



The International Commission on Education for Sustainable Development Practice was convened in 2007 to analyse existing training and education programs for development practitioners and to make recommendations for the future. All Commission members have participated in their personal capacities.

Finding a lack of comprehensive cross-disciplinary programs to train practitioners in the full range of challenges of sustainable development, the Commission proposes a set of recommendations for a new educational system focused on sustainable development practice. Central to the Commission's recommendations is the proposed Masters in Development Practice program. With emphasis on policy and implementation, the MDP program is rooted in four main disciplines: health sciences, natural sciences and engineering, social sciences, and management.

The Commission's recommendations are designed to meet the world's rapidly growing demand for highly skilled sustainable development practitioners.

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Executive Summary

The inter-oven challenges of sustainable development—from extreme poverty and disease control to climate change and ecosystem vulnerability—can only be resolved by leveraging knowledge and skills from a range of disciplines. Meaningful progress requires practical, well-managed policies and programs that incorporate insights from the health sciences, natural sciences and social sciences.

Consider, for example, the many areas of core knowledge necessary to effectively address the challenge of combating chronic hunger in sub-Saharan Africa. Knowledge of agriculture is required to understand the biological factors contributing to the stagnation of crop yields, and the technical solutions that could quickly boost food output and provide a source of quality nutrition in rural areas.

Basic knowledge of environmental science is needed to manage the agricultural land environment and to understand its interactions with climate change. In order to promote nutrition and labor productivity among farmers and to fight the parasites that contribute to under-nourishment, knowledge of health, nutrition and disease control is required. Core knowledge of engineering is required to understand the fundamental infrastructure necessary to support energy, irrigation, storage, transportation and communications systems. To ensure both farm- and macro-scale policy solutions are economically sustainable, knowledge of economics is required to design long-term strategies for overcoming the poverty trap. Political science is required to understand the social promoters and inhibitors of investing in rural areas. Knowledge of anthropology is required to ensure that priorities and innovations are relevant and manageable in local contexts. Participatory planning skills are necessary to ensure multi-stakeholder design of solutions, while at the same time management and administration skills are necessary to promote institutional development at the local and national level.

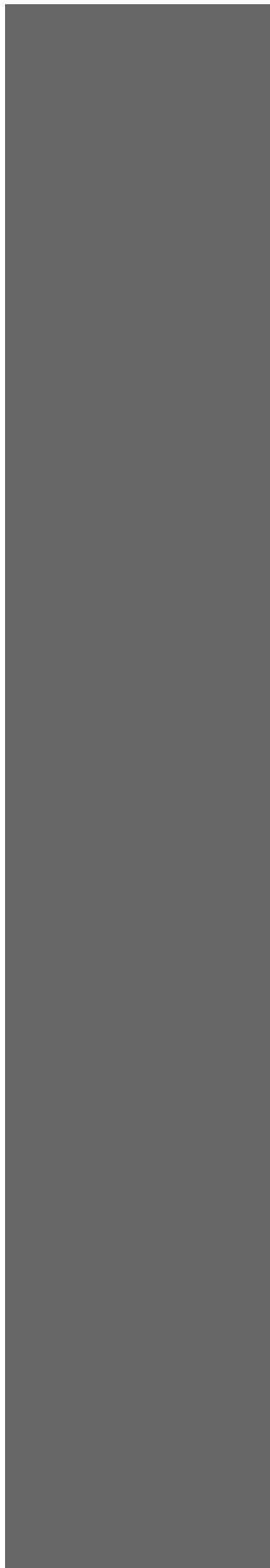
Crucially, none of these individual areas of knowledge is sufficient on its own to solve the challenge of hunger—all are necessary. The same need for multi-disciplinary problem solving arises across a range of developing-country policy challenges, such as disease control, water management, energy service delivery, and climate change adaptation and mitigation.

It remains an unresolved paradox that the parameters for policy making in all sectors—including education, health and the environment—are often set by

finance ministries and other powerful financial institutions that tend to have limited knowledge of the sectors whose outcomes they decide. Financial officials are typically classroom-trained in the theories of economics with insufficient background for evaluating the absolute or relative merits of a plan to control a disease, manage an ecosystem or deliver an energy service, for instance. With predominant urban life experiences, such individuals may encounter difficulty in understanding the distinct nature of rural problems in diverse cultural, economic, social and environmental settings. Furthermore, they typically do not have much exposure to the ground-level practicalities of policy management and project implementation. Yet the consequences are of the highest order when decisions affect, and sometimes even cost, millions of lives at a time.

