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**Fifth Joint Conference on
Agriculture, Food, and the Environment**

Proceedings of a Conference Sponsored by
University of Minnesota
Center for International Food and Agricultural Policy

Università degli Studi di Padova
Dipartimento Territorio e Sistemi Agro-forestali

Agricultural Development Agency - Veneto Region

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**SESSION II: AGRICULTURAL POLICY AND SUSTAINABLE
DEVELOPMENT I**

**PAPER 2: ENDOGENOUS RURAL DEVELOPMENT AND
SUSTAINABILITY: A EUROPEAN (NON ORTHODOX) PERSPECTIVE**

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FOREWORD

This volume contains the papers presented at the Fifth Joint Minnesota/Padova Conference on Food, Agriculture, and the Environment held at Abano Terme, near Padova in Italy, June 17-18, 1996. This conference was organized by the Center for International Food and Agricultural Policy at the University of Minnesota and the Dipartimento Territorio e Sistemi Agro-forestali at the Università degli Studi di Padova (University of Padova) under their international collaborative agreement, along with the Agricultural Development Agency - Veneto Region, the University of Perugia, and the University of Bologna - CNR. The first Joint Conference was held in Motta di Livenza, Italy in June 1989, the second in Lake Itasca, Minnesota in September 1990, and the third in Motta di Livenza in June 1992. The Fourth Joint Conference was held in September 1994 at the Spring Hill Center in Minnesota.

This conference focused on topics of mutual interest in the areas of (1) agricultural and resource policy, (2) land markets, (3) the food and agricultural industry, (4) agriculture and the environment, and (5) agricultural production and environmental quality and sustainability. Although the conference was not intended to provide a comprehensive coverage of all the issues, this volume hopefully represents a useful contribution to current understanding and debate in the areas of food, agriculture, and the environment.

Judy Berdahl, secretary for the Center for International Food and Agricultural Policy at the University of Minnesota, assisted with these Proceedings.

Benjamin Senauer
University of Minnesota

Danilo Agostini
University of Padova

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ENDOGENOUS RURAL DEVELOPMENT AND SUSTAINABILITY: AN EUROPEAN (NON ORTHODOX) PERSPECTIVE *

(draft)

ABSTRACT: The implementation of the new Common Agricultural Policy (CAP) has brought far-reaching consequences for rural development: the farmer, liberating himself from his one and only role of producer, can profit from the opportunities and synergies offered by other activities that are complementary and alternative to agriculture. Thus the farmer has an essential role in the valorization of endogenous resources of the area where he carries his activities on.

Since 1975, the European Community has financed programmes which have increasingly taken into account the rural development dimension in research activities linked to agriculture (for example the AGRIMED and the CAMAR research programmes). Central to such researches is the notion of endogenous development. While this is still not a well defined paradigm, it seems to have some nice explanatory categories which could be worth to discuss in a conference where different experiences (i.e North American and European) are compared. This is the main purpose of the paper. A second objective of the paper is to analyze if the framework of the endogenous development could have useful insight (or, at least, could be suitable) for the analysis of sustainability issues.

* This paper is based on a broader research supported by the Italian Ministry of University and Scientific Research (MURST 60%) on “Institutional Analysis of Agricultural and Forestry Resources Management”. The Author is deeply appreciative of this essential support.

ENDOGENOUS RURAL DEVELOPMENT AND SUSTAINABILITY: AN EUROPEAN (NON ORTHODOX) PERSPECTIVE

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«Diversity is one of the main feature of European agriculture. It is also becoming one of the keywords in the debates on Common Agricultural Policy. Any European perspective on rural development must be grounded on the recognition of such diversity and must necessarily build upon it in order to maintain the agriculture required by Europe's people»

Ann Long and Jan Douwe van der Ploeg, 1994

1. INTRODUCTION

The implementation of the new Common Agricultural Policy (CAP) has brought about far-reaching consequences for rural development. Among others, the farmer, liberating himself from his one and only role of producer, can profit from the opportunities and synergies offered by other activities that are complementary and alternative to agriculture: Thus the farmer has an essential role in the valorization of endogenous resources of the area where he carries his activities on. Since 1975, the European Community has financed programmes which have increasingly taken into account the rural development dimension in research activities linked to agriculture (for example, the AGRIMED and the CAMAR research programs). From these researches emerges that the main feature of European agriculture (and of European rural development patterns) is *diversity*. This is not a chance phenomenon: Diversity is due not only to differences in factors, such as climate, soil, physical distance from the centers of consumption, historically created land-use patterns, etc., but above all, to the basic fact that *agriculture is a social construction*. The strategies used by the actors involved in it, the ways in which they link their practices to markets and to technological developments, the specific interaction between farming activities and regional, national and supranational policies and interventions - are all decisive elements in the complex process that makes agricultural practice what it is - a highly diversified whole.

All these researches are based on the focal concept of «endogenous development» (ED). ED patterns are founded mainly, though not exclusively, on locally available resources, such as the potentialities of the local environment, labor force, knowledge, and local patterns for linking production to consumption, etc. As it is argued in several contributions (see, for example, Long and van der Ploeg, 1994; van der Ploeg and van Dijk, 1995), ED can revitalize and dynamize these local resources, which otherwise might decline or become superfluous. Furthermore, ED practices tend to materialize as self-centered processes of growth: That is, relatively large parts of the total value generated through this type of development are re-allocated in the locality itself. While ED is still not a well defined paradigm, it seems to have some nice explanatory categories which could be worth to discuss in a conference where different experiences (i.e. North American and European) are compared. This is the main purpose of the paper, and section 2 will explain how the idea of ED has emerged and what it is.

It should be stressed, however, that ED is an emerging field of interest that merges different disciplines (like economics, sociology, antropology, etc.), and, as such, presents several characteristics of the parental disciplines: This means that it has no clearly identifiable theoretical roots, at least in the discipline of economics. In this situation, not all the economists are in favor of

this new research topic, simply arguing that ED is not economics: This is where the «non orthodox» caution in the title of the paper comes from. Putting the issue with Bill Slee, «the question should be asked whether economic theory to date has largely failed to identify certain important features of development, encapsulated in the term “endogenous development”, or whether “endogenous development” is an illusion, rooted in bourgeois liberal responses towards the perceived failure of many past development strategies» (Slee, 1994: 184). This calls for a careful scrutiny of the theoretical root of the concept, which will be carried out in section 3.

Finally, in section 4, a third kind of analysis will be carried out, i.e. if the framework of the endogenous development could have useful insights (or, at least, could be suitable) for the analysis of sustainability issues.

2. WHAT IS ENDOGENOUS (RURAL) DEVELOPMENT?

2.1. How does the ED idea come from?¹

The recent interest in ED may be surprising; however, for those being familiar with the so-called “modernization” of agriculture, this interest will come as no surprise. Infact, modernization of agriculture has become increasingly seen as originating from and driven by actors and institutions *external* to the agricultural sector itself. This specific focus was consolidated by a concept of modernization which stressed an essential rupture with existing practices and types of discourse of the countryside: implicitly agriculture was considered a stagnant sector². Correspondingly, those farmers who were more able than others to participate in the modernization projects, were classified as those most open to outside information, messages and innovations, an attitude which was perceived as being identical to an orientation towards urban dynamism. This dominant focus fitted well with mainstream economics, which perceived agricultural development as essentially a (re)adaptation of farming practices to (changes in) global markets and technology (Hayami and Ruttan, 1985).

Accordingly, the practice of modernization was (and still is) shaped by sets of *external interventions*, mostly centralized in state-agencies aiming to introduce new organizational models for farming, new interlinkages between farming, markets and market-agencies, new technological innovations meant to replace existing techniques and knowledge, new forms of socialization and techno-economic training, etc. The deliberate effort to create an integrated policy (and model) for these interventions, implied several consequences:

- a) the *degree of discontinuity vis-a-vis* existing practices, relationships and role definitions increased considerably (i.e. strong reorganization of labor and production processes happened);
- b) modernization not only reproduced existing differences, but increasingly generated its own *differences* and *inequalities*, because of its selectiveness, i.e. under certain conditions, in

¹ This section draws heavily on Long and van der Ploeg (1994).

² «Getting agriculture moving» and «transforming traditional agriculture» were some of the telling slogans of the 1960s that reflected this specific and still persistent view.

particular places and at specific moments it proved to be much easier to apply, adopt or implement modernization projects than at other times or places³;

- c) *dependency* became internalized into the structure and mechanisms of growth and development, since the practice of modernization revolved around the introduction of exogenous elements into the farming sector;
- d) the emphasis on exogenous development produced a particular *bias in our knowledge* of the nature, scope and mechanisms of agricultural development⁴.

As a matter of fact, however, the heterogeneity of European agriculture reflects a wide range of development patterns that is impossible to ascribe to one dominant set of “driving forces” located in markets, agrarian policy and technology development. Rural development is never a simple derivative of the latter: Understanding the dynamics of agrarian development implies a careful analysis of the social relations of production, that not only determine the way farming is related to markets, technology and policy, but also imply a frequent negotiation, adaptation and/or transformation of the goals, instruments, tendencies, directives and rationale contained in markets, technology, and policy. From the researches carried out in Europe in the last decade emerges that one of the criteria for the analysis of this diversity is the degree of *autonomy* or *dependency vis-a-vis* global markets and the supply of technology. As stressed by Long and van der Ploeg, this is not to say that

«[D]evelopment patterns can be defined in ideal-typical terms as exclusively founded upon local resources, nor as only entailing external elements. What empirical research indicates is that they contain a *specific balance of “internal” and “external” elements*. What turns out decisive, for those who follow the exogenous development pattern, is that it is the outside or external elements that compose the conceptual model from which the eventual utility of local resources is judged. If the latter “fit” with the former, they are integrated according to the rationale of the established model. If not, they will increasingly be considered as “outdated”, “worthless”, or as a “hindrance” to change. In endogenous development patterns, on the other hand, a different balance is encountered: It is local resources, as combined and developed in local styles of farming, that figure as the *starting point* as well as the *yardstick* for the evaluation of the eventual utility of “external” elements. If the latter can be used to *strengthen* both the specificity and the vitality of local farming styles, then they will be internalized (often after a careful “*deconstruction*” and “*recomposition*” so as to guarantee the maximum fit with local conditions, perspectives and interests). If no “fit” can be created, then the external elements will remain what they are, that is, “outside” elements» (Long and van der Ploeg, 1994: 4, emphasis added).

The main conclusions of these researches can be summarized as follows:

- a) empirical heterogeneity is neither a random nor an insignificant phenomenon: it reflects frequently a wide array of local farming styles⁵;

³ In this way modernization resulted in growth as well as underdevelopment and marginalization. Consequently, the simple “repetition” of the growth model typical for growth poles, or so-called «center economies», became within the less favored areas an ever less convincing policy proposal.

⁴ Considerable knowledge now exists on how to design and implement projects for exogenous development. However, on how to conceptualize and analyze ED patterns, and of their impact and their potential, there is remarkable ignorance, expressing itself, for instance, in the widely shared belief that if such ED patterns are relevant at all, their significance for resolving actual problems is minimal.

⁵ For a definition of farming styles, see the next section.

- b) the European array of different farming styles contains both those reflecting ED processes, and others expressing a predominantly exogenous development trend;
- c) it is in the careful exploration of the more endogenous styles and associated development patterns, that specific clues are encountered, which could strengthen ED processes⁶.

2.2. What is ED?⁷

ED is a “model” of what could happen in the transition from a situation of underdevelopment to another of development in rural areas. It was developed, and is particularly suitable, for the analysis of transition in European marginal rural areas, where it is possible to recognize some characteristics - like the production of high quality products, the combination of agricultural activities with extra-agricultural activities (i.e. pluri-activity), the structuration of a complex network of socio-economic relations at local level, the presence of many small and medium enterprises as main components of such a network, etc. - which constitute the essence of interesting examples of sustainable (from both an economic and environmental point of view) and self-centered development patterns in rural areas, to whom the EU is paying an increasingly attention within the CAP reform. The main feature of such patterns is that the farmer, and at a broader level the rural inhabitant, has an active role as economic and social actor, i.e. the agriculture and the rural environment are social constructs.

