

Sustainability in the 21st Century

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The rapid run-up of global food and fuel prices over the last year or so has reminded all of us of the interconnected nature of our world. Rising incomes in India and China led to both rising demand for food and to changes in dietary preferences, with meat, fish, and dairy products taking on a greater importance. Governments' concerns to increase their energy independence (i.e., to depend less on imported fuels) and to reduce the carbon emissions of the fuels they do use sparked an explosion of interest in alternatives to fossil fuels. Biofuels fit the bill on the energy side, but the diversion of food crops to fuel production has further raised global prices for grains and oilseeds and caused some to question the ethics of this approach. Some countries have seen new production and business opportunities rising from the rapidly-changing food and fuel environment while others have struggled to deal with their populations' basic needs.

Clearly, the world has some way to go before we figure out how to balance our consumption and production in more sustainable and equitable ways. It is evident that we will need to draw on the learning of many disciplines – engineering and materials science, biology and agriculture, political science and economics, geography, climate science, and anthropology – and to explore how we might better communicate with each other and work together to define feasible approaches to creating a more sustainable future.

The National Academy of Sciences, National Academy of Engineering and the Institute of Medicine (“the Academies”) in the United States are supporting efforts to do just that. Through a Roundtable on Science and Technology for Sustainability, the Academies have brought together experienced professionals from a variety of disciplines and

different sectors (academia, business, government, civil society) to identify and consider key topics in the area of sustainable development. An early priority was looking at the process of translating knowledge (especially interdisciplinary knowledge) to action. This was followed by a deeper consideration of the role that partnerships play in fostering sustainable outcomes. Other issues that are being debated include: the sustainability of urban environments, energy and biofuels development, the choice of appropriate metrics for assessing sustainability, and the use of third-party certification processes as a way to monitor and encourage sustainability.

The Roundtable's "partnerships for sustainability" project symposium held in June, 2008, engaged a wide group of people on this important topic. The project drew on the experiences of some partnerships that responded to the initiatives launched in September, 2002, at the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. In addition to hundreds of partnerships formally registered with the U.N., countless other public-private partnerships for sustainable development have been established at various levels. Development agencies have worked through partnerships in local communities for years. Businesses both large and small are increasingly turning to partnerships (business-to-business and cross-sector) to meet the challenges of sustainability. Foundations are likewise forging new alliances in order to match their relative strengths and skills to better serve communities.

Yet with all of this activity in the area of partnerships for sustainable development, the Roundtable found that little information exists about what makes some partnerships successful and others less so. The Roundtable, therefore, commissioned case studies of 11 partnerships where sustainability was an explicitly anticipated outcome. Participants in the symposium reviewed and discussed the findings, adding depth and insight to the case study findings. A workshop summary will be published in late 2008. For more information, go to <http://sustainability.nationalacademies.org/>.