

## Rural Abandonment and Sustainable Development<sup>1</sup>

Socio-economic forces and governmental policy have encouraged the intensification of agriculture and have aggravated the trend toward abandonment of remote agricultural communities in mountainous regions. Traditional practices that represent the highest potential for sustainable agriculture are threatened by the changes in the intensity of farming which have characterized Mediterranean agricultural sectors during the whole post-war period and in particular by the combination of abandonment and intensification processes. The intensification of agriculture is associated with high productivity and economic profitability but negative environmental consequences, while the abandonment of small agricultural communities is associated with a loss of the more sustainable traditional agricultural practices and the general marginalization of those communities.



The resurrection of agriculture in remote agricultural regions of the EU is necessary to the survival of the communities themselves and to the movement toward sustainable agriculture. However, the continued viability of low-yielding dry land cultivation that is typical to these remote

farming communities seems to be under serious threat because of the inability to compete on the market. This inability to compete renders remote agricultural systems unable to provide a livelihood for agriculturalists. The challenge then is to identify an agricultural system appropriate for rural communities that not only have a neutral effect on the ecological surroundings but that are simultaneously economically viable.

### Causes of marginalization

In Greece, as in many EU Member states, two phenomena have been identified as the major causes of the continued marginalization of remote agricultural communities. First, EU policies geared toward industrialization of agriculture and parallel efforts by the Greek government to grow its industrial sector

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during the post war era, thereby drawing people from the countryside into industrial cores. Second, the industrialization of agriculture rendered small mountainous farms unable to compete with intensified agricultural practices on lower elevations and leading to a depopulation of those areas. This industrialization caused further depopulation of rural areas.

Low economic competitiveness and pervasive socio-economic pressures led to the migration of populations from mountainous Mediterranean regions and the abandonment of their agricultural activities. Agriculture was more economically viable in the more fertile plains and people either followed their work to the plains or moved to cities to find work in other sectors. The model of economic growth which Mediterranean agricultural sectors have followed in the post-war period has led to the creation of only certain pockets of intensive farming mainly following the most easily accessible flat and coastal routes of the continental part of these countries, while leaving the inaccessible mountainous and insular regions in the shadow of this development process.

The motivations underlying the intensification of agriculture have been economic. Agricultural production can be expected to move where it is most productive. In contrast, agricultural land is abandoned when it fails to generate an income flow to households and businesses and when farmers are unwilling or unable to modernize their agricultural practices. The inability of small traditional farming communities to adapt to the modernization of agriculture has been attributed to limitations of the physical environment such as steep terrain, dry climate and climatic instability; the small size of agricultural plots; isolation; and resistance from local people. The results of the case-study illustrate that olive oil production in Kefalonia is limited by these very factors.

### Environmental and social repercussions of industrialized agriculture

Though the reason that agriculture has concentrated in the plains has been predominantly economic in nature, the repercussions on rural communities have not been restricted to economics. Their physical restraints, climatic conditions and geographical remoteness make these mountain areas of Europe representative of an extreme case of economic and social vulnerability while abandonment is associated with land desertion and spontaneous deforestation which pose a threat to the rich diversity of flora and fauna that would typically characterize European mountain areas. The EU Council recognizes the environmental problems associated with agriculture (including olives) that were augmenting in the

1980s and 90s. As regards water quality, nitrogen surplus was especially a problem in the 1980s, slightly declining with the new decade within the Member States. Problems of ammonia emissions, eutrophication, soil degradation and decline in biodiversity persisted at the same rates in many areas.

### **Sustainable development**

Sustainable development, in its broader sense, rests on the principle that present generations must meet the needs of the present without compromising the ability of future generations to meet their own needs. Authors commenting on sustainability integrate a concern for the well being of natural and human resources. Stewardship of human resources includes consideration of social responsibilities such as working and living conditions of laborers, the needs of rural communities, and consumer health and safety both in the present and the future. Stewardship of land and natural resources involves maintaining and enhancing this vital resource base in the long run.