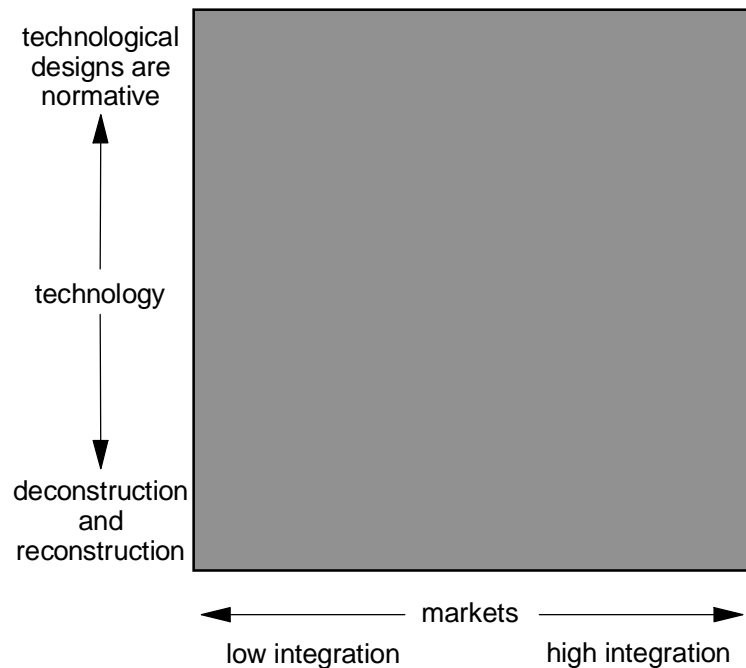
Agriculture, as all others production processes, involves the mobilization and reproduction of resources in order to convert them into specific values. A particular feature of agriculture is that the required resources entail nature and that the subsequent conversion entails, in part, the management of biological processes, that is “natural cycles”. «Simple commodity production» (Friedmann, 1986), the now widely dominant although not exclusive organizational form in Western European farming, is just a specific expression of this general formula: The values produced are mainly (but not exclusively) exchange-values, i.e. commodities; and the resources from which such commodities are produced are mobilized partly via markets, and partly through non-commodity-circuits⁸. Both the mobilization of resources and their subsequent conversion into commodities and/or use-values, imply relations between actors and institutions external to the farm enterprise itself. These relations, which from a theoretical point of view are highly variable, and which constitute, in praxis, specific social relations of production, might be discussed using Figure 1.

The horizontal axis refers to the mobilization of resources, which might be mobilized on the various markets: a growing number of empirical studies have demonstrated that along this horizontal axis there is considerable empirical diversity, both between and within regions (see, among others, van der Ploeg, 1990). In synthesis, farmers relate their farm enterprises in quite different ways to markets, and although markets might increasingly represent one and the same set of external parameters for farming, the way in which farming is linked to this set of parameters is highly variable. The vertical axis of Figure 1 represents the conversion of resources into values, which implies a particular technique of combining resources in order to produce the required outputs. Farm production processes are normally structured along the lines designed by science and agribusiness, but technological designs might be also *deconstructed*. Particular elements of the designs are then reconstituted and combined with elements already existing to provide the most appropriate methods

⁶ In other words perspectives on ED arise through the comparative analysis of heterogeneity and associated styles of farming.

⁷ This section draws heavily on van der Ploeg (1994).

⁸ The latter applies in particular to the labor force recruited within the family and therefore not subject to wage-labour relations.



Source: van der Ploeg, 1994: Diagram 1

Figure 1: Farming room for manouver

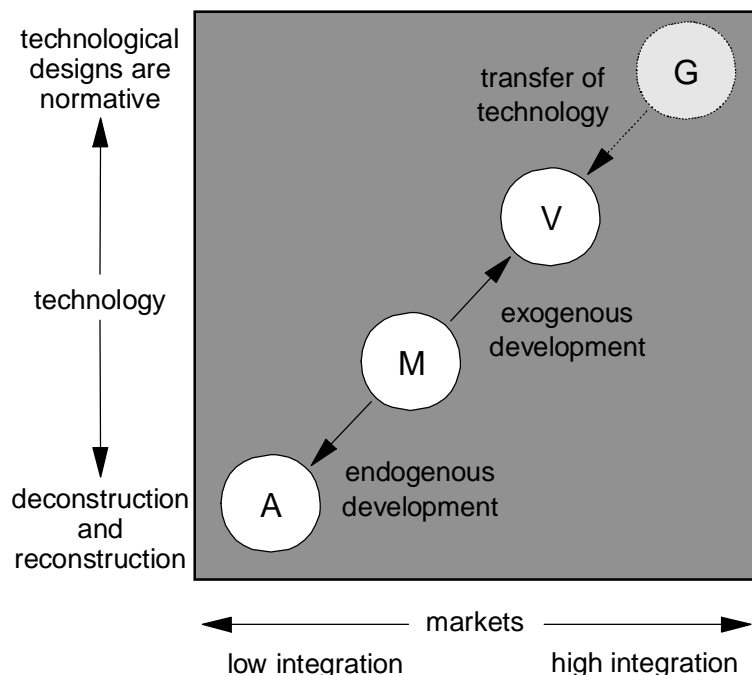
for conversion methods that differ, sometimes considerably, from the original technological designs: craftsmanship replaces external technological design as an ordering principle for organizing the production process, i.e. the conversion of resources into values.

Markets and technology thus do not determine how farming will be carried out, but provide the context in which different positions are possible. Together, they constitute «room for manouver» (Long 1984). In other words,

«[F]armers themselves, as social actors, are able to define and influence the way they relate their farming activity to markets and technology. Distantiation from and/or integration into markets and technology is of course not a matter for capricious decision. It is the object of strategic reasoning embedded in local history, ecology and prevailing politico-economic relations. Simultaneously, it is through such strategic reasoning that particular positions are created, that specific social relations of production are produced and reproduced, and that future developments and decisions become conditioned» (van der Ploeg, 1994: 9).

We can now use the diagram depicted in Figure 1 to discuss the issues of heterogeneity and different development trends in rural areas. We can imagine that the starting position is one of underdeveloped agriculture in a “marginal” area⁹ (or «lagging behind in development», as official EU

⁹ One can argue that, broadly speaking, “marginal” areas are less market-dependent and less organized along the lines of the newest technological designs than is the case for so-called growth poles. Within the forms of development discourse now dominant, these features (in other words low market-integration and technological backwardness) are currently used as indicators of an “underdeveloped” status. It is self-evident that such a definition only makes sense in a strictly “unilinear” model in which development in the «areas lagging behind» is seen as an imitation of the developmental pattern that has already been realized in the growth poles: the validity of such a



Source: van der Ploeg, 1994: Diagram 3

Figure 2: Different patterns of development

phraseology puts it). This is illustrated in Figure 2, where M represents the typical position of agriculture in a marginal area, *vis-a-vis* markets and technology in such areas: Farming, in one way or another, «lags behind» in the adoption of technology.

From theoretical, as well as empirical point of view, it is possible to identify at least two different position as agricultural and rural development starts moving, the V and A positions of Figure 2, where V stands for «Vanguard» farming, for the endeavor to create, within the global marginal conditions, a systematic effort to apply prevailing technologies and at the same time to enter into a more systematic and more tightened set of relations with the markets. It is, in synthesis, an endeavor to apply, in the marginal areas, the development model of the growth poles (G): Transfer of technology then becomes strategic, and development will materialize along the lines of the *exogenous growth model*. Outside elements (such as technologies, organizational forms, capital) and intervention (heavy subsidizing so as to create the required conditions for modernization, technical assistance and control to secure the correct application of the designed model) compose the crucial features of such an exogenous approach to growth and development¹⁰. This is the standard intervention strategy of the EU. As a matter of fact, notwithstanding the strong institutional support for exogenous growth, the results of such a strategy are rather poor for:

unilinear model is, however, highly doubtful, both theoretically and empirically (Meeus *et al.*, 1988; van der Ploeg, 1994).

¹⁰ The presence of this kind of growth model in marginal areas is not to be underestimated. Marginal areas increasingly offer what are becoming structural constraints in the so-called growth poles: space to expand production (through the acquisition of relatively cheap land, as well as additional space as far as quota, etc. are concerned) and clean resources, i.e. not yet contaminated air, water and land, which can increasingly be used to obtain additional value on the urban markets, now rapidly turning to “sound” food.

- a) it turns out to be quite difficult to create the institutional conditions necessary for the maintenance, i.e. the *reproduction over time*, of this growth model: In practice, after the “big leaps forward”, a lot of the farmers are obliged to take “steps backward”;
- b) it is becoming increasingly obvious that although this particular model might alleviate or even change some aspects of the global marginality of a given region (for instance, output at farm level), it simultaneously *deepens other aspects* (like rural employment, landscape preservation, environment conservation, intra-sectoral interlinkages, possibilities for tourism, etc.)

A third position might be encountered - indicated by position A for “alternative” in Figure 2 - which implies two features that differ noticeably from those in the positions already described: farming based *mainly on non-commoditized processes* of reproduction (on resources reproduced within the farm and/or obtained through socially regulated exchange), and in which an optimal conversion (not based on a straight-forward application of exogenous technological models, but grounded on *quality* and *quantity* of farm labor¹¹) is simultaneously realized. Farming in this case is built on an active and goal-oriented moving of the labor and production processes from both markets and technology: In this position, a relatively autonomous and historically guaranteed scheme of reproduction and craftsmanship are the typical constructions that characterize the mobilization of resources and their consequent conversion into the required social values and commodities.

The specific empirical expressions of such a “model” are far from being fully explored. But some indications can be derived from the little we do know in order to highlight a preliminary identification of «*styles of farming*¹²» (van der Ploeg, 1994: 16-24) that possibly embody endogenous development patterns:

- a) the identification of *high quality products* that allow for a relatively high value-added per unit of end product¹³;
- b) the identification of *low external input* agriculture¹⁴ that together with a high technical efficiency founded on the quantity and quality of labor, allows for additional room to achieve a reasonable income even under adverse conditions¹⁵;
- c) the identification of *specific organizational patterns* that allow for alternatives to current modernization schemes¹⁶;

¹¹ It is useful to remind that technological designs are nearly always oriented towards a reduction of both quantity and quality of labor.

¹² Styles of farming is the pivotal category of analysis of endogenous development, at least from a sociological point of view. It represents the underlying patterns of farming in terms of strategically organized flow of activities through time. It differs from farming system, as known in the so-called farming system research, because the latter, being mere descriptions of variables as manifested at a specific point in time, are more instable in time, complex (and confusing) whilst the underlying pattern might easily be missed, and not capturing the “logic of farming” (i.e. being based on particular crops, it might easily obscure the different patterns used in the production of the same crop). In other words, a style of farming is the complex but integrated set of notions, norms, knowledge elements, experiences etc., held by a group of farmers in a specific region, that describes the way farming praxis should be carried out.

¹³ The particular labor process and dependency on local resources that are often strategic for producing such commodities (and the associated social value) inhibit a high degree of incorporation into supply markets and - simultaneously - exclude a straightforward application of current technological models: craftsmanship remains essential. In other words, particular and presently expanding niches in the markets, not only allow for, but assume and require a position such as the A position.

¹⁴ This does not mean, however, that the level of total inputs is necessarily low: mostly it is labor that replaces the use of external inputs.

¹⁵ This applies not only to high quality ecological products, but also to the production of current commodities.

- d) the identification of specific combinations of *extra-agricultural activities*, which give a particular dynamic to the agrarian process of production¹⁷;
- e) the *local recognition and knowledge* of styles of farming, their inter-linkages with markets and technology, their potential and their limits¹⁸.

Those are the main features of ED patterns: They are mostly descriptive because of the lack of a well-developed theoretical background, at least from the economic point of view. This will be the research task for next years in the field. By now, it is possible to summarize ED patterns as ones having a number of distinguishing characteristics as follows:

- a) the *local determination* of development options,
- b) the *local control* over the development process, and
- c) the *retention of the benefits* of development within the locale.

