

Sustainable development:

Why is it not delivering on its promises?

At the Rio Conference in 1992, the sustainable development agenda promised a new era for natural resource management, where the wellbeing of human society would be enhanced through a more sustainable use of natural resources. Several decades on, economic growth continues unabated at the expense of natural capital – as evidenced by natural resource depletion, biodiversity loss, climate change and further environmental issues. Why is this happening and what can be done about it?

This research explored what socio-economic and governance factors hinder sustainable development under the current capitalist-economic system. Furthermore, it examined the role of power relations and imbalances between economic and conservation forces with regard to sustainable development. The original contribution to knowledge of this thesis was based on qualitative and quantitative (i.e. computer models) analyses of different case-studies (e.g. Indonesia, Australia). These examined the extent to which different future scenarios result in the long-term decoupling of economic growth and environmental degradation.

Overall, the research showed the complex and interconnected relationship between the economy and natural systems, and between economic and conservation forces. Addressing complex sustainability issues requires the use of integrative, holistic and interdisciplinary approaches, in addition to considering the particular socio-economic, cultural, political and environmental contexts of the case-study being analysed. Results showed that the current economic system requires an ever-increasing use of natural resources, and that the economy does not protect the natural capital on which it depends. This is based on a disjunction of the economic and conservation elements upon which the sustainable development paradigm is founded. Furthermore, several socio-economic and governance factors appeared to be key for diminishing social-ecological sustainability under the current capitalist economic system; namely, the type of economic and production systems, the particular use of monetary debt, technological development, and weak conservation forces (both top-down and bottom-up). However, results also showed

alternative scenarios where these same factors could be redirected to enhance social-ecological sustainability. This dual role supports the argument that the current economic system is not inherently (i.e. by definition, *per se*) unsustainable. Rather, the specific use of economic mechanisms and behaviour of economic entities, as well as their decisions and relationships with the environment, show a tendency to increase unsustainability. Hence, short- and medium-term sustainability can be enhanced by developing mechanisms that start shifting capitalist forces to support environmental conservation; here, the role of Payments for Ecosystem Services (PES) will be essential. Enhancing long-term sustainability, however, may require a further paradigm change – where economic and production systems integrate, and fully account for, externalities and the value of natural capital, thus human society is embedded within the wider, and more important, natural environmental system.