

Introduction

Contributions to the International Forum on Ecosystem Approaches to Human Health

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In her opening statement to the participants of the May 2003 International Forum on Ecosystem Approaches to Human Health, Dr. Grö Harlem Brundtland captured an increasingly prominent sentiment: human health must be understood in context, and as a foundation for sustainable development. Ecosystem approaches to human health (Ecohealth) attempt to make this sentiment a reality. Consolidating the myriad experiences, successes, challenges, and knowledge that result from using them provided the impetus for the International Development Research Centre (IDRC) and the Université de Québec à Montréal (UQAM) to jointly organize an international Forum, which brought together 358 participants representing donors, government representatives, academic institutions, nongovernmental organizations (NGOs), and researchers from 42 countries. It provided an opportunity for different stakeholders to discuss the Ecohealth framework and its relevance to improving human health and well-being, as well as to explore the implications of evidence from the field.

Discussions at the Forum were built around four themes. The first, definition and conceptualization, emphasized the need to develop concepts that can be broadly defined and applied from a transdisciplinary perspective, to achieve a holistic understanding of the links between ecosystems and human health. Building on this

need, the case studies theme provided descriptions and analysis of ongoing research projects to examine the application of concepts in different contexts. The third theme, linking research to policy, explored the reality that the Ecohealth approach is a research paradigm with a strong commitment to changing human behavior and organization, and therefore requires the effective translation of research results into policy. The final theme, institutionalization, focused on building individual, institutional, funding, and community capacity, in order to implement, manage, and sustain the research or its resulting interventions.

This supplementary issue demonstrates that Ecohealth approaches push us in the right direction for sustainable development, and make improved health an achievable outcome. It is hoped that in addition to presenting an overview of the most prominent issues arising from the Forum, these pieces will stimulate debate, foster dialogue, and contribute to the development of an emerging community of practice in Ecohealth.

OVERVIEW

This supplementary issue includes 12 papers presented at the Forum and is reflective of both the Forum's themes and the diverse regional representation of participants. The first three articles present conceptual issues underlying Ecohealth approaches to research. The following nine articles

present case studies applying the Ecohealth approach in different contexts. Together, they represent the range of stakeholders, interests, and issues engaged by Ecohealth approaches.

The discussion of conceptual issues explores the theoretical underpinnings that frame Ecohealth research and interventions. Noronha's research is based on mining areas in Goa, India. The article illustrates how the application of broader concepts of health distinguishes Ecohealth approaches in the general context of sustainable development, and reveals some of the challenges posed by their use in assessing human health and well-being. In their study of a community in Upper Hunter Valley of North South Wales, Australia, Connor et al. illustrate how an Ecohealth theoretical framework is guiding their understanding of the relationship between ecosystem health, human health, and powerlessness. Sauvé and Godmaire present the construction of an initial theory in the field of Environmental Health Education that integrates elements drawn mainly from the fields of environmental, health, and risk education. The authors assert the need for a conceptual model that fosters research and practice in the emerging field of "Environmental Health Education." In the final conceptual article, Bopp and Bopp address the links between capacity building and Ecohealth work, highlighting the need to link abstract understandings of capacity to realities on the ground. The authors demonstrate that it is vital to involve communities as real partners in research and intervention.

The subsequent articles analyze case studies from countries in the North and South. The Webb et al. and Yanggen et al. articles look at the impact of mercury and pesticides, respectively, on the ecosystem and human health in different communities in Ecuador. The studies explore the complex political, economic, cultural, and biogeochemical factors affecting health that are linked to mercury pollution and pesticide contamination on different ecosystems and communities. Kishk et al.'s study in El Fayoum, Egypt, identifies environmental health issues associated with land and water resource degradation in an agro-ecosystem. Particular challenges involved the integration of data generated using multiple methods, which are important tools for gaining in-depth understanding of the links between environmental stress and human health impacts. Al-Ghazawi presents results from a study of two communities in Northern Jordan based on a Participatory Rapid Appraisal that makes an initial

assessment of ecosystem-related health problems in the communities. Key achievements included the involvement of stakeholders in the identification and prioritization of the problems, and the introduction of the novel concept of Ecohealth.

Two articles use Ecosystem approaches to explore the complex issue of ecosystem management and food security and nutrition, albeit from different regions and using different entry points to the issue. Kerr and Chirwa's case study examines the multiple and complex factors that influence food security, soil fertility, and child nutrition in a community in Northern Malawi. The authors illustrate how social factors and the dynamics of participatory approaches are key in influencing farmers' adoption of legume options that augment soil fertility for improved food production and subsequent improvements in child nutrition. Vázquez-García and colleagues look at nutritional contribution and consumption patterns of uncultivated foods in two communities in southern Veracruz, Mexico. Using Ecohealth approaches, the study shows how changes in land use patterns have contributed to a decline in access to uncultivated foods, and the nutritional implications for people living in these communities.