But, rather than constituting a model of development with clearly identified theoretical roots, ED is more readily characterized as an idealized descriptive contrast to frequently observed patterns and processes of development. ED is locally determined, exogenous development is transplanted into particular locales and externally determined: ED tends to lead to high levels of retained benefits within local economies, exogenous development tends to export the proceeds of development from the region; ED respects local values, exogenous development tends to trample over them.

As reported, “locality” is a key concept in the ED literature, but this must not to be misunderstood. Although one can acknowledge with the claim that rural localities might be able to play to their strengths, it must also be recognized that the meaning of locality was largely deactivated and deconstructed during the epoch of modernization and that it has only recently been reconstituted. At the same time, it must be recognized that locality as such contains *no guarantee* whatsoever. One could even argue that more often than not ED is blocked not by global factors but by locality itself. Again we see that there is no general scheme for ED. It is only the careful and detailed exploration of farming styles and other local elements as embedded in particular frames of interaction with outside factors, that can render insights into the prospects for (or the impossibility of) ED.

3. SEARCHING FOR THEORETICAL ROOTS OF ED

Any discussion on the theoretical relations between ED and economics must analyze how ED fits into the branch of economics that deals explicitly with development, and namely it must take into account what is the role that economic theory assigns to agriculture in the development process. This analysis will be performed first summarizing the evolution of main concepts in

¹⁶ Both the mobilization of resources and the conversion of resources in to end-products (whatever their nature) imply specific (and highly variable) patterns in the social division of labor, of co-operation, of contradictions, etc. To be more precise, both exogenous and endogenous growth models imply specific and quite contrasting organizational patterns.

¹⁷ The expression “extra” here is somewhat misleading in so far as it suggests that these activities are external or only additional to farming. “Pluri-activity” is, of course, more often than not, strategic for the specific way farming is organized. Hence, the interlinkages, fusion and synergy of agricultural and extra-agricultural activities within one and the same economic unit (currently the family) are central for understanding the particular A type position.

¹⁸ It goes without saying that the potential suitability of this methodological approach is largely dependent on the specific culture, the patterns of communication etc., as they are encountered in each particular region.

development economics from the World War II, second contrasting ED with the so-called «endogenous growth» paradigm, which could have some resemblance with ED and, finally, stressing the important role that institutions (and institutional analysis) can play in the analysis of ED.

3.1. On the Evolution of Development Concepts from World War II

Modern development economics is a composite research field which entails several theoretical constructions and different value judgements, which refer to analytical positions that often are very distant from each other. The theories of economic development appeared in last fifty years can be summarized as five main paradigms¹⁹ (see, for example, Todaro, 1993):

- a) “linear-stage” theory, which intends development as an accelerated aggregate economic growth, following an historical pattern of stages of growth common to all nations: among others²⁰, belong to this first paradigm the Rostow’s growth theory (Rostow, 1960) and the Harrod-Domar growth model (Harrod, 1939; Domar, 1946);
- b) “structural change” models, which focus on the structural changes which take place in traditional economies moving from underdevelopment to development and entail, among others, dualistic models of development (Lewis, 1954; Fei and Ranis, 1964; Harris e Todaro, 1970) and so-called “patterns of development” models (Chenery and Syrquin, 1975; Chenery, 1979);
- c) “international dependence” revolution, which is more radical and political oriented (i.e. neo-marxist) and stresses that underdevelopment is the outcome of power relationships between the center and the periphery of the world, and of institutional and structural rigidities within the underdeveloped world (Prebisch, 1950; Baran, 1957; Gunder-Frank, 1967; Emmanuel, 1972; Amin, 1976; Furtado, 1976; Palma, 1978; Cardoso and Faletto, 1979);
- d) “neoclassical counterrevolution”, which, building on the neoclassical growth model proposed in the fifties (Solow, 1956; 1957; 1962), stresses the beneficial role of free trade, free market, *laissez-faire* economic policy (Bauer and Yamey, 1957; Bauer, 1972; Little, 1982; Lal, 1985; Balassa, 1978; Bhagwati, 1978, 1982; Krueger, 1974);
- e) “endogenous growth” (or new growth) theory, which, though steeped in the neoclassical tradition, modifies and expands the assumptions of traditional growth theory (it admits the possibility of learning by doing, it relaxes the hypothesis of diminishing return on capital, etc.) to help explain the observed pattern of growth among nations (Romer, 1986, 1990; Lucas, 1988; Barro, 1990, 1991; Barro and Sala i Martin, 1995).

All those models present some common characteristics and crucial differences. We can summarize the evolution of concepts in the last fifty years, focusing on four important issues, which are relevant in the analysis of ED (Table 1): the definition of dependent variable in such models, the independent variables and their meaning, the role of the State in promoting economic development, and the explanation of the growth/development process.

¹⁹ It goes without saying that such a classification and the subsequent critical remarks on the main features of each paradigm suffer of the obvious limitations and oversimplifications, due to a necessary schematic representation of a thought history which is, on the contrary, extremely rich and complex.

²⁰ See, also, Rosenstein-Rodan (1943), Nurkse (1953), Geschenkron (1962).

Paradigms	Period	Dependent variable	Independent variables	Role of State	Explanation of development
Linear-stage	50-60	econ. growth	Economic	High	Exogenous
Structural change	70	econ. growth, development	Economic, socio-institutional	High	Exogenous
International dependence	70	econ. growth, development	Economic, socio-institutional	Revolution	Exogenous
Neoclassical	80	econ. growth	Economic	Low	Exogenous
Endogenous growth	90	econ. growth	Economic	High	Endogenous

First of all, it is worth stressing that the whole set of paradigms can be partitioned in two subsets: in the first one we can find the linear-stage, neoclassical and endogenous growth models, which are characterized by a higher level of formalization, and by focusing mainly on the economic dimension of development; in the second one are considered the structural change and international dependence paradigms, which present the opposite features, i.e. a lower level of formalization and the focus on socio-institutional characteristics too.

This means that in the paradigms belonging to the first subset the dependent variable has not changed over the whole period, i.e. the growth rate of the economy, though criticisms on that point were well known at least since Gunnar Myrdal works²¹. There are many motivations for that: during the fifties and sixties the choice of this variable was the simple transposition into the modelling realm of what was the predominant idea in the political arena, i.e. development was practically synonymous of economic growth; in the following decades this variable was maintained as a proxy for development, because easier than the multidimensional (and slippery) concept of development²² in econometric applications. How this has been deleterious for the explanation of the development process, it is self-evident. Structural change and international dependence models have paid more attention to a richer and realistic representation of dependent variable (i.e. the purpose of development), even though this has meant a lower degree of econometric formalization.

On the side of independent variables, also, there are strong similarities among the models belonging to the first subset: some variables indeed have maintained a crucial role since the Harrod-Domar model (for instance, net investments, capital stock, savings rate, etc.). However, time passing, other variables appeared, for instance technological progress in the Solow model, and became increasingly more important. Shortly, we can say that the *leit motiv* of the evolution of the modelization is the search for a more “endogenous” explanation of economic growth, whose fundamental steps are the endogenization of physical capital productivity in the Solow model (where, however, it depends on the changes of a level variable, i.e. technological progress, which is exogenous to the model) and the subsequent endogenization (at least partly) of technical progress, which takes place in the more recent endogenous growth models. Again, the models belonging to second subset (i.e. structural change and international dependence models) did not restrict

²¹ On this point see, also, Clower (1966), Seers (1969), Goulet (1971).

²² Development is «[A] multidimensional process involving major changes in social structures, popular attitudes, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty» (Todaro, 1993: 16).

themselves to strictly economic variables, but explicitly took into account also sociological, institutional and political variables.

Finally, models differ widely on the emphasis they put on the role of the State in development process. Broadly speaking, we can say that first models (linear-stage and structural change models) seem to assign a great deal of trust on the possibility of positive effects from State intervention. On the contrary, dependency models with their emphasis on needed fundamental economic, political, and institutional reforms, both domestic and worldwide, suggest that no positive role can be assigned to the State, at least if it is not deeply restructured. Neoclassical models, with their thaumaturgical trust on the role of the market, are very suspicious on the consequences of State intervention, and explicitly suggests that the lesser the State intervenes, the better. In last years, endogenous growth models restored a significant role for government policy (complementary investments in human capital, infrastructure and research and development) in promoting long-run growth and development.

The conclusion is that the array of theories and models that have sought to illuminate economic aspects of the process of development are largely devoid of reference to endogenous development or related concepts. Only endogenous growth models try explicitly to highlight and explain a self-sustained mechanism of growth, and we will turn soon to it in order to verify if they were suitable for the analysis of ED. Before that, however, it is important to say something on the role of agriculture in development theories (Table 2).

A first observation is that there are very few paradigms that explicitly take into account agriculture, namely structural change and dependency models. Such models are typically premised on the assumption that, in a variety of ways, agriculture nurtures the process of development (see, for example, Kuznets, 1961; Johnston and Mellor, 1961). The agricultural sector is seen as a provider of food at non-inflationary prices; as a source of increased purchasing power to fuel sales in the industrial sector, as a source of investment capital for the industrial sector; or as a potential source of foreign exchange earnings to support the development process.

Most models postulate a dynamic relationship between a modern industrial sector and a traditional sector. Dual economy models are a typical example of this approach: Lewis (1954) postulated a process of labour shedding from a traditional sector, replete with surplus labour to the urban industrial sector. He envisaged successive rounds of capital investment in the industrial sector drawing more and more of the surplus labour out of the rural sector until the commercialization of agriculture is triggered. The significance of this model for the discussion we are interested in lies not in its explanatory power, but in its clear identification of the process of agricultural and rural development as being exogenously determined by the capitalistic industrial sector.

Within the broad array of dependency thought, rural areas are also viewed as largely incapable of endogenous development. The pre-capitalistic rural economy is characterised by an inward

TABLE 2: AGRICULTURE IN DEVELOPMENT THEORIES

Paradigms	Period	Explicit consideration of agriculture	Development strategy based on	Model of agricultural development
Linear-stage	50-60	NO	Industry	Exogenous
Structural change	70	YES	Industry	Exogenous
International dependence	70	YES	Industry	Exogenous
Neoclassical	80	NO	Industry	Exogenous
Endogenous growth	90	NO	Industry	Exogenous

looking self-sufficiency, i.e. rural communities are viewed as enslaved beneath traditional rules, living an undignified, stagnatory and vegetative life. Outside the early industrialised capitalist economies, the transformation effected by capitalistic development on rural areas leads to the replacement of self-sufficiency with export-oriented crop production and the substitution of locally produced craft products for imported mass-produced goods. These changes again stress the exogenous nature of the development process²³.

Both approaches reinforce the conception of rural development as “dependent” development. Within the non-marxist paradigm much attention is given to the means by which modernization can be speeded up. Thus, emphasis is placed on the provision of capital and finance in the rural sector (to get around the problems of exorbitant interest rates charged by local lenders), the introduction of new technology (to overcome the disadvantages of customary practice and primitive technology), and the provision of infrastructure (to link the area more effectively to the external world). Such changes are all likely to increase the extent of external control and incorporate rural areas more fully into national and international markets. Within the neo-marxist approaches the predominance of external concentration of power will ensure that exogenous forces prescribe the nature of development²⁴.

3.2. *ED vs. Endogenous Growth*

Although endogenous growth theory (EG) has some semantic resemblance with the concept of ED, it is, however, not suitable for an explanation of ED phenomena (Romano, 1996). First of all, ED is characterized by the local determination of development options, the local control over the development process, and the retention of the benefits of development within the locale. This focus on the “local” dimension of development process is a first, crucial, feature that differs ED as compared as EG models (Table 3), where the latter feature an analytical level which is aggregate, i.e. macroeconomic²⁵. On empirical terms this means that EG models are not suitable for the analysis of specific local case studies.

