CHAPTER 2

Human Ecology: The Science of Sustainability for the Third Millennium?

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ABSTRACT The fast process of globalization and fast economic transformation all over the world, are generating a crisis in the process of governance within human societies (both in the developed and developing world). This crisis is especially evident when the issue of sustainability is addressed. This phenomenon can be linked to a growing inability of conventional science to handle in a satisfactory way the representation, communication and policy analysis when dealing with the sustainability predicament. The text starts providing a definition of Sustainable Development from the perspective of Human Ecology. Such a definition is based on the concept of “Procedural” rationality, rather than the concept of the “Substantive” rationality, typical of “reductionist science. Then the paper illustrates the new challenges that the issue of sustainability implies for scientific analyses, forced to go beyond the concept of commensurability and efficiency (the need of moving from “monocriteria analyses of experts” to “multicriteria participatory assessment”). Finally, it concludes saying that the paradigm shift needed for developing a new science for sustainability (looking for a Post-Normal Science) implies a set of characteristics which indicate the field of Human Ecology as a good candidate for this job.

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