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INTRODUCTION TO THE FOCUS ISSUE

THE IDEA OF SUSTAINABLE DEVELOPMENT IN PUBLIC ADMINISTRATION

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This article introduces the Focus Issue on Sustainable Development by first discussing the environmental problems caused by unsustainable development and then the shortcomings caused by a piecemeal approach to policy development and implementation. The idea of sustainability appears to fit well with other core values of public administration, which is a consistent theme throughout each of the articles in this issue. Definitions of sustainability are discussed, followed by two relevant models. Finally, each article in the focus issue is introduced.

Keywords: *sustainability; sustainable development; public administration*

Sustainable development is an important new perspective on public policy and administration that has emerged largely from outside the United States. This concept attempts to more explicitly consider the future consequences of current behavior. The symptoms of unsustainability are manifested everywhere: the greenhouse effect, climate change, ozone depletion, atmospheric acidification, toxic pollution, biological species extinction, deforestation, land degradation, desertification, depletion of nonrenewable resources, urban air pollution, and solid waste pollution (Rao, 2000, p. 81).

The scarcity of environmental resources and the potential for social and economic crises based on the depletion of once-abundant natural inputs are becoming increasingly clear. The increasing level of consumption coupled with increases in population places the future of societies at risk. The problems emerging in managing resources are increasingly nonlinear as signs of environmental injury are hidden until a critical threshold is reached (Rao, 2000, p. 19). However, the problem goes beyond the availability of natural resources. The effect of Hurricane Katrina in September 2005 and the flawed response of public officials is a vivid and disturbing illustration of the problems caused by our piecemeal consideration of policy and the consequence of an inadequate system of citizen participation in decision making (Leuenberger & Bartle, 2005).

Traditional public administration values remain important to practice and theory, but are these values sufficient? Three pillars of public administration have been identified: efficiency, effectiveness, and social equity (Svara & Brunet, 2004). Should sustainability be added as a fourth pillar of public administration? The articles in this issue find that the complex problems of

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Should sustainability be added as a fourth pillar of public administration?

public administration require simultaneous consideration of a variety of values. For instance, the framework of sustainability presents the opportunity to integrate principles that have traditionally been considered incompatible, such as intergenerational equity, environmental preservation, and economic efficiency (Rao, 2000, p. 69). Sustainability may also afford administrators an opportunity to integrate social equity and efficiency as complementary values rather than competing values. Are the themes of sustainability and sustainable development appropriately matched to these major normative themes of public administration? What is their utility in practice? This focus issue explains the concept of sustainability, contrasts it with other social values, and illustrates its application to four different policy areas.

Defining Sustainability and Sustainable Development

What are sustainability and sustainable development? Lamont C. Hempel introduces several definitions. These definitions summarize the definitions operationalized by several theorists and serve as a starting place for defining these terms (modified from Hempel, 2001, p. 47).

SUSTAINABILITY

- “a nondeclining utility function or nondeclining capital; nondeclining human welfare over time” (Pearce, Markandya, & Barbier, 1989)
- “a condition in which social systems and natural systems thrive together indefinitely” (Euston, 1995)
- “resilience—ability to maintain structural integrity, form, and patterns of behavior in the midst of disturbance” (Common, 1995)
- “a process of creation, maintenance, and renewal that persists in balance with the process of decline, death, and decay” (Hempel, 1992)

SUSTAINABLE DEVELOPMENT

- “the system does not cause harm to other systems, both in space and time; the system maintains living standards at a level that does not cause physical discomfort or social discontent to the human component; within the system life-support ecological components are maintained at levels of current conditions or better” (Voinov & Smith, 1998)
- “the complex of activities that can be expected to improve the human condition in such a manner that the improvement can be maintained” (Munro, 1995)
- “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission, 1987)

Because a number of meanings have been assigned to sustainability and to sustainable development, the definition of these concepts is the first task for public administration scholars, before application in the field can be clarified. Of the definitions listed above, we believe that the first definition in each category is the most useful for public administration theory and practice.

Models of Sustainability

It is helpful here to very briefly review two basic models of sustainability to introduce the reader to concepts that are used in the following articles. The first model emphasizes the relevance of system models to the goals of sustainable development. These are goals of the biological, economic, and social systems as illustrated in Figure 1 (Barbier, 1987, cited in Rao, 2000, p. 83). Biological system goals include genetic diversity, resilience, and biological

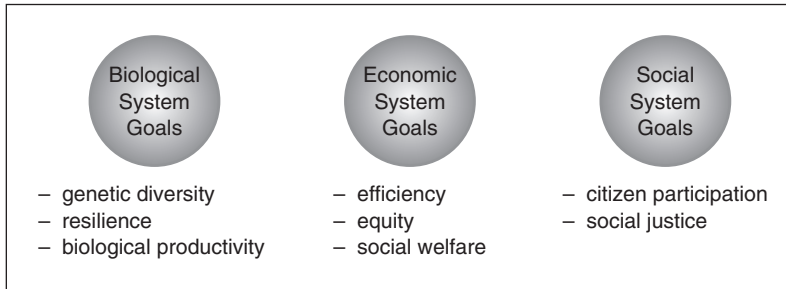


Figure 1: Goals of Sustainable Development

productivity. Economic system goals include efficiency, equity in distribution, and social welfare improvements. Social system goals include citizen participation and social justice. The systems approach in sustainable development is a close match to the ecology of public administration, as it embraces the idea of interdependence of human life, equilibrium, organic systems, and stabilization (Stillman, 2000, p. 80).