²³ Indeed the whole terminology of Marxist thinking on development is replete with references to the subservience of rural areas to the capitalist core. Colonial relationships between centre and periphery directly imply an exogenous set of forces operating on the region (see Baran, 1957; Gunder-Frank 1969).

²⁴ More precisely, de Janvry (1981) argues that a combination of land reform, that breaks the alliance between the national industrial capitalists and the traditional landed elite, and technical change, resulting in the generation of new income streams in rural areas, could result in the incorporation of marginal classes as more active participants in the national economic and political system. Again, this development process is driven by external (to rural areas) forces.

²⁵ This statement could be surprising, since, formally, the EG functions are microeconomic functions: Under this respect, the EG models are similar to the neoclassical models, which strictly speaking do not utilize individual functions, but just per capita functions, obtained subdividing the aggregate function by the relevant population.

TABLE. 3: COMPARISON BETWEEN ENDOGENOUS GROWTH AND ENDOGENOUS DEVELOPMENT		
Categories of analysis	EG	ED
Objective function	Uni-dimesional: economic growth	Multi-dimensional: development
Analytical level	Macro	Micro, Meso
Explanation of growth/development	Endogenous	Endogenous
Determinism of growth/development path	High: uni-linear	Low: diversity
Sustainability of growth/development path	Economic: high Technological: medium Environmental: low	Economic: high Technological: high Environmental: high

A common feature of the two approaches is the attempt of an endogenous explanation of development. There is, however, a significant difference in the meaning the two approaches give to the term “endogenous”: in EG models the growth mechanism seems be restricted to «learning by doing» and «learning by using» phenomena, while there is no room of manouver for «deconstruction/reconstruction» of production techniques, which play, instead, a pivotal role in local development processes. This is very important, because in this case the degree of external technological dependence decreases and the degree of adaption of such techniques to a given situation will be improved. Again, EG models say nothing on how exogenous technology could be adopted and adapted to a given situation: paraphrasing Machlup (1967), we can say that the local development system in those models is nothing but a «theoretical link», a technological black box. Therefore, from the point of view of technical change explanation, the ED paradigm seems to be more suitable than EG models.

My personal feeling is that EG models are in a situation of “comparative disadvantage” as compared as ED, because, despite the fact that they have a more powerful explanatory power than neoclassical models, they are still rooted in the neoclassical paradigm. In other words, since the dependent variable is still mere economic growth, and the presumption to be able to explain with a single model all possible development paths, pose insuperable constraints over EG models: They are not able to take into account fundamental dimensions of adoption/adaption of techniques process, like the institutional set-up, the social relations of production, the articulation of economic system at micro level, etc.

In conclusion, putting aside the semantic assonance between EG and ED, the two approaches seem to be fundamentally different. All the issues we dealt with so far seem to derive from a fundamental lack of EG models: They miss the institutional dimension of development. On the contrary, this allows the ED approach to take explicitly into account the possibility of several development paths, which are the outcomes of dynamic responses given by economic agents to changes in the operational environment. Development paths can be only partly predetermined: Development is full of uncertainties and its inner meaning can be grasped only if the theoretical framework we use is suitable for the analysis of adapative behavior to such pervasive uncertainty²⁶(Romano, 1995). As we shall see, the response will depend on the prevailing institutional set-up: a demand for an institutional change will be explicated whenever this setting will no longer be consistent with the prevailing economic and social conditions.

²⁶ That is, only if the theory allows for “closed loop strategies”, as is well known from game theory.

3.3. Changes in Traditional Thinking on Development

The conventional wisdom on development has been substantially modified by both theorists and practitioners in last decades. From both the liberal and the Marxist approaches new ideas have emerged which offer new perspectives on the contribution of endogenous factors to development processes. Within the liberal approaches a number of different strands of thinking have developed. Three particular strands seem important for the discussion at hand: The potential for spread effects to diffuse outwards from the initial locus of development, the extent to which local culture can be seen as a modifying influence on development processes, and the contribution of practicing development agents.

The assertion that spread effects will arise as a result of development in a particular location is implicit or explicit in most liberal formulations of the development process. These spread effects can arise either naturally, as in the Myrdalian conception, or can be contrived through the location of growth poles in regions where it is intended to stimulate development artificially. It might also be asserted that an alternative form of spread effect arises as a result of remittances being sent back to rural areas, or of reverse migration where the primary motive is not financial: Rather than the agricultural sector being a source of capital for the developing urban sector, it may become a destination for capital and wages earned in other sectors. The significance of this process is twofold: First, it implies a reversal of the normal direction of capital flows and the introduction of capital to support “traditional” ways of life; second, it is recognized that the reconstituted rural community can modify development pressures and mediate the development process.

A second set of modifications of normal development models can be found in the work of anthropologists and ethnographers, who argue that local culture mediates the development process, even within an apparently homogenous culture. Furthermore, local culture is seen not as a residue or as an anachronism, but «the persistent “production” of culture and attribution of value becomes an essential bulwark against the cultural imperialism of the political and economic centers, and thus provides fundamental means by (*sic*) keeping the communities alive and fruitful» (Cohen, 1982: 6). If economists ignore the enormous significance with which people invest their cultural distinctiveness, they will fail to fully understand patterns of development: Not only can development occur where neither market forces nor policy instruments have directed it, but the characteristics of development can take on specific forms (Long, 1984; Strathen, 1984).

The third modification of traditional liberal thinking comes from the largely atheoretical observations of development activists and practitioners. Perhaps the clearest statement of this is found in the work of Chambers (1983), who, highly sensitive to the failings of both liberal and Marxist agendas for development, offers a set of practical proposals and guidelines to enable development intervention to operate more effectively. Chambers «balanced pluralist approach» suggests that development agents should engage in a dialogue and learn from the intended beneficiaries of development. Chambers’ solution is “bottom-up” development, a challenge to established procedures, breaking out of top-downwards thinking, participating in decision making with the poorest, helping them to articulate their demands for services and rights and learning by acting on the ground in development actions with those that most need help. Here is evidence not so much of endogenous development but of local values being considered as a desirable ingredient in the development process: The change agent is still external, the development process still exogenous, but development is not so much imposed as negotiated.

The Marxist approaches have been modified in three ways that might impinge on the question of endogenous development: It has been argued that there is no “iron law” that compels capitalist agricultural development to take precisely the same course in other settings; the assertion that family

units comprise a transitional class has been subjected to considerable debate, which has implications on the nature of development in certain regions; the debate about capitalist restructuring and the capacity for rural regions to be affected by this spatial restructuring also has implications for theorizing about development.

The suggestion that the commonly described Marxist model of agrarian development should operate uniformly has been challenged by Carter (1979). Elaborating on case studies, he argues that, while it is possible to use Marxist analysis to explain the extraordinarily rapid agrarian development of a region, it is unreasonable to expect that the development of capitalistic agriculture will always take the same form: It can be asserted that local factors mediate and differentiate the development process, and models and theories which fail to identify this may offer weak explanations of observable patterns of development.

The extent to which peasants and small family farms have survived the ingress of capitalism into the rural economy has led to much debate about the status of family farms where the functions of management and ownership of capital and provision of labor are carried out by the farmer and his family. Farming is by no means a unique example of a small enterprise with family labor. Indeed many rural businesses are of this kind. Tourist businesses, other service businesses, some food manufacturers are characterized by their imperfect fit with the idealized Marxist model of mature capitalism. Within the mode of production described by Friedmann (1986) as «simple commodity production», the small firm can be linked into more advanced capitalism in all ways except its use of labor. Although some (Winter, 1984) have asserted that the peculiar nature of land explains this “incomplete” form of capitalism, this fails to explain why other sectors of the economy, operating without land as an organic input, possess similar structural features²⁷. As matter of fact, the existence of large numbers of simple commodity producers is one of the main features of the least advantaged sectors and regions, and to the extent that such decisions are made within the (farm) household, they are endogenous, although it is probable that many small family businesses are locked into wider circuits of capital (by credit arrangements etc.).

The third elaboration of Marxist thinking concerns the spatial manifestations of mature capitalism (Urry, 1984; Allen and Massey, 1988). The struggle for profit forces firms to exploit labor pools that have hitherto been unexploited and thus it is possible that areas remote from the capitalist core can be economically activated by decisions made literally thousands of miles away. In the struggle to keep production costs down, rural economic space is increasingly used in many countries. Where development proceeds by this route (by creating new employment opportunities and increasing economic activity in rural areas) it cannot be regarded as endogenous development. This branch-plant approach to regional development has often been criticized for ignoring the needs of the locale and for failing to establish economic activity which has a local entrepreneurial base. Firms associated with this type of economic activity are likely to be footloose and be all too ready to exit the region during recessions (Firn, 1975).

There are parallels and contrasts in the liberal and Marxist reformulations. Both acknowledge the existence of a bundle of factors that influence the course of development. However, the extent to which endogenous development can be postulated is restricted to its identification as a cultural

²⁷ The failure of normal capitalist structures to develop in these sectors may reflect the limited or uncertain returns to particular forms of economic activity, and the utility of this “incomplete” mode of production to mature capitalism. Thus, in rural tourism the part-time tourist provider offers accommodation in economic space that is unexploitable by normal capitalistic firms. This occurs because, in a period of economic difficulty, the family unit can partially disengage from the market, or reduce its rewards for labor to levels that would not be tolerated by hired labor.

variable within the liberal formulation or a local effect within the Marxist formulation. Within simple commodity production it is possible to postulate a degree of endogenous development, although this mode of production still operates in association with other more normal capitalistic forms. Chambers' liberal plea for bottom-up development represents a *crie de coeur* on behalf of the least advantaged, which tends to reaffirm the contention that exogenously controlled development often ignores the interests of the least advantaged. Endogenous development thus hovers in the shadows of some of these reformulations but rarely occupies a position of prominence. Again, endogenous development is not so much a concept with clearly defined theoretical roots, but more a perspective on rural development, strongly underpinned by value judgments about desirable forms of development.

The principal question facing economists is to explain how a concept which has been so marginal to mainstream thinking in economics should have acquired such centrality in the activities of development practitioners. Several explanations can be offered. First, it can be argued that endogenous approaches to development are rooted in the responses of marginalised groups to pressures for their assimilation into wider social and economic structures. Second, it might be asserted that endogenous development has become a tactic in effecting the economic subordination of particular groups or regions. Third, and more important, endogenous development is a means of achieving more effective development of a conventional type.

The difficulties of creating enduring benefits to regions that operate under significant handicaps of peripherality have long been recognized. Development agencies have been established to aid the development process. Often in the past the development agencies operated with very top-downwards styles, encouraging at times a significant amount of inward investment, but not a great deal of locally-based entrepreneurship. The subsequent metamorphosis of the agencies' strategy for development to one which was more focused on the support of endogenous entrepreneurship may have been influenced by the bitter experience of bad debt arising from major projects associated with external investors. Many agencies now have a much better understanding of the factors that inhibit endogenous development and are prepared to act in ways to reduce such factors by providing a variety of business and community support services.

Development agencies have thus adapted their *modus operandi*, without altering their fundamental aims and objectives. They have recognized that long-run development gains are likely to be secured more effectively by encouraging local entrepreneurship than by inducing footloose branch-plants into the area. The same packages of infrastructure development, grant-aid, loan finance and business and community support services are still in evidence, but the agencies have learned to adapt these elements to the local social and cultural context. In addition to recognising the need for a development dialogue with the recipient community, it has also become apparent that proliferating agencies must interact effectively amongst themselves (Parker, 1989). A further strategy which has been pursued by many agencies is the use of amateurs and networkers. These individuals usually operate over a relatively restricted area, often have networking responsibilities in that they try to achieve collaborative action by agencies, and endeavor to maximize the amount of indigenous activity. They provide communities with a conduit to external support services and aim to catalyze development by helping communities to recognize the options confronting them.

