Ethical and Value Issues in International Agricultural Research

Kenneth A. Dahlberg

ABSTRACT. Agricultural research raises fundamental ethical and value questions going beyond those in other fields both because of its public funding and because its results have significant impacts on habitats and other species. Questions about the sustainability of modern agriculture, which are shared with other sectors, require us to examine alternative visions and structures. These can be seen to range from status quo preserving ideologies to change-oriented utopias. It is argued that at the national level current ideologies—which include positivistic approaches and belief in the neutrality of technology—mask real structural and policy choices as well as their ethical and value implications. At the international level, the export of fossil-fuel based modes of agriculture to the developing countries raises additional structural, policy, value, and ethical issues.

I. Introduction

Agricultural research raises basic ethical and value questions and issues that are in many ways more fundamental than those raised by research in other sectors of industrial society. Not only is there extensive public funding for both national and international agricultural research, but the object of its studies and promotion—agriculture—represents one of the largest and most basic interfaces between natural and human systems.

The dependence of humans upon natural systems and the food they provide means that in addition to the ethical and value issues involving individual/individual, individual/group, and group/group conflicts typically considered in most fields, there is a need to include questions and issues involving the relationships of humans to other species and to natural habitats. Unfortunately, there has been only modest consideration of these issues in general, with most of what has been done appearing in the literature on environmental ethics. More specifically, there is very little discussion that directly addresses agriculture and the different ways it structures and affects human interactions with the natural environment.

Agriculture as a way of life has always involved a simplification of ecosystems for human benefit. Since such simplification—and the agricultural practices that go along with it—carries the risk of undermining or destroying the supporting species, habitats, and natural processes that ultimately enable it in the first place, a number of ethical and value issues emerge. For example, what ethical obligation does the current generation have to maintain sustainable or renewable systems for future generations? And what should be the nature of humankind's relationship to these other species, habitats and natural processes—one of dominance, equality, or dependence?

Most hunting and gathering and agricultural societies developed belief systems, symbols, and
rituals that sought to answer these questions by stressing respect for other creatures, the land, and future generations (often through rituals honoring ancestors)—even if in practice they did not always follow those beliefs. In contrast, industrial society has been built upon a complex set of beliefs (and institutions) that have stressed man's moral and practical dominance over nature. It is only in the past couple of decades that these beliefs have been broadly questioned and challenged as the limits to industrial society have become more obvious. Most recently, concerns regarding the loss of genetic and biological diversity at a global scale have led many natural scientists to raise fundamental ethical questions regarding the intrinsic value of nature and other species. However, there has been little linking of these concerns to either the structures of industrial society generally or to the global expansion of modern agriculture more specifically.

This larger questioning of industrial society and its relationship to, and impacts upon, the biosphere also has implications for research of all types and at all levels. This is because research is itself a highly rationalized and institutionalized emanation of industrial society. As such it reflects its assumptions, values, and structures. Thus, both national and international research systems need to be evaluated in terms of this larger debate. This is particularly the case for agricultural research—given the size of its impacts, its public funding, and the questions regarding the sustainability of industrial modes of agriculture that have emerged in recent years.

Several basic ethical questions emerge from the issue of sustainability: 1) What is the responsibility of those doing or administering agricultural research to question the assumptions, structures, and longer-term viability of modern production agriculture? 2) To what degree do they have a responsibility to examine the global as well as the domestic impacts and risks of current practices and structures? 3) If there are serious doubts about the sustainability of current industrial approaches, is it ethical to seek to export them to developing countries—particularly when they often replace systems that historically have been sustainable?

These and a number of other ethical and value issues will be explored here—both in terms of their ideological dimensions, as well as how a better understanding of national structures and perceptions (particularly those found in the U.S. experience) can help to clarify the ethical and value issues found at the international level.

II. Ethics, Values, Ideologies, and Utopias

One may ask why the questions raised above have rarely been seriously examined within the agricultural research establishments of the industrial world. Part of the answer lies in the dominance of a particular paradigm—one that focuses on efficiency and productivity achieved through specialized scientific research. As with any dominant paradigm, there is either an inability or reluctance on the part of its adherents to acknowledge their own ethical and value positions and assumptions because of the vested professional interests that have been created along with it. In addition, there is the general tendency of specialists within any establishment to accept the larger institutions and values of their culture and society without question. Finally, there is a general societal tendency to be unaware that in industrial society basic ethical and value issues tend to be formulated in ideological or utopian terms.

Table 1 illustrates this in very general terms, showing different level agricultural-related goals and their underlying ethics and values and how these vary between dominant and alternative groups. Institutional and structurally, the very presence of national, international, and global levels reflects the accretion over the past three centuries of complex and increasingly more centralized infrastructures, resource regimes, and institutions. It is only recently that analytic critiques of these centralized, and capital- and energy-intensive infrastructures and institutions have emerged. Such critiques add an important dimension to Karl Mannheim's insights regarding the ways in which utopian visions gradually become reified into status-quo protecting ideologies as they are institutionalized and various groups develop vested interests in both the institutions and their supporting values and paradigms.

This has occurred society-wide over the past several hundred years as the original utopian vision of an industrial society governed by reason and science and pursuing secular progress through the application of technology has become an ideology. That is, current groups have a vested interest in both protecting and extending the existing infrastructures, institutions, and ethical and value assumptions and beliefs associated with the rise of industrial society. Those who challenge these and propose a new vision that would require their reform or restructuring are today's utopians, and are often met with neglect, derision, or fear.

All industrial research suffers from this ideological myopia, something that is particularly