Because many socio-economic and environmental issues are intertwined in a society's food production, and because many developing regions are agricultural, agriculture is at has become synonymous within EU policy with rural development. As each agricultural system is a combination of wider societal forces and local conditions, a precise definition for sustainability remains elusive. The term sustainable development reveals a focus on development, which has been the focus of policies and movements that have presented the very problems that the movement of sustainability attempts to solve today. However, sustainable development pays attention to how these needs are met.

As with the broader concept of sustainable development, sustainable agriculture emphasizes the need to promote the health of human and natural resources simultaneously. In other words, the concept of sustainability recognizes the interdependency of people and their natural surroundings. Sustainable agriculture can be viewed as a system that includes concerns for social equity and that recognizes the interconnectedness of the individual farm and its workers, the local ecosystem, and communities affected by this farming system both locally and globally.

### **Economic vitality**

Embodying the principles of a holistic approach to development, sustainable agriculture concerns itself with economic vitality, environmental preservation and social equity all inclusively, straying from the isolationist tendency to focus only on the ability of a food system to produce maximum quantities. Instead of

being based purely on net financial gain, within the concept of sustainable agriculture, economic vitality is considered as the long-term increase in the value to the community. Long-term economic stability is achieved through sustainable agriculture by 1) the reduction of the long-term costs of pest resistance and destruction of beneficial insects that occurs with overuse of pesticides; 2) reduction of the costs of external fertilizers and other chemicals; and 3) a decrease in the costs of work-related illness. Costs and benefits are measured beyond economic terms in an agricultural system that strives to be sustainable. Practices that attempt to meet current and future societal and environmental needs are measured by their ability to maximize the net benefit to society when all costs and benefits of the practices are considered.

### **Social needs**

Tightly integrated with the economic components of agriculture are its social needs. The economic returns of an agricultural activity must be locally concentrated so that the local economy is strengthened. Further, to be sustainable, the route of development should be determined by the cultural tendencies and needs of the local population, known as endogenous development.

### **Environmental health**

A sustainable agricultural system is one that is not reliant on high chemical input or mechanization that threatens environmental or human health. The conflicts between environment and development were first acknowledged by the United Nations in the 1972 Stockholm Conference on the Human Environment. The concept of sustainable development grew from there at the 1982 World Commission on the Environment and Development called by the General Assembly of the United Nations. The report from the Brundtland commission gained recognition as the first international address of sustainable development. Within the report, Brundtland proclaimed:

*"The environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to defend it in isolation from human concerns have given the very word "environment" a connotation of naivety in some political circles. The word "development" has also been narrowed by some into a very limited focus, along the lines of "what poor nations should do to become richer," and thus again is automatically dismissed by many in the international arena as being a concern of specialists, of those involved in questions of "development assistance." But the "environment" is where we live; and*

*"development" is what we all do in attempting to improve our lot within that abode. The two are inseparable"*

### **The evolution of sustainable development**

Within policy and planning discourse, sustainable development groups together the concepts of sustainable agriculture and rural development. As stated, most lagging rural areas are dependent on agriculture as their main livelihood. With the industrialization of agriculture, the inability of small farming communities to compete has perpetuated the marginalization of traditional farming communities. These areas become less attractive to younger generations due to their lack of economic opportunity, and the communities lose their population to the pulls of more developed economies. Therefore, international bodies such as the United Nations have recognized the link between development and agriculture.

In 1992 the United Nations held the first Earth Summit in Rio, making sustainable development one of its guiding principles in international policy. More than 178 governments representing developing and developed nations alike met to adopt a plan known as Agenda 21, calling for action on global, national and local levels in "every area in which there is human impact on the environment" (UN 2006). Chapter 14 of Agenda 21 is titled "Sustainable Agriculture and Rural Development" or SARD.

