



## Environment, Health and Development Network

<http://www.uea.ac.uk/dev/ehdnet>

Background Document  
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The Environment, Health and Development Network is a research forum focussing on the interconnections between environment and human health in the context of poverty and development. The underlying aim is to promote a more effective integration of social perspectives within a multi-disciplinary body of work on the environment and health issues faced by poorer or more marginalized regions and communities around the world.

The Network is based in the UK but brings together researchers and stakeholders from diverse countries, institutions and disciplines in order to:

- share resources and insights
- engage research with policy
- build working links
- develop multi-disciplinary initiatives

The Network is intended to provide a channel for communication, dissemination and exchange of information, ideas and viewpoints. It will host conference and seminar events geared to knowledge integration, the research/policy interface and the building of research agendas.

The Network is supported by the UK's Economic and Social Research Council under the Joint 'Environment and Human Health Programme' (which has funding contributions from Natural Environment Research Council, Economic and Social Research Council, Medical Research Council, Biotechnology and Biological Sciences Research Council, Engineering and Physical Sciences Research Council, Defra, Environment Agency, Ministry of Defence and Health Protection Agency).

### **Rationale for the Network**

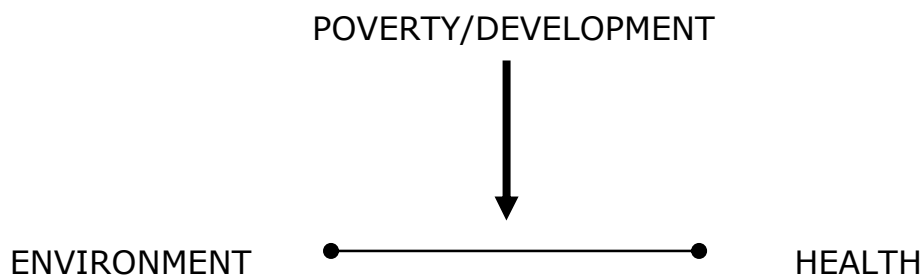
The interconnections between environment and human health are at their most challenging in the context of development. In many countries, income poverty and constraints on livelihood assets heighten vulnerability of individuals to environmental hazards, while collective poverty reduces the capacity of society to reduce those hazards and to provide adequate health care when impacts arise. Historical experience in higher-income countries underlines the critical importance of

improvements in environmental health as a foundation for improved public health - improvements that for many populations in Africa, Asia and Latin America are yet to take effect. Moreover, development pathways, societal transitions and patterns of environmental change at varying scales are themselves re-shaping the inter-linkages between health and environment, often with major implications for the wellbeing of the poor and marginalized.

In these and other ways, the connections between environment, health and human wellbeing are at their most pronounced in developing countries, especially for the lowest-income populations. Arguably, efforts to understand environmental health problems should be prioritized to those experiencing them at the 'sharp end' - where there is the greatest need for improved understanding of problems and potential solutions to guide policy and action. Yet, overall research effort on environment and health falls far short of the need that exists. Advances are required on many fronts, not least in addressing the challenge of undertaking rigorous epidemiological research on environment-health pathways in varying development contexts. The importance of this challenge is increasingly acknowledged, especially in the context of tackling the potentially heightened threats posed by climate change. What has received rather less attention is the role of social science as an integrating dimension in this research endeavour.

We argue, in particular, that there is a need for much greater social science involvement in work on environment, health and development, as part of wider multi-disciplinary effort engaging both environmental and medical science. The special role of social science approaches is in their ability to engage directly with development processes, social systems and their dynamics, and to focus on how poverty and other social factors ultimately shape health/wellbeing outcomes by influencing behaviour and the options available to all actors, including individual people, social groups and institutions. Social science researchers engaging in the three-way intersection between health, environment and development exist within the academic community, but are relatively few, and dispersed within many different institutions and disciplines.

The primary function of this Network is to provide a forum to bring those specialists together, to share insights, develop research initiatives, and promote collaboration both with a multi-disciplinary community of wider researchers, and with stakeholders from agencies who have a key interest in promoting research, policy and practical action in this field. Our aim is to ensure that a robust understanding of development processes and the realities of living in poverty are integrated into work on environment and health issues faced by the poorer or more marginalized regions and communities of the world.



## **What are the linkages?**

The connections between environment, health and development are multiple and multidirectional.

Perhaps most obviously, the environment can be seen in a negative sense as a source of threats or hazards to human health. Environment-related threats in developing countries tend to be manifestly more significant than in higher-income countries, especially those associated with infectious disease such as environmental contamination by human waste and proliferation of insect vectors. Environment-related threats may also be associated with development processes, such as increasing industrial pollution, use of agrochemicals, vehicle pollution, and urban expansion on to unstable hill-slopes.

