policy and the beginning of environmental awareness. Chapter 1 introduces the five pillars of the Netherlands' cooperative environmental management strategy (p. 7) as follows: (1) integrating environmental responsibilities into society as a whole; (2) presenting clear information, understandable and acceptable to all parties; (3) recognizing policy as process, in which many actors play critical roles; (4) framing the policy debate in terms acceptable to all participants and (5) working for long-term continuity policies.

The rest of the book represents a genuine effort by the authors to illustrate whether or not the ethos of the Netherlands' environmental policy principles has been put into practice and to what extent the policy has succeeded in delivering its promises.

Chapters 3–6 describe the environmental policy process leading to strategy building. This is a familiar method of narrating the cycle of environmental strategies, particularly the first phase, including information assembly and analysis, policy formulation and the design of action planning. Two features unique to the Netherlands experience are the concepts of 'each generation's responsibility' (pp. 79–81) and 'integrated chain management' (pp. 84–8). Although the NEPP did not start with involving what the authors call 'the wider audience' (i.e. the public) from the beginning, research and information played an important role in (1) gauging the public interest and (2) maintaining both horizontal and vertical information flow. The integration of the public concern was carried out through 'immediate actions' informed by the National Health and Environmental Research Institute's (RIVM) three feedback mechanisms. These mechanisms are: (1) research to generate follow-up reports and economic studies, (2) subsequent action resulting in new generations of National Environmental Policy Plans and (3) contingency plans for monitoring progress and preparing better plans for the future.

Chapters 7–10 deal with various levels of environmental policy harmonization, 'institutional politics' and the difficulties that have emerged between various stakeholders both at the state institutional

(Government Ministries and Departments) levels on the one hand and private and public interests on the other. As the various stakeholders realized that they could not go it alone, they began a shift as the authors state 'from fighting to managing the process'. Although consensus building was achieved, not without confrontations, there was a need for moving from principles to actions, with clear instruments and strong institutions, both operating within a national legal instrument. The continuity (or rather the sustainability) of the Netherlands NEPP was secured by a process that has culminated in creating roles and a common interest in the environment.

The title of the book, *Our Common Journey*, is probably depicted from the material presented in Chapters 11–13, which illustrate how the Netherlands NEPP has influenced, and been influenced by, international environmental policy orientation, and the environmental policies of the European Union, Australia, Canada and New Zealand. In a sense, the title of the book ameliorates *Our Common Future* (a 1987 publication of the World Conference on Environment and Development and Oxford University Press), but concentrates more on national rather than global environmental policies, although the two cannot be disentangled. This is evident in Chapter 14, which grapples with five global challenges (biodiversity and nature protection, population, migration and distribution of wealth, eco-efficiency, water supply and climate change). An attempt is made here to illustrate that the quest for global cooperative environmental management represents a common human journey, a common human future.

Although the book offers an excellent description of the evolution of the Netherlands NEPP, it runs short of producing strong evidence that these policies have actually worked. The reader would have benefited from a chapter on targets set and targets met since the inception of the policies. The authors are also up-beat, presenting the Netherlands NEPP as a pioneer trendsetter in strategy building and implementation. Some authors may beg to disagree. Nevertheless, this criticism would not lessen the significance of this book and a major contribution to understanding the socio-political and economic context within which at least three generations of the Netherlands NEPP have been conceived and implemented.

*Our Common Journey* is a very well-written book, with excellent first hand material and graphic illustrations to back up the arguments raised. It is written in a very accessible language, yet professionally done. It is a must read for students of environmental policy, researchers, policy makers, the general and particularly the 'green public'. The book also provides an unique insight that is helpful also for environmental activists in their struggle for better environmental governance worldwide.

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### **The Hydraulics of Open Channel Flow. An Introduction**

BY HUBERT CHANSON

xiv + 495 pp., 24.4 × 17.2 × 3.0 cm, ISBN 0 340 74067 1 paperback, £29.99, London, UK: Arnold, 1999

It is a sign of the times when a book with the above title is offered for review in a journal such as this. Thus, my review must neces-

arily evaluate the text both for the author's intended audience (students in Civil, Environmental and Hydraulic Engineering) as well as an altogether different one, namely that concerned with the interface between engineering and environmental science. This is an audience membership of which is growing, and where practitioners may require a basic grounding in open channel hydraulics, having not followed a traditional route through an engineering degree.