It would be erroneous to describe these changes in development practice as a substitution of endogenous development for exogenous development. Both are examples of dependent development, although endogenous development strategies may provide rather more opportunities for locally-based social, economic and cultural circumstances to shape the development processes. The significant differences in development strategies pursued offer opportunities not so much to

refine development theory but instead to apply known economic techniques to assess the effects of the different strategies. Comprehensive audits of development projects are to be preferred to intuitive appraisals, ideally embracing cultural, social and environmental effects as well as the economic dimension. The potential contribution of economists is considerable. The local, regional and national multiplier effects of projects can be estimated, the cost-effectiveness of different agency strategies can be explored, and the distributional consequences of particular actions can be assessed. Intuitively it might be expected that “bottom-up” endogenous development strategies would perform favorably under the scrutiny of economists. Unfortunately, the evidence to date is still too fragmentary to be able to offer any generalizations.

3.4. *The Role of Institutions and Institutional Analysis*

In section 3.2 I argued that institutions play a great role in determining ED. Here I will elaborate on this idea, trying to answer the following two questions: Why do institutions matter, and where do they come from? This will also offer the opportunity for some critical remarks on the kind of economic analysis we need, in order to take into account properly the institutional dimension of development.

Institutions can be defined as «[C]ollective rules that define socially acceptable individual and group behavior» (Bromley, 1989: 44), i.e. they are a set of conventions and norms that define the society’s «working rules» (Commons, 1968: 6). This means that any institutional set-up has its own «normative content», i.e. any given institutional structure defines what is a cost (or a benefit) and for whom, by means of shaping choice sets from which economic agents (individuals, firms, households, and other decision-making units) choose courses of action. The economy as a set of ordered relations obtains its structure and operational character from institutions: It is the institutional set-up which gives meaning to economic concepts like efficiency and optimality. Institutions exist because, as ordered relations, they reduce uncertainty within social and economic systems, or, as Ford Runge (1984: 162) has put it, institutions «[O]rganize, process, and store the essential information required to coordinate human behavior».

3.4.1. **Why do institutions matter?**

If we agree with the statement that any institutional structure has its own normative content, then it is clear why institutions matter in development processes: Both efficiency and distributional outcomes of development are determined by institutions. And, of course, there could be institutional set-up that are more conducive than others to development. As a matter of fact, an institutional set-up which is “born from within” (i.e. which is not juxtaposed from outside) offers more guarantees to be successful: this is the experience of the most part of the rural development projects in the Third World (see section 3.3), and is also the experience of the Italian industrialization model, based on small and medium enterprises, organized in industrial districts (Becattini, 1987, 1989). It could be interesting to analyze a bit deeper the latter example, because it is a nice case study which has several features that can shed light on the issue of ED; furthermore, the same analytical category (i.e. district) has been recently proposed as an example of ED pattern in rural areas (Iaconi *et al.*, 1995).

An industrial district (as well as an agricultural or an agro-industrial district) is a local development system where takes place a «strengthening of industrial relations, which is lasting over time and creates a complex network of positive and negative externalities, as well as of historical heritage». What is important in the Italian experience is that the diffusion of industrial districts is perfectly consistent with the diffusion (until early post-World War II years) of a particular

institutional structure, where sharecropping (“*mezzadria*”) was the predominant agricultural contract. Here, we are not saying that sharecroppers and landlords mechanically turned themselves into workers and/or entrepreneurs: It is just important to point out the statistical correlation between diffusion of *mezzadria* and diffusion of industrial districts: Economic historians have explained that with the fact that the *mezzadria* contract was based on farm management sharing, it was conducive to a culture of firm management sharing, which has been the fertile environment where industrial districts were born.

From an economic point of view, Iacoponi (1994) proposed a new-institutional analysis of the industrial district, arguing that it modifies the firms’ economic space: The local system of firms is a “quasi-market system”, where firms have to decide whether “buy” or “make”, on the base of economic comparisons on production, transport and transaction costs. However, this decision is not only an economic decision, since, as pointed out by Becattini,

«[T]he advantage of local products as compared as those coming from outside is not a mere advantage in terms of transport costs, but relies upon an array of other factors, which call for spatial proximity and the belonging to a human group which is historically and culturally identified» (Becattini, 1989: 13).

In other terms, what Becattini and Iacoponi stressed, is that the different position with reference to the firm’s “efficient boundary” has impacts not only in terms of commodities production, but also in terms of social reproduction of the local system:

«[T]he local *milieu* is the end-tail of a natural and human history, that provides the production organization of some essential inputs, like labor, entrepreneurship, material and immaterial infrastructures, social culture and institutional organization. (...) Production is not only the transformation of a (given) set of inputs into an output according to given technical processes, but it means also the reproduction of material and human requirements on which the production process is built. (...) Commodity production entails the social reproduction of productive organism: a truly productive process should co-produce not only commodities, but also values, knowledge, institutions and the natural environment that perpetuate it» (Becattini e Rullani, 1993:).

Another important assertion²⁸ in explaining why institutions do matter, is that any institutional setting is also an “authority system” able to ensure that the expectations of right holders are met: «[C]ompliance, protected and reinforced by an authority system, is a necessary condition for the viability of any property regime» (Bromley, 1991: 27). The more consistent to the values diffused in the polity, the better the operational effectiveness of the institutional set-up. This statement is well-known and proved in many case studies, mainly in LDC, where indigenous property rights structures (mainly based on common property regime) have been substituted by colonial (i.e. private or State) property regimes that undermined and delegitimized the original one, being not able to establish the implicit and explicit legal foundations of an economy and society. Again, the juxtaposition of an alien (i.e. not accepted) institutional set-up has served worse than the endogenous one. Using Bromley’s words for depicting such a situation, in these countries

«[M]ost economic activity is plagued by strategic uncertainty - a situation in which economic actors are precluded from maximization by the everchanging nature of the “rules of the game”. This fluid condition, what Myrdal called the *soft state*, means that the family and the village become the

²⁸ Often forgotten in economic analysis.

primary unit for economic exchange. (...) With the institutional foundations of the economy being ineffective in providing a secure basis of economic calculation over space and time, we also find that social sanctions and conventions regarding land and natural resource use are either absent or contradictory. This situation can be thought of as arising from an *institutional vacuum*, or from *institutional dissonance*. In either case, independent economic agents are, for the most part, left to their own wile and creativity to assure survival.» (Bromley, 1991: 105).

Those examples should be clear enough on why institutions matter on an empirical ground. However, this recognition has implications also on theoretical ground: An economic theory that is aimed to the explanation of development cannot avoid to take into account the institutional dimension of development process. This means that the received theoretical apparatus (i.e. mainstream economics) must be expanded to include not only the mere exchange of commodities, but also the definition of individual and collective choice sets, i.e. the institutional change (Commons, 1961). Such an expanded view undermines the conventional wisdom²⁹ of economic efficiency as the driving force for institutional change, because recognizes that efficiency, however defined, is dependent upon the institutional structure that gives meaning to costs and benefits, and that determines the incidence of those costs and benefits. Therefore, a model of institutional change that is driven by the quest of economic efficiency is circular, or, using Bromley's expression, it is «largely tautological». This calls for a theoretical model of institutional change that offers a legitimate rationale for institutional change, other than that of narrowly construed economic gain.

3.4.2. Where do institutions come from?

There are basically two views of institutions and their birth in economic theory:

- a) in the first, which Schotter (1986: 117) calls the «school of social institutions», they are seen as sets of rules that constrain individual behavior and define social outcomes that result from individual action (see, among others, Buchanan e Tullock, 1962; Tideman e Tullock, 1971; Dasgupta *et al.*, 1979; Nabli e Nugent, 1989). Throughout this literature, social institutions are planned and designed mechanisms given exogenously to or imposed upon a society of agents. Institutional change is a process of social engineering that takes place through the manipulation of the rules;
- b) the other view, called by Schotter (1986: 118) the «behavioral view» (see, among others, Menger, 1883; Hayek, 1973; Williamson, 1975; Schotter 1981), looks at social institutions not as sets of predesigned rules, but rather as unplanned and unintended regularities of social behavior that emerge «organically» (to use Menger's term). What changes is the view of how these institutions are created - they emerge or evolve spontaneously from individual maximizing or satisficing behavior, instead of being designed by a social planner.

Though both approaches are appealing, it is the second view of institutional change that seems relevant for ED³⁰. New-institutional economics has given important contributions on how institutions

²⁹ See, for example, the so-called «property rights» theory (Coase, 1937, 1960; Demsetz, 1967; Alchian and Demsetz, 1973), the «induced institutional change» model (Hayami and Ruttan, 1985), and the North (North and Thomas, 1970) model of institutional change. For a critical assessment of those models, see Bromley (1989).

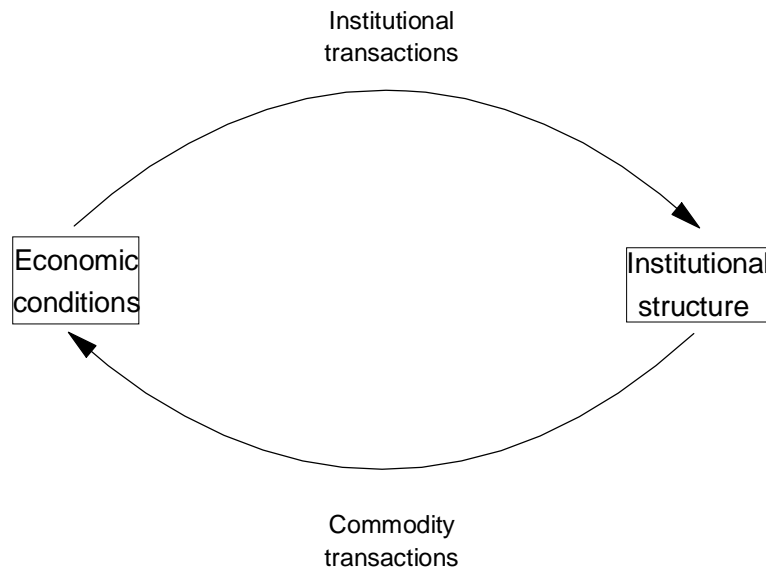
³⁰ This doesn't mean, obviously, that the first view of institutions has no relevance. Examples of important questions that can be raised under this view could be: Which role for Public interventions in ED processes? How can the degree of endogeneity of exogenous institutions be augmented? Etc.

can emerge³¹, so I won't deal with these topics here. Instead, it seems worth stressing a "truly" institutionalist explanation of institutional change. If one accepts the hypothesis that institutions can influence economic outcomes, it is straightforward to accept also deliberate actions, aimed to change the institutional set-up, by economic agents. In other words, economic behavior is more than exchange of goods and services, it is also about the definition and delimitation of individual and group choice sets: individuals are interested not only in «commodity transactions», but also in «institutional transactions». As suggested by Bromley,

«[W]hen economic and social conditions change, then the existing institutional structure may no longer be appropriate. In response to these new conditions, members of society will undertake efforts to modify the institutional arrangements (...) so as to bring them in line with the new scarcities, the new technological opportunities, new distributions of income and wealth, of the new tastes and preferences. Those activities undertaken in response to new economic conditions, with the intent of establishing new institutional arrangements, are called *institutional transactions*. Those activities undertaken within a given institutional structure are referred to as *commodity transactions*» (Bromley, 1989: 110).

Therefore, it can be envisioned a process of circular causation between economic conditions and institutional structure (Figure 3). It is such an iterative mechanism that is innovative, as compared as to both neoclassical and new-institutional models: It explains, in a truly *endogenously* way, institutional change. Such a model of institutional change explicitly recognizes that any decision-making unit has its own preferences, which find an expression in interests, which then show up as claims against the prevailing institutional structure. The intent of such claims is, in the final analysis, to modify existing institutional arrangements, in order to provide a new different structure of conventions and entitlements. The analytical relevance of this approach for ED is its capability to take into account endogenous institutional changes: It can be a framework for the economic analysis of such a change, by means of economic explanatory categories (i.e. institutional transactions that increase productive efficiency, that redistribute income, that reallocate economic opportunities, and that redistribute economic advantage) which allows for a "fine tuning" on rural ED (see Romano, 1995).