But the environment also acts in a positive sense in provision of resources for health and wellbeing, providing nutrients for food crops, sources of wild food, water and oxygen, and a range of other ecological functions that help sustain healthy lives. Degradation of environmental resources in turn has consequences for human health that may include heightened risks of waterborne diseases, respiratory diseases and malnutrition. For both these forms of risk, the key question for the Network is how poverty and/or development mediates health outcomes, by shaping the hazard itself or the vulnerability of those exposed to its effects.

It is important to recognize that the linkages can work in other ways too. Under conditions of poverty, the consequences of shifting disease burdens on livelihoods and family structures can in turn exacerbate environmental degradation. In a more positive sense, health status can function as a resource to help households cope with environmental change or hazards. Though most research at the nexus between health, environment and development is likely to examine environment-to-health linkages, these are two examples in which research work has emphasized linkages operating in the reverse direction, with health as the start point.

## **Central importance of poverty**

Poverty is not synonymous with vulnerability, but it is of central importance in heightening risk of health outcomes.

Poverty influences the extent to which people are exposed to hazards in their occupations and at home. The urban poorest, for example, unable to access titles to land or better housing, are commonly concentrated in fragile dwellings in marginal locations, with inadequate sanitation and high levels of indoor pollution.

Poverty shapes people's ability to access adequate food and clean water, their ability to avoid or cope with health threats that arise, and their access to preventive and curative health care. The rural poor in water-stressed environments, for example, may find their livelihoods undermined by environmental degradation with few alternative options, combined with limited access to drinking water and remoteness from health facilities. Poverty also helps determine people's health status, and hence their underlying susceptibility to new infections, injuries or mental health problems arising from environmental hazards.

## **Social science's role**

We have underlined the need for more research endeavour in the field of environment, health and development. This includes a need for more scientific research in developing countries by environmental and medical scientists on causes and patterns of health burdens, and transmission routes from environment to humans. But if such insights are to progress, to lead to efforts to redress problems, it is vital too that there is a contribution from social scientists from a range of disciplines - anthropology, demography, economics, human geography, legal studies, political science, public health, sociology. Key contributions from social scientists can lie in, for example:

- providing detailed understanding of how poverty shapes and constrains knowledge, perceptions, attitudes, opportunities and actions that can be taken against health risks at individual, household and community levels - such work can play a critical role in informing interventions such as health promotion
- understanding how cultural conceptions of environment interact with conceptions of the self in shaping attitudes and behaviour toward environmental health risks experienced by the poor and marginalized
- analyzing how health systems and related sectors such as water and sanitation systems in developing countries are able to set policies and implement activities relating to environment and health
- understanding broader governance issues relating to the field of environment and health; often, positive actions can be limited by problems of capacity, resources and inter-sectoral coordination - problems that tend to be heightened in conditions of chronic underfunding of public agencies in developing countries
- analyzing the role and potential role of social movements and civil society in galvanizing action toward environmental sustainability and health protection
- developing environment/health criteria as indicators of poverty, inequity and development, and assessing their implications for poverty reduction goals
- assessing the role of health and wellbeing in mediating the effects of environmental hazards and environmental change
- understanding how population dynamics and socio-economic changes interact with environmental change to re-shape environmental health risks and environmental resources for health and wellbeing
- understanding how changing disease burdens within society (especially HIV/AIDS) can impact on local environmental change in the context of poverty
- facilitating the incorporation of scientific knowledge into decision-making and policy formation, through engagement with stakeholder communities

Such contributions require work at varied spatial scales - local, national, global. Some research is likely to entail overlapping scales, for example in work assessing how global climate change impacts and adaptation play out in a local context. They also are likely to require work at different timescales - looking at single events, short-term processes and long-term changes.

Academics from different social science disciplines bring with them different approaches and conceptual innovations, and one of the key activities of this Network will be to share, explore and evaluate the merits of different approaches applied to environment/health problems in the context of development. These may

include: approaches drawing on concepts such as sustainable livelihoods, capabilities/entitlements, human security, vulnerability, resilience and adaptation; foci on social determinants of health, transitions, pathways, institutional dynamics and ecosystem services; population health, behavioural/cognitive, cultural epidemiology, ecosystem health and environmental justice approaches.

### **Multi-disciplinary working**

It is a founding principle of this Network that research at the nexus between environment, health and development requires at least a multi-disciplinary understanding, and at best multi-disciplinary or inter-disciplinary research teams. Understanding human environmental health issues in a holistic sense implies contributions from environmental, medical and social science. The Network seeks to bring together these groups of researchers, and link them with stakeholders from governmental, non-governmental, community-based and private agencies. It welcomes membership from all who share an interest and concern in tracing environment and health linkages solidly in the context of *poverty and development processes*, with the aim of reducing environmental health risks and promoting wellbeing of the poor

Working across disciplines can be difficult, both in terms of achieving commonalities in approach and methodology, and in terms of conventional career incentives. But we believe it is the key to successful research in this theme, to translating science into policy, and to promoting enhanced wellbeing of the poor in the process of development.

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