Without a doubt, this is the best introduction to the hydraulics of open channel flow that I have yet to read. The text is divided into four parts. The first two deal with principles of open channel flow and sediment transport, respectively. The second two address practice, including hydraulic modelling (both physical and numerical) and the design of hydraulic structures. The pace of the book is right, using basic principles to introduce fundamental relationships, and then illustrating their use through worked examples. The pace benefits from revision exercises and the repetition of variable definitions as they are re-used; from my experience, this really helps students during the learning process. The text deserves special credit for the explicit identification of the assumptions that exist behind relationships, something that can be (and is) easily overlooked by students whilst using other texts. The book's revision exercises have solutions provided for them, care of the publisher's website, and this provides a clear incentive for the student to solve, before they revert to finding out how they should have solved, each exercise. As an introduction to the hydraulics of open channel flow, I would find it difficult to recommend anything that could improve upon the approach adopted.

In a text with this title, coverage is a more difficult issue, requiring a very careful balancing of breadth with depth. The depth was pretty much spot-on, aside from the need to include more references for the advanced student, to allow them to explore the more subtle and esoteric aspects of open channels which can often be necessary to bridge the gap between practical river-channel management and research questions in hydraulics. The breadth could, perhaps, have been extended to include consideration of mixing and dispersion, with respect to dissolved loads. Mixing processes are of increased importance to the river engineer, because of both growing environmental emphasis and the way in which many tools, notably numerical models, have been extended to include water-quality treatments. Indeed, there are a set of water-quality models in widespread use which have a notoriously poor hydraulic basis. A water-quality section, that links water quality to hydraulics in the same highly effective way that the author links sediment transport to hydraulics, could be very useful, such that the student can judge the full limitations, assumptions and benefits of the tools that they are adopting in the water-quality area as well. In terms of the author's intended audience, I am certain that this text will prove sufficiently popular to warrant many reprints, and the author might like to look towards possible revisions with this in mind.

Judging this text in terms of its suitability to a non-engineering audience, one concerned with, for example, the ecological dimension of river channel management, my conclusions are more sober. As a book for the non-expert, it holds many of the advantages identified for engineering students. It is useful for moving from minimum or zero knowledge to a reasonable level of understanding, provided that the reader spends time working through the exercises. The grounding in basic principles and the exposition of key assumptions is critical. However, I found myself wondering whether or not this book really does any more than provide an excellent grounding for river engineers in the same way that aquatic ecology texts might

provide the basis for river ecologists? The average ecologist would pale at the section of the book concerned with the design of hydraulic structures, if only because the design of hydraulic structures is now about so much more than dams, weirs, spillways and culverts. The growth of river and floodplain restoration is causing new questions to be asked of hydraulic engineering, with new management goals (e.g. that of maintaining sufficient overbank flows for floodplain vegetation rather than keeping flows within the channel *per se*) beginning to complicate traditional solutions of the relationship between fluid flow and a deformable boundary. These are interesting (and sometimes awkward) times for the engineer, as the traditional management of rivers based upon equilibrium and the design of a system that is adjusted to the things that are likely to be imposed upon it, must be extended to incorporate ecological concerns which are driven by the need for disturbance and hence disequilibrium. It is at the interface between engineering and ecology that new research questions lie. A text that moves beyond traditional civil engineering approaches and into the ecological arena is desperately required if only to prevent the sort of contradictions that arise when a river engineer works with an in-stream ecologist. It is not simply the lack of any reference in the index to vegetation that raises my concern, but also the paucity of treatment of natural or self-formed alluvial channels. It is real river channels that the engineer must now manage, for ecological reasons in addition to those associated with the conveyance of water and sediment. It is the dynamic behaviour of such channels that the ecologist must understand, in recognition that a river cannot always be managed for ecological reasons alone. I fear that an ecologist without a basic understanding of the context of open channel flow research (and hence an awareness of the need to understand basic principles) could simply conclude, from this text, that the gulf between engineering and ecology is simply too great to be bridged.

The above paragraph is critical of this text only because of the journal for which the review is being provided. As a resource for those concerned with environmental conservation in open channels, I am less persuaded. Indeed, the author's preface to the book does not include this as a goal. Thus, it would be wrong to finish on a sombre note, as my overwhelming conclusion is that as an introduction to the hydraulics of open channel flow, it would be impossible to produce a better result. This will appear on both my undergraduate and postgraduate reading lists as the core text. It is rare for me to be so readily persuaded, and Dr Chanson deserves full credit for an outstanding teaching resource.

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### The Basin of Mexico: Critical Environmental Issues and Sustainability

BY EXEQUIEL EZCURRA, MARISA MAZARI-HIRIART, IRENE PISANTY AND ADRIÁN GUILLERMO AGUILAR

xix + 216 pp., 43 tables, 35 figs., 23.5 × 15.5 × 1.5 cm, ISBN 92 808 1021 9 paperback, US\$24.95, Tokyo, Japan: United Nations University Press, 1999

This little book is a welcome addition to the unfortunately sparse published material on environmental quality and problems in