The second model, articulated by Mazmanian and Kraft (2001), identifies three epochs of the environmental movement in the United States (pp. 10-13). The first of the three epochs, the environmental protection era, was concerned with the development of legal administrative and regulatory infrastructure. The second epoch that emerged in the 1980s emphasized efficiency-based regulatory reform. From 1990 to the present, the approach to environmental protection has been leaning toward sustainability. This era supports harmony between human and natural systems, a balance of long-term system needs through system design and management, an ecocentric ethic, an emphasis on resource conservation, use of comprehensive future visioning, environmental strategic planning, assessment and goal prioritization at the societal level, and encourages public/private partnerships and community capacity building. This approach simultaneously embraces generational equity, public participation, and efficiency.

The systems approach in sustainable development is a close match to the ecology of public administration, as it embraces the idea of interdependence of human life, equilibrium, organic systems, and stabilization.

Articles in This Focus Issue

In applying concepts of sustainability to public administration, the match between sustainability and goals of public administration is demonstrated best when applied to specific problems. The articles in this focus issue provide evidence of the importance of considering sustainability in public decisions, as well as the difficulty of achieving durable policy implementation.

Leuenberger argues that the concept of sustainability helps managers to manage resources across both time and space. It also helps them to manage risk, addresses the goal of intergenerational equity, and provides a framework to conserve natural resources. Her article traces the link between the principles of sustainable development and the tenets of public administration. The application of broad-based sustainable development reflects the values of efficiency, effectiveness, and citizen participation. However, the system perspective of sustainability requires a simultaneous balancing of these considerations. Although more complex, such a perspective offers the potential for a lasting contribution. She asks, "Are the goals of sustainable development a match with public administration practice?" and finds that these goals can be applied to much of the work of the public sector, such as the provision of transportation, public housing, human services, and environmental protection.

Kraft examines efforts to improve water quality in the Fox-Wolf River Basin in Northeastern Wisconsin. It places the history of these efforts within the historical context of environmental policy. The current epoch of environmental policy stresses reliance on broadly inclusive stakeholder involvement and civic environmentalism. Water quality in the area has improved significantly over time, but further improvement will require intensive actions focused on nonpoint sources of pollution and remediation of contaminated sediments. Collaboration and stakeholder involvement can be successful in some circumstances, but in other circumstances,

conventional regulation may be preferred. Policy approaches that are hybrids of these two may be most effective. The potential for alternative approaches that are grounded in the concepts of sustainability and collaborative decision making is explored. The lessons from this case are relevant for many other communities.

Bartle opens with the observation that sustainable development has had limited influence on air transportation. He examines how U.S. air transportation practice meets the four dimensions of sustainability—environmental, economic, financial, and social—and finds current practice to be unsustainable and likely to continue to get worse. Neither current pollution control policies nor technological progress are sufficient to solve the problem. Shifting from air travel to other modes of travel is an option; however, the goals of mobility and speed of travel would be inhibited. Taxes could reduce the external costs caused by air pollution; however, there are administrative and political barriers to this. Institutional reform seems to be the logical solution, and some of the options that have been used in Europe and elsewhere to achieve this reform are described. Any U.S. policy to address these issues would have to be consistent with our political, economic, social, and cultural institutions.

Bartle and Devan examine sustainability issues in the area of highway travel. As with air travel, highway travel is forecasted to increase steadily worldwide in ways that are likely to be unsustainable along all dimensions: environmental, economic, financial, and social. Federal legislation, in particular the Intermodal Surface Transportation Efficiency Act, has made progress toward the goal of sustainability, and technological improvements offer potential for reduced emissions, but both potentials have not been fully realized and are not likely to fully solve the problem. The same is true of reductions in automobile usage and of efforts to internalize external costs. Ultimately, institutions will have to change. This will not be easy; however, examples from the European Union show how institutional change can be implemented in a durable way. Change needs to take place both inside and outside of government, using both top-down and bottom-up approaches. This change is important not just for environmental reasons but also for long-term prosperity.

Taken together, these articles cover a broad range of policy areas and suggest both the successes and shortcomings toward the goal of sustainability. Continued progress will depend on two changes: a normative orientation toward the goals of sustainability, and development of implementation routines by many public administrators. These challenges are great, but so are the dangers of not meeting them.

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