Development practitioners are currently prepared to design and implement integrated solutions that could promote sustainable development. Even within development-related academic programs, individual disciplines tend to value inward-looking specialization rather than outward-looking problem solving, often discouraging practical connections across communities of expertise. Trained within the current system, professionals rarely have the background necessary to conduct effective cross-disciplinary policy management or problem solving.

The International Commission on Education for Sustainable Development Practice,¹ supported by the John D. and Catherine T. MacArthur Foundation and based at The Earth Institute at Columbia University, was established in early 2007 to identify the core cross-disciplinary educational needs to support problem solving in the realm of sustainable development. The Commission's work is anchored in an understanding that professionals working in the field of sustainable development—whether in inter-governmental organizations, developing-country ministries, developed-country



Need for "Generalist" Sustainable Development Practitioners

for course-related field work or internships remain rare. The Commission finds that while existing degree programs may offer some subset of the required skills, there are no programs that systematically provide students with the relevant skills and knowledge in health sciences, natural sciences and engineering, social sciences, and management, while developing practical skills through field-based training.

Lack of Appropriate Training Programs for Life-long Learning

Mirroring the lack of degree programs focused on cross-disciplinary learning, development professionals have almost no opportunities for refreshing and upgrading relevant skills throughout their careers. Executive education programs typically focus on management techniques rather than substantive training. In addition, training programs within organizations working in sustainable development generally do not provide staff and management with cross-disciplinary learning opportunities or requirements.

In order to succeed in the practice of sustainable development, professionals must be trained in a basic set of competencies that integrate cross-disciplinary knowledge for practical problem solving with management and leadership skills for effective implementation. With the aim of supporting future generations of professionals as well as those currently working in the sphere of sustainable development, the Commission makes the following recommendations.

1. Establish the Core Competencies of the Sustainable Development

Practitioner

In consultation with a broad range of development practitioners, the Commission has identified fundamental core competencies, essential knowledge, skills

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Health Sciences nutrition, population sciences and reproductive health, basic epidemiology of infectious and non-infectious disease, health policy, health system design and management

Natural Sciences and Engineering agriculture, forestry and fisheries management, water management, energy, engineering, environment and climate science

Social Sciences anthropology, economics, education, politics and international political economies, statistics

Management project design and management, budget planning and financial management, commodities management, communication and negotiations, critical self-reflection, geographic information systems and decision making tools, institutional resource and human resource management, information management systems and design

Practical learning through projects, exercises and case studies:

To support and enrich the core MDP curriculum, the program could integrate a variety of teaching and learning resources including practical, experiential learning through cross-disciplinary case studies and group exercises.

Global Learning Resources for Sustainable Development

Practice: Shared open-source curricula, global courses, communication portals for students and faculty, web-based collaborative activities, and other learning resources could enhance the MDP program at universities around the world by providing curricular support as well as real-time engagement in practical, cross-institutional learning and knowledge sharing.

MDP Network: A vibrant network of universities, development agencies, research institutions and affiliated organizations could participate in academic exchanges, mentorship programs and curriculum development.

Field Training: Designed to build practical on-the-job skills, the MDP field training program should include two separate assignments lasting a total of six months. Field training programs will work in coordination with partner universities and local development organizations to provide a holistic clinical training experience.

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Establishing eligibility guidelines for partner MDP programs
Strengthening relationships with donors
Assisting academic institutions in their preparation for MDP grant proposals

CONCLUSION

Through the course of its work, the Commission has been able to help mobilize a global network of efforts that are already providing momentum to its recommendations. There is clearly strong global demand for a cross-disciplinary education system to train the next generation of sustainable development practitioners. As this report goes to press, several universities are already preparing their own plans to launch Masters in Development Practice programs (see Appendix E). The very first group of students is scheduled to begin classes in August of 2009. And the newly formed Global MDP Secretariat is already at work to support the global MDP network and the new MDP degree programs.

The implementation of the Commission's recommendations could be a fundamental step forward for the practice of sustainable development. At the same time, the creation of new education programs alone will be insufficient in affecting long-term change. Coordinated efforts to revise and expand the ideas presented in this report will be needed to respond to the dynamic nature of sustainable development, and the evolving technologies that are empowering ever richer forms of global communication and curriculum development. Innovative tools should continually be developed to effectively teach competencies and to measure and test competency development.

In a fragile planet that requires management of countless complex and delicate natural and social systems, future generations will require all the cross-disciplinary expertise that they can muster. By activating a vibrant network of academic institutions, development organizations, research institutions, governments and donors to engage in cross-disciplinary problem solving on an ongoing basis, the Commission's recommendations are poised to play a dynamic and constructive role in advancing the long-term sustainable development on which the world depends.