The final articles explore case studies that implicate institutionalization and policy development. Spiegel et al. demonstrate successful institutionalization of Ecohealth approaches through a strengthening of local capacity to better manage environmental health risks in Havana, Cuba. In that case, Ecohealth approaches were critical in responding to a dengue outbreak, and in enabling the community to develop mechanisms for managing additional challenges. The Smoyer-Tomic et al. article reviews literature on health effects associated with drought, to develop an ecosystems health framework that is specific to the context of prairie ecosystems. With predictions of increased occurrence of drought in the Canadian prairie provinces, more research is needed to understand the causes of climatic variability, and identify adaptations best suited for the communities. The perspectives drawn from this article lend themselves to policy discussions on drought, mitigation, and adaptation in the Canadian prairies.

CONCLUSIONS

This collection of articles spans a broad range of topical issues around ecosystem approaches to human health, from theories to action. While the issue represents only a

subset of what was presented at the Forum, it does provide a good illustration of the type of discussions that took place. We hope that this collection will contribute to demonstrating that improved human health is inextricably linked to ecosystem management strategies and that it will fuel further reflection on the approaches within and beyond the emerging global community of practice on Ecohealth.

Résumé: Le désir de consolider les nombreuses expériences, ainsi que les succès, défis et connaissances résultant de l'application d'approches écosystémiques de la santé humaine (écosanté) a mené le Centre de recherches pour le développement international (CKDI) et l'Université du Québec à Montréal (UQAM) à organiser conjointement un Forum international auquel ont participé 358 représentants d'agences donatrices, de gouvernements, d'institutions académiques, d'ONG, ainsi que chercheurs, originaires de 42 pays différents. Le Forum s'est articulé autour de quatre thèmes principaux: définition et conceptualisation, études de cas, liens entre recherche et politiques, et institutionnalisation. Cet ouvrage regroupe douze conférences présentées au Forum, qui reflètent à la fois les thèmes du Forum et la diversité régionale des participants. Les trois premiers articles abordent des problèmes d'ordre conceptuel et explorent les fondations sur lesquelles reposent la recherche et les interventions reliées à l'écosanté. Les articles suivants analysent des études de cas de pays du Nord et du Sud. Les deux premiers décrivent des études différentes menées en Équateur afin d'évaluer les impacts du mercure et des pesticides sur l'écosystème et la santé humaine. Les deux articles suivants explorent le domaine complexe de la gestion des écosystèmes, de la sécurité alimentaire et de la nutrition, vu de différentes parties du monde et sous des perspectives différentes. Les derniers articles présentent des études de cas qui examinent et privilégient l'institutionnalisation et l'élaboration de politiques. Ensemble, ces articles sont représentatifs de la diversité des intervenants interpellés par les approches écosystémiques ainsi que des multiples intérêts et enjeux. Même si cet ouvrage contient une infime partie du travail qui a été présenté au Forum, il illustre la variété des discussions qui s'y sont tenues. Par l'analyse et la publication des liens entre les écosystèmes, la santé et la durabilité, nous espérons alimenter (raviver) et approfondir la réflexion au sein, et même au-delà, de la nouvelle communauté de pratique mondiale d'écosanté.

Resumen: La consolidación de numerosas experiencias, éxitos, desafíos y conocimientos que resultan de la utilización de enfoques ecosistémicos para la salud humana (ecosalud), proporcionó el ímpetu para que El Centro Internacional para el Desarrollo de Investigaciones de Canadá (IDRC) y la Universidad de Quebec en Montreal (UQAM) organizaran conjuntamente un foro internacional, que reunió a 358 participantes de 42 países en representación de donantes, funcionarios de go-

biernos, instituciones académicas, organizaciones no gubernamentales (ONG) e investigadores. El Foro fue organizado alrededor de cuatro temas: definición y conceptualización, estudios de casos, vincular las investigaciones a la política, e institucionalización. Este volumen incluye doce artículos presentados al Foro que reflejan los temas del evento y la diversa representación regional de los participantes. Los tres primeros artículos presentan temas conceptuales que exploran los fundamentos teóricos que enmarcan las investigaciones y las intervenciones en "ecosalud." Los siguientes artículos analizan estudios de casos de países del Norte y del Sur. Los dos primeros presentan diferentes estudios de Ecuador que determinan el impacto del mercurio y los pesticidas en el ecosistema y la salud humana. Los dos siguientes artículos exploran el complejo tema del manejo de los ecosistemas y la seguridad alimentaria y la nutrición, en diferentes regiones y utilizando diferentes puntos de partida. Los artículos finales, presentan estudios de casos que examinan y priorizan la institucionalización y las políticas de desarrollo. Juntos, representan el rango de las partes interesadas, intereses y temas relacionados por los enfoques ecosistémicos para la salud humana. Aun cuando representan sólo un subconjunto de lo que fue presentado al Foro, este suplemento ilustra el espectro de las discusiones que tuvieron lugar. Al examinar y publicar los vínculos entre ecosistemas, salud y sostenibilidad, esperamos impulsar reflexiones adicionales dentro y más allá de la emergente comunidad global de prácticas en "ecosalud."

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