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Confrontation or Cooperation in the Cornfield

Two different projections are being made concerning the prospect of global hunger. The more gloomy views suggest that massive starvation is probably unavoidable before the end of this century. The more optimistic views, derived from several recent agricultural successes, imply that massive increases in starvation might be neither necessary nor probable. My knowledge in this area is very imperfect, but the data I've seen inspire little optimism. However, if the recommended agricultural strategies continue to focus on ever larger areas of the earth's surface converted to narrow, intensive approaches for maximizing food production and continue to ignore broader ecosystem relationships, we are bound to seriously aggravate the later stages of the "people-food crunch," whatever its magnitude.

The past few decades of agricultural development have made possible increased yields, greater uniformity in the marketed products, and lower unit costs. However, it now becomes clear that the bookkeeping on agricultural production is artificial. Sizable sums have been palmed off on the world at large and do not enter the ledger as part of production costs: these include pollution and other degradative processes which re-emerge as medical bills, more rapid deterioration of property, increased costs for recreation and other goods and services, as well as general lowering of some aspects of environmental quality. Calling attention to this bogus bookkeeping has triggered a loud response from the more blatant polluters. They insist that their critics want a totally unattainable return to pristine presettlement conditions; i.e., some polluters apparently recognize no alternative to the accelerating degradation currently being perpetrated.

In no small measure the restlessness among thoughtful people—including many college students—is aggravated by a growing awareness of this ultimately lethal flaw in our technology. The cynicism displayed by many polluters, including some in agriculture, who have fought governmental regulation while abdicating self-regulation, warns of the increasing role these issues could play when the Vietnam war no longer mesmerizes the nation's activists.

The foreseeable demand for improved food production should result in increased prestige for the profession. But turning agricultural graduates loose on the world without sensitizing them to the larger environmental problems or to the serious flaws in many narrowly specialized strategies for maximizing food yields and profits must end. There are encouraging signs that required curricula are indeed being altered to include a broad environmental viewpoint. For their part, more ecologists might assume the responsibility of illuminating ecological principles as they apply to agriculture.

But change is difficult, slow, dependent on strong motivation and on financial support. As the hidden costs of narrow management strategies, largely spawned on our campuses, become more apparent, will agricultural programs become subject to the kind of ridicule and protest currently being heaped on academics conducting research for narrow military ends? Three-way communication seems required among (i) those concerned with designing tomorrow's food production technologies, (ii) those concerned with studying the earth's ecosystems and the presently unutilized species in natural communities, and (iii) those concerned with the value systems in our many different cultures. The sooner sound cooperation begins, the better our chances for escaping a wasteful confrontation.—JOHN E. CANTLON, *Provost, Michigan State University*.

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