³¹ Focusing on transaction costs (Coase, 1937, 1960; Simon, 1955, 1959; Williamson, 1975), on property rights (Coase, 1937, 1960; Demsetz, 1967; Alchian e Demsetz, 1973), and on asymmetric information (Stiglitz, 1985). Since those approaches are widely applied in agricultural economics (see, among others, Nabli e Nugent, 1989; Bardhan, 1989; Hoff *et al.*, 1993).



Source: Bromley, 1989, Figure 5.1

Figure 3: Institutional and commodity transactions

4. ED AND SUSTAINABILITY

4.1. Definitions of Sustainability

It is generally recognized that sustainability is a vague and ambiguous concept, but one with the potential to bridge the divide between developers and environmentalists. By acknowledging that development and economic growth can be sustained, the term allows developers and production interests to feel that environmental concerns can be assimilated into business practices. At the same time, it signals to environmentalists that they have a role to play in determining what counts as sustainable practice. So far, however, the ready acceptance of the term sustainable development rests on its imprecision, which allows for difficulties and differences to be glossed over. As O’Riordan (1988: 29) argues, it is its ambiguity which makes it so attractive to both sides, for developers «[N]ow realize that under the guise of sustainability almost any environmentally sensitive programs can be justified, (while) environmentalists abuse sustainability by demanding safeguards and compensating investments that are not always economically efficient or socially just». So while sustainability is a concept with the potential to build a bridge between environmentalism and development, it may also serve as a “cover” for traditional practices. There is, therefore, a need to define sustainability more closely in order to make clear what might count as sustainable practice.

The concept of sustainable development was first publicized in the World Conservation Strategy in 1981 and was subsequently adopted in the Bruntland Report (WCED, 1987). The idea is beginning to achieve widespread acceptance. It has been incorporated into official policies at both

the international level - with, for example, the establishment of a Sustainable Development Commission at the Rio Conference - and in national government strategies. A possible definition³² of sustainable development is the one quoted from the Brundtland Report:

«[S]ustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs» (WCED, 1987).

This has the advantage of being brief, and highlights the central concern within the sustainability literature, which is to maintain welfare over time. The notion of needs can extend from very general to the specific, while the period over which this should be sustained is often not explicitly stated, but according to Markandya and Pearce (1987), unless there are good reasons for the contrary, the time horizon in question should be an infinite one.

Sustainable agriculture is coming to mean all things to all people. There does seem however, to be a prevalence of ecological considerations in the current definitions. Conway (1987), for example, defines sustainability as the ability of an agro-ecosystem to maintain productivity when subject to a major disturbing force: This represents the “resilience” of the system. Altieri (1989), on the other hand, defines sustainable agriculture as a system which should aim to maintain production in the long-run without degrading the resource base, by using low-input technologies that improve soil fertility, by maximising recycling, enhancing biological pest control, diversifying production, and so on³³. According to Riley (1992), the level of analysis chosen can be a significant influence on sustainability. At the field level, particular soil management, grazing and cropping practices will be the most important determinants of sustainability. At the farm level, sustainable resource use practices need to support a sustainable farm business and family household. At the national level, there may be broader pressures on the use of agricultural land from non-farming sectors, and at the global level, climatic stability, international terms of trade and distribution of resources also become important determinants.

As soon as sustainability is taken into account complex choices are to be made. How, in practice, will the concept of sustainability allow us to make these choices? What kinds of calculations does sustainability entail within the development process? Two components are involved:

- a) the need to integrate environmental considerations and economic policy-making, and
- b) the distributional consequences of development.

The requirements of the first component have stimulated inquiry into new institutional structures, regulatory procedures, and economic measures. The main axis of debate is between advocates of market-type solutions and advocates of institutional and procedural reform. The former involve the financial valuation of environmental costs and benefits, and their incorporation into development appraisals, the measurement of economic performance and the formulation of economic incentives. The latter refer to the development of “enabling” institutions which are concerned with decentralization and local control as opposed to hierarchical bureaucratic structures.

The second component - equity - has always been at the heart of environmental conflicts. But the debate on sustainability has given it a new complexion. In the 1960s and 1970s, for example, a common charge was that environmentalism was the preserve of the well-off who did not want to see

³² Despite its long gestation, there is little convergence between different notions of sustainable development. For instance, Pearce *et al.* (1989) identified 24 different definitions, while Pezzey (1992) at least 33.

³³ There is a tendency to assume that as long as the proposed systems benefit the environment and are profitable, sustainability will be achieved and the whole of society will benefit. However, what is produced, how, and for whom, are important questions that must also be considered if a socially sustainable agriculture is to emerge.

their standard of living diluted or threatened by others seeking the good life. Such considerations of intra-generational equity have to some extent been displaced by more recent concerns about inter-generational equity. However, the key point to recognize is that a legitimate concern for the welfare of future societies does not foreclose debate on the existing distribution of resource use. On the contrary, it should pose rather starkly the trade-offs between intra- and inter-generational equity. In other words, if resource constraints have to be introduced for this purpose now, how should the sacrifice involved be fairly distributed amongst the present generation? Another and more practical way of approaching these same issues is through addressing the long term effectiveness of existing social structures and institutions on which the maintenance of environmental and economic well-being depend.

In the context of rural development this raises the question of the sustainability of rural communities and the resources upon which they depend. A move toward a more resource conserving future might begin to redress the rural-urban imbalance in farming methods on the one hand and in commuting patterns on the other. More generally, it will emphasize the vital functions that rural areas perform as environmental reservoirs, maintaining and renewing the quality of natural resources; and as a living space, providing human refreshment and recreation through the cultural, aesthetic, and amenity qualities. So what are the implications of these understandings for current economic and social practices in rural areas?

4.2. *ED and sustainability*

The key value of the sustainability concept has been seen as its ability to overcome the old dichotomy which insisted that people had to be in favor of either economic progress or environmental protection. However, sustainability has a broader meaning encompassing the viability of localities and communities on which the maintenance of both the environment and economic activity ultimately depends. For those concerned with the economic and social development of rural communities, this is obviously crucial, but it has been often neglected in contemporary debates about sustainability.

In addressing issues of “rural” sustainability, one vague term meets another. Finding a precise definition of rurality has been a long and largely fruitless enterprise (Neetby, 1986), and we may have to be satisfied with a use of the term which is purely descriptive. However, we may address the general processes that have given rise to contemporary changes in rural areas. Rural social change has been experiencing bifurcatory processes. On the one hand, industrial agriculture is being increasingly vertically integrated into the modern agro-food system. On the other hand, there has been a horizontal disintegration and recombination of the spatial structure of society induced by the changing geography of capital accumulation. It is within this overall framework that we must address the issue of “rural” sustainability.

It can be seen that rural sustainability is undermined by agriculture, particularly as agriculture is the dominant user of rural land. However, in discussing sustainable agriculture, the ecological dimension has tended to be privileged while the social dimension has been neglected. This is despite the fact that one of the central objectives of agricultural policy in the EU and much of the advanced industrial world has been to maintain farm incomes and keep farmers on the land (i.e. a socially sustainable agriculture). The current economic and ecological crisis for agriculture has, therefore, opened up the space for a discussion of what sustainable agriculture might be, and how it might be operationalised. Current responses to the crisis in agriculture have three broad strands:

- a) encourage the removal of some resources such as land and people from agricultural production, but on some land only,
- b) some areas of particular environmental priority are delimited and payments are made to farmers as environmental managers, and
- c) on the rest of the land, a productivist agriculture is allowed to carry on.

In this context, the recent CAP reform can be seen to be a continuation of the agro-centricity of agricultural and rural policy. Social sustainability in much of rural Europe is still to be sought through a productivist agriculture. Thus, there continues to be a trade-off between ecological priority areas and the productivist pressures of the agricultural treadmill. And, in the emerging mosaic of ecological priority areas, agriculture relations with the local natural environment become critical.

This increasing differentiation of land uses within the agricultural sphere, along with the current interest in developing a sustainable agriculture, is leading to a renewed concern with local contexts. Indeed, one response to the growing globalisation of the food system has been to stress the need for a local focus to any discussion of sustainability. Heterogeneity and localness (see section 2.1) are continuing features of contemporary agriculture, but must be assessed in relation to the dominant tendencies towards standardisation. Agriculture is becoming “disconnected” from local features such as nature, labour skills (through appropriation from external agencies), the labour process (now increasingly governed by external technologies) and end products (now often merely the raw material for processed foods). According to van der Ploeg, this disconnection is leading to new forms of local knowledge:

«[T]hese not only concern, in different situations, the application of general rules, procedures and artifacts, they also entail specific responses on how to resolve the particular problems that emerge from such an application» (van der Ploeg, 1992: 26).

This local knowledge derives from the direct experiences of production processes which are themselves shaped and delimited by the distinctive characteristics of a particular place with a unique and physical environment. It is finely tuned to the requirements of local conditions. This focus upon a locally situated production process is clearly useful in beginning to think about how sustainability might be contextualized. However, a note of caution has been sounded here. Molnar *et al.* (1992) argue against any romantic reification of local knowledge, which could distort the importance of local knowledge and neglect the limits of the local. They believe it is naive to blindly promote farmers as a category to a superior status as knowledge producers without first giving consideration to the differences between farmers and scientists. In the view of these authors, local knowledge may be useful, but only in adapting general solutions: «[B]asic science must be the starting point and market signals cannot be ignored» (1992: 87). Here again the emphasis is on the promotion of “spatially-indifferent” solutions. But this ignores, or at best plays down,

«[H]ow basic science has tended to derive the specific from the general, squeezing local differences into more standardised forms. This has diminished the differences between agro-ecosystems. The mismatch between farming practices and local environments has emerged precisely because of the diffusion of basic science. This makes the achievement of sustainability problematic at the local level as local agro-ecosystems have become integrated into unsustainable systems at the international level» (Murdoch *et al.*, 1994: 273).

This emphasis on local and regional frameworks for the implementation of sustainable agricultural practices within this global system of scientific productivism inevitably raises questions associated with the most appropriate institutions and instruments of regulation. This has led to

considerable interest in the benefits of an integrated approach. According to the OECD (1989), successful integration of environmental and economic concerns requires policy-makers to give full consideration to, and accept responsibility for, the effects of their policies on the objectives of all other sectors. This notion of “responsibility” is central to the development of an integrated policy but it is clear that this kind of accountability can only be conveyed in certain types of institutions: Large, centralised bureaucracies distant from their areas of governance, are difficult to bring to account. Localised institutions, on the other hand, can be closely tied to the policy outcomes and their effects. Indeed, the OECD recognises that the «[O]pportunities for integration are often greater at the regional level³⁴» (1989: 8). Local conditions, both environmental and economic, can more readily be incorporated into research and advisory programs and management agreements are, by definition, localised. These policies need to be sensitive to local circumstances and rely on local farming knowledge for their detailed implementation. This marks a move away from centralised, homogeneous agricultural policies which seek to obliterate diversity. Policy institutions themselves must also reflect this diversity.

This type of approach also allows us to link social sustainability (rural livelihoods) to ecological sustainability. The policy instruments - research and advice, sanctions on pollution, incentives and taxes - need to be geared to the social reproduction of farming systems. Integrated policies may make this easier to achieve. One way of approaching this issue is through the concept of «sustainable livelihoods», developed most notably by Chambers (1992: 215), who has proposed an approach to sustainable development which put at its heart the question of how people can be enabled to gain adequate, secure, decent and sustainable livelihoods in rural areas. The first priority is not the environment or production but rural livelihoods, stressing both the satisfaction of basic needs and long-term security. The essence of this approach is to reverse top-down thinking by empowering people and giving them the resources to manage their own livelihoods. These resources include equitable and secure rights and access to resources; access to basic services; and safety nets of support. This approach of “putting people first” means that development agencies must strengthen their training methods, spend time in the field learning with rural people, direct expertise to neglected gaps in local knowledge bases, and sponsor new initiatives.

