

## **Book Review**

Clean, Green and Blue: Singapore's Journey Towards Environmental Sustainability Tan Yong Soon, with Lee Tung Jean & Karen Tan Singapore, Institute of Southeastern Asian Studies, 2009, 390 pp,

I vividly recall a discussion that I had when Singapore became an independent country in August 1965, at the Faculty Club of the University of Strathclyde, Glasgow, where I was teaching at that time. The topic of our discussion was the future of Singapore. My four colleagues were somewhat pessimistic. They did not see how a small state of about 600 km², with a population of only about 1.5 million, with no natural resources, per capita GDP of around US\$1500, with no significant manufacturing and industrial base, could have a bright future. My view was different. I argued that behemoths like India and China would find it difficult to turn on a dime. However, a small nation like Singapore can turn on a dime, provided it had enlightened and strong leadership, good governance and takes full benefit of its comparative advantages.

Looking back, it turns out that I was closer to the truth. In a period of only 40 years, in 2005, the country had nearly 4 million people and a per capita GDP of close to US\$27 000, an astonishing increase of 18 times that of 1965. The questions that need to be answered at present are how did Singapore do it, and what were the enabling conditions that made this country a miracle in the history of development. My view has not changed much during these four decades. The main reasons for this remarkable transformation have been enlightened and strong leadership and good governance from which every strand of development in different sectors has flowed. Thus, it is appropriate that the book is dedicated to Lee Kuan Yew, whose leadership has ensured this miracle.

In this authoritative book, Tan Yong Soon, who is the Permanent Secretary of the Ministry of Environment and Water Resources of the Government of Singapore, with the help of Lee Tung Jean and Karen Tan, explains objectively and candidly the country's long environmental journey over the past 40 years. It explains how Singapore made this transformation, as well as the background and the rationale for the policies that were formulated, and what is more important successfully implemented, as well as the institutional evolutions that occurred which made this miracle possible.

Right from its very independence, its leaders realized that environment and development are two sides of the same coin. One affects the other, and, in turn, is affected by the other. Its Prime Minister Lee Kuan Yew clearly pointed out as early as 1968 the importance of maintaining "a clean and green city". This was four years before the UN Conference on Environment and Development, in Stockholm, when the world started to realize the importance of maintaining a good environment, concurrent with population growth, urbanization and industrialization.

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The main aspects that ensured Singapore is where it is today are the following:

- continuous clear vision of its leaders as to where the country should go in the future, and strong endorsement of this vision by its people;
- transformation of the vision into long-term plans, which have regularly evolved over time as the world and/or national conditions have so warranted;
- continuous consideration of management, technological and institutional innovations in the planning process; and
- ensuring that the vision, plans and programmes are practical and doable, and can be implemented cost-effectively and within the stipulated time period with the full support of its people.

This approach has not only worked in the area of water management but also for all aspects of the nation's development. The book analyses how this overall philosophy was successfully implemented to control and manage air, land and water pollution.

Let us consider the case of water pollution. By the 1960s, as the authors correctly point out, the rivers of Singapore had become 'open sewers', which is currently the case for nearly all water bodies in and around urban centres of the developing world. In 1977, Lee Kuan Yew said: "It should be a way of life to keep the water clean ... In ten years, let us have fishing in the Singapore River and fishing in the Kallang River. It can be done".

This 'can do' attitude, strong political support from the very top, and proper planning and implementation of the plan ensured that the task was completed in time. The enormity of the exercise, including sensitive social planning which made this task possible, can be appreciated by the facts that some 46 000 unsewered squatters had to be resettled, and 610 pig farms, 510 ducks farms and 2800 backyard trades and industries had to be relocated and modernized. The squatters were rehoused and received compensation. By mid-1980s, a decision was taken to phase out completely all the pig and the duck farms since these could not be managed properly in the context of Singapore's limited land and water availability. The clean up operation cost \$300 million, excluding resettlement compensations. All these efforts were completed by mid-1987, as a result of which not only fish and other forms of aquatic species returned to the rivers, but also construction of attractive riverside walkways and landscaped parks ensured that the Singaporeans claimed these areas as prime sources for recreation. All these developments very significantly improved the quality of life in the nation.

This most remarkable success proves that many of the water problems of the world can be solved, given the political will and popular support, with the currently available knowledge, technology and investments. The world needs to learn from this experience, when Lee Kuan Yew had earlier prophetically proclaimed: "It can be done".

This very readable book will not only make all Singaporeans proud of their environmental achievements and heritage, but also provide many valuable and practical lessons to other countries, both developed and developing, as to how their environment can also be successfully managed to ensure a better future for all its citizens. In a world where gloom and doom stories take the centre stage, it is refreshing to see a comprehensive analysis that categorically shows how given good leadership (both political and professional), existing environment-development problems can be solved in a timely and cost-effective manner.

For all those interested in solving the world's water problems, I would strongly recommend that they read this remarkable and uplifting book on Singapore's

environmental journey over the past four decades. There is much to learn from this success story, very ably and objectively told by Tan and his colleagues, which repudiates the rubbish that one often reads, such as the world is running out of water, or there will be wars between countries because of physical scarcities of water. As Singapore has clearly demonstrated, the real problem the world is facing is not physical scarcities of water, which is a renewable reserve that can be used time and time again, but poor management and governance of water that is widespread all over the world, in both developed and developing countries. Everyone should read this book to see how Singapore achieved it. Much of the rest of the world should then try to emulate the Singaporean efforts.

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