Chapter 14 of Agenda 21 defines sustainable development as "the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations". Following Rio, the UN established a Commission on Sustainable Development (CSD) to monitor progress in implementing Agenda 21 and the Food and Agriculture Organization (FAO) was designated as Task Manager for Chapter 14. The FAO is an international forum composed of developed as well as developing countries for the purpose of negotiating agreements and policies within fisheries, forestry and agriculture. Since its creation in 1945, FAO has focused primarily on developing rural areas. With the Rio summit and the resulting SARD charter, the concept of sustainability would now be the focus of FAO efforts in rural development. The SARD concept defined at the Rio Summit and adopted by FAO would act as a paradigm for holistic development.

By virtue of being focused on development as opposed to preservation, the concept of sustainability laid out by Agenda 21 and the FAO emphasizes technological advancements that aim to support human needs for the longest possible time. Indeed, at the

heart of sustainable development is development. Many authors describe development and agriculture as sustainable when they are able to meet the needs of the present without compromising the ability of future generations to meet their own needs. The aim of sustainability is to achieve economic development that takes overall human and environmental well being into consideration. Technological advancements that have enabled greater productivity and higher profit with less labor requirements were successful at meeting the economic needs of some agriculturalists and the nutritional needs of a greater number of people. An agricultural system that maximizes the economic potential and produces the greatest volume of food however has been criticized as being too narrow in focus. To be sustainable, development and agriculture should recognize the interconnectedness of the farm, its workers, the local ecosystem, and the communities affected by the farming system both locally and globally.

### **Less Favored Areas (LFAs)**

Sustainable agriculture and Rural development policies are a response to problems faced by lagging agricultural regions. On an international level, the majority of these regions are within the parameters of developing countries. However, the United Nations acknowledges the poor state of rural areas in developed nations as well as developing nations (UN Agenda 21: Chapter 14: 14.2) and the importance of restoring their agricultural lands and revitalizing their communities. Within the European Union, policies for rural development were arrived at in response to agricultural abandonment that was emblematic of the post war and has escalating in the past few decades.

### **Rural abandonment in Greece**

Of the European Mediterranean region, Greece is the country most touched by land abandonment. In the post-war period, there was an enormous rural exodus of approximately 1.5 million people. Men of working age sought employment in other countries including Germany and the United States, or moved to metropolitan areas of Greece, mostly Athens. In response to international market pressures, the priority of the Greek government was to develop the urban sector through rapid industrialization of the economy. A study based in five communities in Ionnina revealed that a lack of infrastructure and a lack of economic activities, alternative or complementary to agriculture, promoted the gradual depopulation and marginalization of these areas.

Rural depopulation signaled the need to reform the countryside, and between the 1960's and 1981 – the year Greece became a full

member of the EU - the national agricultural policy adopted price supports designed to reduce economic class and regional divisions and to generally raise the standard of living in the countryside. Still, between 1961 and 1991, continued emigration reduced the agriculture population by more than half, from 45% to about 17%. The effects on the rural landscape were apparent, with the total cultivable land area decreasing by 10.5% in the period of 1987-1993. Despite these great losses of rural populations through the 1990s, 39% of the total income of households in Greece came from agriculture in 2005. Such a large percentage of income from a deteriorating area of cultivated land indicates an intensification of crops and high-input practices

Today it is a top priority of the Greek government to redistribute its national population back to the abandoned countryside. The Ministry of Rural Development and Food identified at the new millennium several policy objectives to promote the development of agriculture, the competitiveness of Greek products and the restructuring of the countryside. The plan for the restructuring of the countryside concentrates on an integrated economic and social intervention in agriculture. This intervention seeks to make Greek agriculture "attractive, modern and viable" (Ministry of Agriculture web announcement, 200). Current policy reflects the growing national goal for the modernization of rural Greece. Fueled by the opportunities offered by the global economy, the nation hopes to bring jobs and life back into the countryside.