The strengths of the sustainable livelihoods concept are three-fold. First it ensures that sustainability contains a social as well as an environmental dimension. Secondly, the concept has a strong bottom-up democratic thrust. Thirdly, the concept acknowledges that people be treated as a resource, not just as consumers, or as producers concerned solely with profit and that human capital, including skills and knowledge and resource-conserving practices, needs also to be conserved. However, there is also a need to ensure the economic activities themselves are sustainable, and this brings us to the area of market participation. If agricultural production systems are to play to local strengths, then the issue of developing sustainable markets becomes crucial.

A first assertion on this point is that regional or local control of their production processes by primary producers does allow them to both police the ecological aspects of production and capture a market advantage through the “greening” of their practices. “Environmental auditing” could be the

³⁴ This becomes clearer when we examine the opportunities identified by the OECD for a better integration of agricultural and environmental policies. These include (i) the development of research and advisory programs promoting environmental objectives; (ii) encouragement of farm management plans to include environmental considerations; (iii) management agreements for the improvement of landscape amenity and nature conservation value; (iv) promotion of environmentally favourable practices such as integrated pest management schemes; (v) charges on inputs such as fertilizers and pesticides; (vi) making income, capital and land taxation policies neutral with regard to agricultural and environmental objectives.

management tool to assess internal performance and to identify means of improving arrangements for environmental management: The European Commission has proposed a directive which would lay down standardised procedures for the conduct of environmental audits, their external verification and public reporting requirements.

Many producers have begun to realise that a green image may be good for business. Green Consumerism has emerged as a powerful force amongst well-off and concerned consumers, and is now being paralleled by the contemporary debate in Europe over “eco-labelling”. An initial focus of green consumerism was retailing and, particularly the food sector. However, the concerns of major retailers coupled with the activities of environmental campaigners have pushed the pressure down the production chain: It is incumbent on firms in high value consumer industries and the food sector to demonstrate that their products have been responsibly produced. A growing feature of most EU countries is pressure from consumers for greater information about food products, their contents and their provenance, and greater discrimination concerning healthy eating and life-styles. These concerns increasingly focus on issues to do with food purity. A parallel development is that of responsible consumption, where people seek to pursue ethical principles in the consumer choices they make. These principles may embrace, for example, animal welfare concerns, the environment and social justice in the labour process. At the same time, there is growing demand for localised and crafted products of high quality and identifiable origin. There seems growing scope, particularly through effective marketing and product development for these two trends to converge in demands for high class niche products carrying a passport indicating their provenance and responsible production.

Effective place marketing would be the key to link the promotion of such niche products with rural sustainability. In this way, production could be tied to the assertion of positive environmental images of place thus assisting local produce to carve out niche markets. This could be further facilitated by the promotion of co-operation between local producers so that a single image of community and place is promoted, thereby tying together the protection of rural livelihoods with the protection of the rural environment.

As agriculture goes through a transition towards sustainability, many farmers may need to diversify into other economic activities. Agriculture’s (horizontal) links with the local economy should be incorporated into economic strategies. Similarly, its international (vertical) links with the food system and the consequences of this need to be recognised. The local development agencies must, therefore, carry a responsibility for local environmental and human resources. They should concern themselves with both sustainable ecosystems and livelihoods. In conclusion, however, it is worth noting the limits to this strategy. While we have emphasised the localised nature of sustainable rural development, this is only part of the picture. As pointed out by Norgaard (1992), sustainable development requires to be initiated locally, but on its own this is clearly insufficient: It must be part of a broader strategic framework concerned with sustainability at all levels of governance.

5. CONCLUSIONS

The analysis carried out in this paper has reached no definitive conclusions: The issue of ED needs more researches in order to highlight its internal mechanism and to try any generalization on such a mechanism. However, some intermediate conclusions, based on what we do know so far, are the following:

- a) ED doesn't fit with any development economics model: The model appeared so far in the literature focus on mere economic growth and/or are rooted in an idea of development as an exogenously driven process. However, the practice of development practitioners, in Third World as well as in developed countries, has shown how important is an approach that puts the people first, building on local communities and strengthening the existing network of relations at local level. This is why
- b) ED is closer to a sociological and development practitioners perspective, rather than an economic perspective. This is unfortunate, because usually economists tend to reject theoretical constructs that don't have the "flavor" of economics. However, if economists ignore the significance of ED patterns, they will fail to fully understand a great deal of development experiences, in both underdeveloped and developed world: Not only can development occur where neither market forces nor policy instruments have directed it, but the characteristics of development can take on specific forms. This redirects our attention to the
- c) crucial role of institutions. By now there is a huge amount of experience which witnesses that development will be more effective if based on locally tailored institutions. But this must not to be misunderstood: Although one can acknowledge with the claim that rural localities might be able to play to their strengths, it must also be recognized that "locality" as such contains *no guarantee* whatsoever, sometime it works, other times it doesn't. It is important to analyze why does this happen. There therefore is a
- d) need for an institutional analysis of ED. It is only the careful and detailed exploration of farming styles and other local elements as embedded in particular frames of interaction with outside factors, that can render insights into the prospects for (or the impossibility of) ED. This, also, is probably the only way to carry out an economic assessment of ED phenomena, as shown recently by Ostrom's works (Ostrom, 1990, 1994; see, also, Bromley, 1992, and Runge, 1995).
- e) Finally, it seems that the issue of sustainability could fit nicely with ED.

Infact, sustainability is about more than the maintenance of ecological resource levels and biodiversity: The concept has a social dimension that must be placed at the centre of any discussion of how sustainability is to be made practicable, and the link between the social and the ecological components of sustainability can be most readily combined within local settings. Implicit in this argument is the belief that a rupture has taken place, through the use of particular technologies driven by basic science and the market, which has broken the link between social systems and their immediate environments. Thus, the "art of localization" has been submerged under a barrage of technological transformations. This has not, however, freed these social systems from ultimate environmental constraints: a return to a concern with immediate, local environments provides at least a starting point for the promotion of a sustainable agriculture and for challenging the agriculture's dependence on external forms of credit and technology. The focus, here, is very close to the one argued by Norgaard (1992), when he proposed a «co-evolutionary» approach to sustainable development:

«[S]ustainability does not imply that everything stays the same. It implies that the overall level of diversity and overall productivity of components and relations in systems are maintained and enhanced. (...) The shift towards sustainable development entails adopting policies and strategies that sequentially reduce the likelihood that especially valuable traits will disappear prematurely. It also entails the fostering of diversity per se» (Norgaard, 1992: 81-82).

This diversity applies not just to ecological systems, but to social, cultural and organizational systems. The sustainability of social and ecological systems at the local and regional levels needs institutional support and regulation, and this entails the development of political institutions for this end. It also implies increased accountability and democratic sanction within these new regulatory institutions. In this way rural localities might be able to play to their strengths. The production of “green” commodities may enhance the status of those localities which are able to most successfully link product and place, so leading to a regeneration of areas which are, at present, viewed as peripheral within global systems of production. In this way, rural livelihoods could be strengthened locally rather than weakened globally.

REFERENCES

- Alchian, A., and Demsetz, H., 1973. The Property Rights Paradigm. *Journal of Economic History* 13: 16-27.
- Allen, J., and Massey, D., 1988. *Restructuring Britain: The Economy in Question*. Sage. London.
- Altieri, M., 1989. Agroecology: A New Research and Development Paradigm for World Agriculture. *Agriculture, Ecosystem, and Environment* 27: 37-46.
- Amin, S., 1977. *Imperialism and Unequal Development*. Monthly Review Press. New York.
- Arrow, K.J., 1962. The Economic Implications of Learning by Doing. *Review of Economic Studies* 29 (June): 155-73.
- Balassa, B., 1978. Exports and Economics Growth: Further Evidence. *Journal of Development Economics* 5 (June): 181-9.
- Baran, P., 1957. *The Political Economy of Growth*. Monthly Review Press. New York.
- Bardhan, P., 1989 (eds.). *The Economic Theory of Agrarian Institutions*. Clarendon Press. Oxford.
- Barro, R.J., 1990. Government Spending in a Simple Model of Endogeneous Growth. *Journal of Political Economy* 98 (Oct, part II): 103-25.
- Barro, R.J., 1991. Economic Growth in a Cross Section of Countries. *Quarterly Journal of Economics* 106 (May): 407-44.
- Barro, R.J., and Sala i Martin, X., 1995. *Economic Growth*. McGraw-Hill. New York.
- Bauer, P.T., and Yamey, B.S., 1957. *The Economics of Underdeveloped Countries*. University of Chicago Press. Chicago.
- Bauer, P.T., 1972. *Dissent on Development*. Weidenfeld & Nicholson. London.
- Becattini, G., 1987 (eds.). *Mercato e forze locali: il distretto industriale*. Il Mulino. Bologna.
- Becattini, G., 1989 (eds.). *Modelli locali di sviluppo*. Il Mulino, Bologna.
- Becattini, G., and Rullani, E., 1993. Sistema locale e mercato locale. *Economia e politica industriale* 80: 24-48.
- Bhagwati, J.N., 1978. *Foreign Trade Regimes and Economic Development: Anatomy and Consequences of Exchange Control Regimes*. Ballinger. Cambridge.
- Bhagwati, J.N., 1982. Directly Unproductive Profit-Seeking (DUP) Activities. *Journal of Political Economy* 90 (October): 988-1002.
- Bhagwati, J.N., Brecher, R.A., and Srinivasan, T.N., 1984. DUP Activities and Economic Theory. In D.C. Colander (eds.), *Neoclassical Political Economy*. Ballinger. Cambridge.
- Bhagwati, J.N., and Srinivasan, T.N., 1980. Revenue Seeking: A Generalization of the Theory of Tariffs. *Journal of Political Economy* 88 (Dec.): 1069-87.

- Hoff, K., Braverman, A., and Stiglitz, J.E., (eds.) 1993. *The Economics of Rural Organizations: Theory, Practice, and Policy*. The World Bank. Washington DC.
- Bromley, D.W., 1989. *Economic Interest and Institutions: The Conceptual Foundations of Public Policy*. Basil Blackwell. Oxford.
- Bromley, D.W., 1991. *Environment and Economy. Property Rights and Public Policy*. Basil Blackwell. Oxford.
- Bromley, D.W., 1992. *Making the Commons Work. Theory, Practice, and Policy*. ICS. San Francisco.
- Buchanan, J.M., and Tullock, G., 1962. *The Power to Tax*. Cambridge University Press. New York.
- Cardoso, F.H., and Faletto, E., 1979. *Dependency and Development in Latin America*. University of California Press. Berkeley.
- Carter, I., 1979. *Farm Life in North East Scotland 1840-1914: The Poor Man's Country*. J.Donald. Edimburgh.
- Chambers, R., 1983. *Rural Development: Putting the Last First*. Longman. London.
- Chambers, R., 1992. Sustainable Livelihoods: The Poor's Reconciliation of Environment and Development. In Ekin, P., Max.Neef, M., (eds.). *Real-Life Economics: Understanding Wealth Creation*. Routledge. London.
- Chenery, H.B., 1979. *Structural Change and Development Policy*. Oxford University Press. New York.
- Chenery, H.B., and Syrquin, M., 1975. *Patterns of Development, 1950-1970*. Oxford University Press. London.
- Clower, R., 1966. *Growth Without Development*. Northwestern University Press. Evanston.
- Coase, R.H., 1937. The Nature of the Firm. *Economica* 4 (Dec): 386-405.
- Coase, R.H., 1960. The Problem of Social Costs. *Journal of Law and Economics* 3 (1): 1-44.
- Cohen, A.P., (ed.) 1982. *Belonging*. Manchester University Press. Manchester.
- Commons, J.R., 1961. *Institutional Economics*. University of Wisconsin Press. Madison.
- Commons, J.R., 1968. *The Legal Foundations of Capitalism*. New York. McMillan.
- Conway, G., 1987. The Properties of Agroecosystems. *Agricultural Systems* 24: 87-117.
- Dasgupta, P., Hammond, P., and Maskin, E., 1979. The Implementation of Social Choice Rules: Some General Results on Incentive Compatibility. *Review of Economic Studies* 46 (2): 185-216.
- de Janvry, A., 1981. *The Agrarian Question and Reformism in Latin America*. The John Hopkins University Press. Baltimore.
- Demsetz, H., 1967. Toward a Theory of Property Rights. *American Economic Review* 57 (2): 347-59.
- Domar, E.D., 1946. Capital Expansion, Rate of Growth, and Employment. *Econometrica* (April): 137-47.
- Emmanuel, A., 1972. *Unequal Exchange*. Monthly Review Press. New York.

