

**ECOSYSTEM APPROACHES:
NAVIGATING COMPLEXITY, PROMOTING HEALTH**

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Ecosystem Approaches to Health (also known as the “Ecohealth” approach) link population or community health and wellbeing with the environment and sustainable development. The approach is based on the understanding that health (good or bad) arises from interrelationships between coupled human and natural (social-ecological) systems. The ecohealth approach rests on principles of transdisciplinarity, participation, gender and social equity, systems thinking, sustainability and research-to-action. It is a framework to study and manage relationships between human beings and the environment in pursuit of co-benefits; improving both ecosystem health and human wellbeing. In this presentation the emerging field of ecohealth will be introduced and its organization around communities of practice described. The approach will be illustrated with three case studies. The first case is the application of the Adaptive Methodology for Ecosystem Sustainability and Health (AMESH) to interrelated crises of poverty, environmental degradation, and zoonotic disease along the Bishnumati River in Kathmandu, Nepal. Instead of a normal scientific approach to hydatid disease, a team of Nepali and Canadian researchers approached the problem by developing systemic understanding the social dynamics involved, leading to novel interventions in meat processing, sanitation and environmental improvement. The second case is an application to improve community wellbeing in a low-income informal settlement (slum) in Chennai, India. This community was stuck in a maladaptive attractor – a poverty trap. The project married an ecosystem approach to participatory action research to build capacity in the community and achieve social and physical interventions to improve health and well-being. Finally, an ongoing project with the Credit Valley Conservation Authority in Southern Ontario will be presented. This project is oriented to identifying and communicating relationships among ecosystem services and human health/well-being so as to demonstrate the importance and efficacy of watershed management. Ultimately the project will support scenario planning for watershed management that has explicit human health and wellbeing goals.