

Environment and Development Economics **congratulates Partha Dasgupta and Karl-Göran** **Mäler for the award of the Volvo Environment** **Prize, 2002.**

The citation for the prize follows:

Partha Dasgupta and Karl-Göran Mäler are two of the world's leading economists in the fields of environment and resources. They began their careers in the 1960s when environment was emerging as a global concern and, working both separately and together, they have made seminal contributions to the field.

Mäler is considered as one of the founding fathers of environment economics. His early article 'A method of estimating social benefits from pollution control', opened up a number of trails for rigorous examination and advance. His 1974 book *Environmental Economics: A Theoretical Inquiry* laid the foundations for environmental economics as a major discipline.

General equilibrium theory is the core part of economic theory in the sense that it tries to cover all interactions between all different actors in an economy. Mäler was the first to develop this theory to include the environment.

Today most of our more serious environmental problems are borderless and require an international response. Mäler, in his 1989 paper on 'The acid rain game', provided the basis for a major advance in addressing such problems. Moreover, it was one of the first applications of game theory in environmental economics.

It is now accepted that GNP is not a good measure of economic performance. National accounts only include market transactions and most environmental interactions occur outside markets. Mäler was among the first who analysed this question from a theoretical point of view, helping to lay the basis for later proposals for reform by the UN system, including the UN Statistical Office and the World Bank.

Like Mäler, Partha Dasgupta has made several uniquely outstanding contributions. His trail-blazing work on the economic theory of depletable resources, green accounts, development, environment, and poverty have not only improved understanding but have led to significant policy change, and his writings on these subjects are now classics.

In the 1970s, almost all environmental economists were occupied with air and water pollution problems in the North. Very early, however, in the area of development economics, Dasgupta recognized the importance of environmental resources for poor countries. He led pioneering work on the economics of exhaustible resources in several path-breaking analyses. Among other things, this research identified the critical parameters for sustainable development in economies reliant on depletable natural resources and man-made capital.

Later, Dasgupta was one of the first economists to consider the role of natural resources in providing essential ecological services. Because of that insight, his 1982 book *The Control of Resources* became a milestone in the history of environmental economics.

His work brought to the surface the consequences of environmental degradation to the very poorest people in the poorest countries. During the 1980s and 1990s, he continued many different lines of attack to better understand the processes of underdevelopment and their connections to the environment. One example of this is his studies of nutritional needs and the effects of undernourishment on human behaviour. Dasgupta has summarized his findings in a monumental volume, *An Inquiry into Well-Being and Destitution*.

The Volvo Environment Prize for 2002 is awarded to Partha Dasgupta and Karl-Göran Mäler, two economists of international distinction, who pioneered original and outstanding contributions to several strands of environmental and resource economics. Jointly they have worked on property rights, environmental protection, poverty, and the theory for demonstrating a sustainable path of economic development. Mäler's main contributions include a theoretical basis for estimating social benefits from pollution control; developing general equilibrium theory to include the environment; providing in 'the acid rain game' the basis for a major advance in addressing international environmental problems; and helping to lay the basis for proposals for reform of systems of national accounts. Dasgupta's main contributions include his decisive work on the economics of exhaustible resources, his insights on their role in providing essential ecological services, and his pioneering efforts to better understand the processes of underdevelopment and poverty and their connections to the environment. Their seminal contributions have been of enormous consequence for understanding the relationships between development, environment, and poverty and have translated into significant policy advances. The work of Partha Dasgupta and Karl-Göran Mäler mark them as outstanding, innovating social scientists of great vision and determination operating on the frontiers of environmental economics.

The phrase 'Their seminal contributions have been of enormous consequence for understanding the relationships between development, environment and poverty' refers to their own work, but it might just as well have referred to the work that they have jointly done to build the capacity to address these issues in South Asia, South East Asia, Latin America and Africa. The Beijer research training programme has directly affected the careers of many. Indeed, there can be few aspiring environmental economists in these regions who have not been touched directly or indirectly by the programme. This journal is an outcome of the same vision – that real progress in both science and policy depends on building the capacity of people in the South to address the environmental consequences of economic development. Without Partha Dasgupta and Karl-Göran Mäler *Environment and Development Economics* would simply not exist.

Charles Perrings
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