- Fei, J.C.H., and Ranis, G., 1964. *Development of the Labor Surplus Economy*. Irwin. Homewood.
- Firm, J., 1975. Branch Plants in Regional Development. In G. Brown (ed.). *The Red Paper on Scotland*. Edinburgh University Student Books. Edinburgh.
- Friedmann, H., 1986. Family Enterprises in Agriculture. Structural Limits and Practical Possibilities. In G. Cox et al. (eds.). *Agriculture: People and Politics*. Allen and Unwin. London.
- Furtado, C., 1964. *Development and Underdevelopment*. University of California Press. Berkeley.
- Geschenkron, A., 1962. *Economic Backwardness in Economic Perspective*. Belknap. Cambridge.
- Goulet, D., 1971. *The Cruel Choice: A New Concept in the Theory of Development*. Atheneum. New York.
- Grossman, G.M., and Helpman, E., 1992. *Innovation and Growth in the Global Economy*. MIT Press. Cambridge.
- Gunder-Frank, A., 1969. *Latin America: Underdevelopment or Revolution*. Monthly Review Press. New York.
- Harris, J.R., and Todaro, M.P., 1970. Migration, Unemployment and Development: A Two Sector Analysis. *American Economic Review* 70 (March): 126-42.
- Harrod, R.F., 1939. An Essay in Dynamic Theory. *Economic Journal* 49 (March): 14-33.
- Hayami, Y., and Ruttan, V.W., 1985. *Agricultural Development. An International Perspective*. 2nd ed. The Johns Hopkins University Press. Baltimore.
- Hayek, F.A., 1973. *Law, Legislation, and Liberty. Vol. 1: Rules and Order*. University of Chicago Press. Chicago.
- Helpman, E., 1992. Endogenous Macroeconomic Growth Theory. *European Economic Review* 36 (Apr):
- Iacoponi, L., 1994. Il distretto agro-industriale come modello di sviluppo endogeno. In Panattoni, A., (eds.). *La sfida della moderna ruralità. Agricoltura e sviluppo integrato del territorio: il caso delle colline pisane e livornesi*. Progetto Finalizzato CNR-RAISA. Pisa.
- Iacoponi, L., Brunori, G., and Rovai, M., 1995. Endogenous Development and the Agroindustrial District. In van der Ploeg, J.D., and van Dijk, G., (eds.). *Beyond Modernization. The Impact of Endogenous Rural Development*. Van Gorcum. Assen.
- Johnston, B.F., and Mellor, J.W., 1961. The Role of Agriculture in Economic Development. *American Economic Review*. 51 (4): 566-93.
- Kaldor, N., 1957. A Model of Economic Growth. *Economic Journal* 67 (Dec): 591-624.
- Krueger, A., 1974. The Political Economy of Rent-Seeking Society. *American Economic Review* 64 (2): 291-303.
- Kuznets, S., 1964. Economic Growth and the Contributions of Agriculture. In Eicher, C.K.n and Witt, L.W., (eds.). *Agriculture in Economic Development*. McGraw-Hill. New York.
- Lal, D., 1985. *The Poverty of Development Economics*. Harvard University Press. Cambridge.

- Lewis, A.W., 1954. Economic Development with Unlimited Supplies of Labour. *Manchester School* 22: 139-91.
- Little, I.M.D., 1982. *Economic Development: Theory, Policy, and International Relations*. Basic Books. New York.
- Long, A., and van der Ploeg, J.D., 1994. Endogenous Development: Practices and Perspectives. In van der Ploeg, J.D., and Long, A., (eds.). *Born from Within. Practice and Perspectives of Endogenous Rural Development*. Van Gorcum. Assen.
- Long, N., 1984. *Creating Space for Change: A Perspective on the Sociology of Development*. Wageningen Agricultural University. Wageningen.
- Lucas, R.E., 1988. On the Mechanics of Economic Development. *Journal of Monetary Economics* 22 (July): 3-42.
- Markandya, A., and Pearce, D.W., 1987. Natural Environments and the Social Rate of Discount. Discussion Paper 87-27- Department of Economics. University College London.
- Menger, C., 1963. *Problems of Economics and Sociology*. University of Illinois Press. Urbana. (Orig. Ed. 1883).
- Meuus, J., van der Ploeg, J.D., and Wijermans, M., 1988. *Changing Agricultural Landscapes in Europe: Continuity, Deterioration or Rupture*. IFLA. Rotterdam.
- Molnar, J., Duffy, P., Cummins, K., van Santen, E., 1992. Agricultural Science and Agricultural Counterculture: Paradigms in Search of a Future. *Rural Sociology* 57: 83-91.
- Murdoch, J., Ward, N., and Lowe, P., 1994. Sustainable Agriculture and Endogenous Development: A Socio-Political Perspective. In van der Ploeg, J.D., and Long, A., (eds.). *Born from Within. Practice and Perspectives of Endogenous Rural Development*. Van Gorcum. Assen.
- Nabli, M.K., and Nugent, J.B., 1989 (eds.). *The New Institutional Economics and Development*. North-Holland. Amsterdam.
- Newby, H., 1986. Locality and Rurality: The Restructuring of Rural Social Relations. *Regional Studies* 20 (3): 209-15.
- Noorgaard, R., 1992. Coevolution of Economy, Society, and Environment. In Ekin, P., Max.Neef, M., (eds.). *Real-Life Economics: Understanding Wealth Creation*. Routledge. London.
- North, D.C., and Thomas, R.P., 1977. The First Economic Revolution. *Economic History Review* 30: 229-41.
- Nurkse, R., 1953. *Problems of Capital Formation in Underdeveloped Countries*. Basil Blackwell. Oxford.
- OECD, 1989. *Agriculture and Environmental Policies: Opportunities for Integration*. OECD. Paris.
- O'Riordan, T., 1988. The Politics of Sustainability. In Turner, R., (ed.). *Sustainable Environmental Management: Principles and Practice*. ESRC/Bellhaven/Westview. London.
- Ostrom, E., 1990. *Governing the Commons: The Evolutions of Institutions for Collective Action*. Cambridge University Press. Cambridge.

- Ostrom, E., Gardner, R., and Walker, J., 1994. *Rules, Games, and Common-Pool Resources*. University of Michigan Press. Ann Arbor.
- Palma, G., 1978. Dependency: A Formal Theory of Underdevelopment or a Methodology for the Analysis of Concrete Situations of Underdevelopment?. *World Development* (July-August):
- Parker, K., 1989. *Integrated Rural Development in the Peak District: Summary and Provisional Conclusions*. Peak Park Planning Board. Mimeo.
- Pearce, D.W., Barbier, E.B., and Markandya, A., 1989. *Blueprint for a Green Economy*. Earthscan Publications. London.
- Pezzey, J., 1989. Economic Analysis of Sustainable Growth and Sustainable Development. Working Paper 15. The World Bank. Washington DC.
- van der Ploeg, J.D., 1990. *Labour, Markets, and Agricultural Production*. Westview Press. Boulder.
- van der Ploeg, J.D., 1994. Styles of Farming: An Introductory Note on Concepts and Methodology. In van der Ploeg, J.D., and Long, A., (eds.). *Born from Within. Practice and Perspectives of Endogenous Rural Development*. Van Gorcum. Assen.
- van der Ploeg, J.D., and Long, A., (eds.) 1994. *Born from Within. Practice and Perspectives of Endogenous Rural Development*. Van Gorcum. Assen.
- van der Ploeg, J.D., and van Dijk, G., (eds.) 1995. *Beyond Modernization. The Impact of Endogenous Rural Development*. Van Gorcum. Assen.
- Prebisch, R., 1950. *The Economic Development of Latin America and Its Principal Problems*. United Nations. New York.
- Riley, R., 1992. The Challenge to Science in Food and Agriculture. In Royal Agricultural Society of England. *Towards Sustainable Crop Production Systems*. Monograph Series n° 11. RAS of England. Stoneleigh.
- Romano, D., 1995. Agricoltura e uso del suolo. In Cannata, G., (eds.). *Lo sviluppo del mondo rurale: problemi e politiche, istituzioni e strumenti*. Quaderni della Rivista di Economia Agraria n° 20. INEA-II Mulino. Bologna: 119-98.
- Romano, D., 1996. Crescita endogena vs. sviluppo endogeno: un caso dove le istituzioni fanno la differenza. Atti del 2° Incontro IDEA. Il Borghetto. Pisa.
- Romer, P.M., 1986. Increasing Returns and Long-Run Growth. *Journal of Political Economy* 94 (October): 1002-37.
- Romer, P.M., 1990. Endogenous Technological Change. *Journal of Political Economy* 65 (October): S71-S102.
- Romer, P.M., 1994. The Origins of Endogeneous Growth. *Journal of Economic Perspectives* 8 (Winter): 3-22.
- Rosenstein-Rodan, P., 1943. Problems of Industrialization in Eastern and South-Eastern Europe. *Economic Journal* 53 (June): 202-12.
- Rostow, W.W., 1960. *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge University Press. Cambridge.

- Runge, C.F., 1984. Institutions and the Free Rider: The Assurance Problem in Collective Action. *The Journal of Politics* 46 (1): 154-81.
- Schotter, A., 1981. *The Economic Theory of Social Institutions*. Cambridge University Press. Cambridge.
- Schotter, A., 1986. The Evolution of Rules. In Langlois, R.N., 1986 (eds.). *Economics as a Process: Essays in the New Institutional Economics*. Cambridge University Press. Cambridge.
- Seers, D., 1969. The Meaning of Development. *International Development Review* 11 (December): 3-4.
- Simon, H.A., 1955. A Behavioural Model of Rational Choice. *Quarterly Journal of Economics* 69 (1): 99-118.
- Simon, H.A., 1959. Theories of Decision-Making in Economic and Behavioural Science. *American Economic Review* 49 (1): 253-83.
- Slee, B., 1994. Theoretical Aspects of the Study of Endogenous Development. In van der Ploeg, J.D., and Long, A., (eds.). *Born from Within. Practice and Perspectives of Endogenous Rural Development*. Van Gorcum. Assen.
- Solow, R.M., 1956. A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics* 70 (February): 65-94.
- Solow, R.M., 1957. Technical Change and the Aggregate Production Function. *Review of Economics and Statistics* 39 (August): 312-20.
- Solow, R.M., 1962. Technical Progress, Capital Formation, and Economic Growth. *American Economic Review* 52 (May): 76-86.
- Solow, R.M., 1994. Perspectives on Growth Theory. *Journal of Economic Perspectives* 8 (Winter): 45-54.
- Stiglitz, J., 1985. Information and Economic Analysis. *Economic Journal* 95 (suppl.).
- Tideman, N., and Tullock, G., 1976. A New Superior Principle for Collective Choice. *Journal of Political Economy* 84: 1145-59.
- Todaro, M.P., 1994. *Economic Development*, 5th a cura di Longman. New York.
- Urry, J., 1984. Capitalist Restructuring, Recomposition, and the Regions. In Bradley, T., and Lowe, P., (eds.). *Locality and Rurality*. Geobooks. Norwich.
- White, T.A., and Runge, C.F., 1995. The Emergence and Evolution of Collective Action: Lessons from watershed Management in Haiti. *World Development* 23 (10): 1683-98.
- Williamson, O.E., 1975. *Markets and Hierarchies: Analysis and Anti-Trust Implications: A Study in the Economics of Internal Organizations*. The Free Press. New York.
- Winter, M., 1984. Agrarian Class Structure and Family Farming. In Bradley, T., and Lowe, P., (eds.). *Locality and Rurality*. Geobooks. Norwich.
- WCED, 1987. *Our Common Future*. Oxford University Press. New York.