



“Summary of article by Miguel A. Altieri and Omar Masera: Sustainable Rural Development in Latin America: Building from the Bottom Up” in Frontier Issues in Economic Thought, Volume 1: A Survey of Ecological Economics. Island Press: Washington DC, 1995. pp. 356-358

Social Science Library: Frontier Thinking in Sustainable Development and Human Well-being

“Summary of article by Miguel A. Altieri and Omar Masera: Sustainable Rural Development in Latin America: Building from the Bottom Up”

In recent years, the debate on sustainable development (SD) has gained momentum rapidly within Latin America, but a gap remains between the rhetoric of SD and its reality. Institutional arrangements and market forces in the agricultural sector are biased against sustainable rural development. Creating new policies that reduce the resource costs of farming and promote social and ecological sustainability will be a major challenge for SD, in addition to addressing the principle development priorities of the region that include reducing poverty, enhancing food security and self sufficiency, conserving natural resources, and encouraging the empowerment and participation of poor rural communities. Most top-down national and international development approaches have not met these goals, but grassroots, bottom-up approaches by non-government organizations (NGOs) have opened new roads to target the poor directly. Promoting policies that are not only ecologically sound but also economically profitable is a major challenge for those NGOs involved in the agricultural sector. The long-term success of these NGOs will depend upon creating the socio-economic conditions necessary for widespread implementation of agroecological programs.

ENVIRONMENT AND DEVELOPMENT IN THE LAST TWO DECADES

Conventional "top-down" development strategies have proven to be fundamentally limited in their ability to promote equitable and environmentally sustainable development in Latin America. As Latin American countries are drawn into the existing international economic order, their governments adopt policies to service their enormous debts, and they increasingly embrace neoliberal economic models that emphasize export-led growth. However, these approaches have resulted not only in growth, but also in increased poverty, as well as deforestation, soil erosion, industrial pollution, pesticide contamination and loss of biodiversity.

During the 1970s, Latin American countries adopted an import substitution industrialization strategy (ISI), emphasizing highly capital- and energy-intensive industrialization primarily centered on the manufacture of durable consumer goods. Agriculture was subordinated to industrial development, and agricultural surplus was diverted into the industrial sector. This strategy produced high rates of regional growth, and social indicators did improve in most countries as a consequence of government social programs, despite growing inequality in income and land distribution. However, this approach was not environmentally neutral. Programs such as large energy and infrastructure projects, colonization of tropical forests, subsidies to agro-

chemical companies, expansion of mechanization in agriculture, and rapid industrialization all vastly expanded the human impact on the region's ecosystems.

The region's economy stagnated in the 1980s, exacerbating environmental problems. The massive debt problem was a key cause of this crisis; debt service captured between 20 and 40% of the region's exports, diverting financial resources needed for internal investment. The structural adjustment programs required by the multilateral development banks as a condition for new loans have entailed downsizing the state, eliminating subsidies, controlling inflation, and adopting neoliberal trade policies. The social costs of these new policies have been high, especially for the poor.

The increasing marginalization of the poor and the deterioration of these economies have had further negative impacts on the environment. Budgetary cutbacks and the urgent need to generate foreign exchange have led to both cutbacks in environmental programs and to increasing pressure on natural resources. Social pressure for access to natural resources has also increased among the poor, transforming them into agents of overexploitation of fragile lands.

CHALLENGES FOR SUSTAINABLE RURAL DEVELOPMENT: THE CASE OF THE PEASANT SECTOR

The urgent need to combat rural poverty and to regenerate the deteriorated resource base of small farms has stimulated a number of NGOs to actively search for new strategies of bottom-up agricultural development and resource management. These are based on local participation, skills and resources, and so enhance productivity while conserving the resource base. The central idea of this approach is that development and research should start with what is already there: local people, their needs and aspirations, their farming knowledge, and their autochthonous natural resources. The goal has been to define a new agricultural approximation to the peasant production process based on agroecological principles.

NGOs throughout the region face diverse socio-economic and agricultural constraints, ranging from lack of access to land and low income of peasant families to various physical limitations of the agroecosystems. Preliminary evaluations of NGO activities show that they have produced tangible benefits for the local populations such as enhanced food production, regeneration of natural resources bases, and higher use-efficiency of local resources. Nevertheless, in many cases these efforts have met with mixed results, primarily due to an environment in which poor peasants have limited access to political and economic resources, and in which institutional biases against peasant production prevail. A bottom-up approach requires the elimination of three systemic constraints: 1) anti-peasant biases in credit and extension institutions; 2) perennial underinvestment in peasant communities; and 3) subsidies to capital intensive and agrochemical based agriculture.

MAKING SUSTAINABLE RURAL DEVELOPMENT OPERATIVE

The design of new procedures and indices for evaluation of projects and technology is a key step in making sustainable rural development operative, because it is through these procedures that the final assessment of alternative projects occurs. Current evaluation procedures, especially

cost-benefit techniques, give all the weight to the economic dimensions, and have proven inadequate to fulfill the requirements of a broader process of technology evaluation.

Two emerging evaluation procedures are participatory rural appraisal (PRA) and natural resource accounting (NRA). NRA techniques incorporate environmental externalities in conventional cost-benefit analysis, and can be used to evaluate the profitability of agricultural systems when natural resources are taken into account. One problem with these techniques, however, is that markets are often imperfect or nonexistent in peasant agricultural systems, so it can be difficult to compile data on resource depletion and to assign market values to resource losses. NRA techniques also perpetuate the traditional economic bias by reducing the whole evaluation process to a monetary indicator.

PRA techniques constitute an important step toward the design of alternative bottom-up evaluation procedures. This approach emphasizes the informal gathering and presentation of information to facilitate a participatory process involving both local residents and multidisciplinary teams of researchers. The goal is to mobilize communities to define their own priority problems and opportunities, and to prepare site-specific plans of intervention. Data gathering and presentation is based on a rich array of procedures that include semi-structured individual and group interviews. Technologies are evaluated through very general criteria addressing the environmental, economic and social concerns expressed by the local community. The evaluation schemes utilized in PRA often lack detail, however, and need to be complemented with more thorough analysis.

Elements of both PRA and NRA techniques could be brought into a sustainable development evaluation framework that does the following: 1) incorporates aggregate and quantifiable indices, but does not lay out qualitative criteria; 2) addresses concerns and trade-offs among long-term and short-term objectives, and micro and macro costs and benefits; and 3) contrasts local people's priorities and interests with "desirable" technology or project characteristics as stated by the dissemination agency. Researchers and local residents should remain aware of the elements of both traditional agricultural knowledge and modern agroecological principles and techniques that offer the potential to conserve and regenerate resources, optimize productive potential and resource use, and facilitate farmer to farmer communication and extension.

Latin American countries must realize that future patterns of growth and development must be radically different from those of the past. The immediate needs are to achieve a more equitable distribution of wealth, secure adequate living conditions for the poorest, broaden the bases of participation in decision-making processes, and conserve and enhance the region's natural resource base.