**Bridging knowledge and science to sustainable development policy: the role of geospatial technologies**

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Abstract

The Global Environment Outlook Report of the UN Environment Programme (GEO-5) and several other authoritative scientific documents prepared in the context of the last United Nations Conference on Sustainable Development present undeniable evidence that humanity is currently living beyond the planet’s means, consuming Earth’s renewable resources as if we had one and a half planets to draw upon.

The emerging economies of Asia and the Pacific are exerting considerable pressures on biodiversity and ecosystems. The GEO-5 identified the main pressures on biodiversity include habitat loss and degradation, overexploitation, alien invasive species, climate change and pollution. The Region’s ability to address climate change, rapid increase in consumption, natural resource availability and environmental sustainability calls for strengthening the link between scientific knowledge and policy making.

Asia Pacific can better address complex and demanding policy needed to reconcile the pathways between natural capital conservation and human wellbeing by narrowing the current science-policy gap.

Information and knowledge exists, however it is fragmented, sometimes under-utilised, not properly documented, partly outdated, heterogeneous, not easily accessible and/or not always responding to policy-makers’ needs. For example, GEO-5 notes that in the area of chemicals and waste the lack of sufficient information on contaminated sites challenges many governments and hampers response efforts. Likewise, while electronic waste is a growing problem for Asia and the Pacific, data on its scale is insufficient. It is also impossible to assess global trends in freshwater pollution because of inadequate data.

The aims of this paper are: to summarise main environmental issues the Region experiences and, using illustrative case studies show how geospatial technologies have assisted in providing relevant data and information for addressing science-policy gaps related to these issues.