485

A GLOBAL VIEW OF AIR POLLUTION IMPACTS ON ECOSYSTEMS, CROPS AND SENSITIVE VEGETATION AND THEIR POLICY RELEVANCE

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A considerable body of research has indicated the extent of air pollution damage to ecosystems, crops and sensitive vegetation in Europe, much of it focussed on the data required by the UN/ECE Convention on LRTAP. Many problems have been considered serious enough for concerted action and as a consequence some pollutant impacts on ecosystems have decreased across the European region. However, in Asia, Africa and Latin America, where pollutant emissions are rising, the extent of these impacts is poorly quantified. Human health inevitably dominates policy maker concern but there is increasing awareness of the potential for damage to crop yields (particularly by ozone), acidification of ecosystems and impacts of nitrogen on the diversity of vegetation. This paper attempts to show the extent of knowledge of different impacts in different parts of the globe: areas where crop yields are known to have been affected; biodiversity hotspots that may be at risk from nitrogen deposition, and parts of Asia where acidification could become a problem. Some of the networking activities being developed to expand the understanding of impacts and risks from air pollution are outlined. Finally, the structures by which this information is being made available to policy makers in South Asia and southern Africa to prioritise their policy choices and develop cost-effective strategies aimed at reducing socio-economic impacts of air pollution for these regions are described.