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***PROCEEDINGS OF  
THE 6<sup>TH</sup> JOINT CONFERENCE ON  
FOOD, AGRICULTURE  
AND THE ENVIRONMENT***

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## The role of rural tourism in sustainable rural development strategy.

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### 1-Preface

A traditional interpretation of the international data trends relative to GNP, for each countries, shows that agriculture ,step by step, loes the relevance of its position at the formation of national wealth.As a consequence the role of agriculture in the perspectives of development and growth, for each side, appeares, nowadays, as no significant or reduced at a the tendencially small position.Similar consideration can be done regarding the role of rural areas and rural development.

But this is a traditional and old approach for agriculture and rural areas ,that is linked to the quantitative vision of the apport of the sector to the society.

This paper want to analize,regarding agriculture and rural development, it there is a future significant role for the growth of the global world ; following we try to show the modern contents of rural development.

### 2-Introduction at the problem

The social-economic world order of the last ten years has been marked by a very wide, often divergent, in-depth debate on the environmental question. The world community has begun to discuss the precarious prospects which would arise for future generations if we continue to follow a quantitative development model. A strategic problem was already posed in the '70s: the natural resources were continually eroding, the environment in a broad sense was rendered ever less livable, the drive towards productivity increased, there were inconsistent development cooperation policies and the north-south gap became wider.

Today our society is dealing with the problem of quality of life, development perspectives, and future generations. Because of the complexity of our society and the difficulty of evaluating and predicting changes in society, some people have predicted that chaos will be the norm for future generations. But we should not let complexity defeat us; it should be understood and managed in order to achieve the fixed target of a better quality-of-life level, and more equity in the distribution of resources and wealth produced - in other words, sustainable development.

The economic setcor ,agricultural and agricultural-industrial fields, are immersed in a universal social-economic order, characterized by:

- Complexity;
- Globality;
- Competitivity;
- Open market;
- Sustainable development strategy;
- Quality of products;
- Accentuation of the environmental problems;
- Collapse of the East European economies and their reposition in the market economy;

-Inactivation of the traditional industry and moving of the interest in innovating fields to the Asiatic eastward.

In this framework we must analyze if it is reasonable to suggest, as the actual and future model of development, the quantitative and traditional approach.

3-What kind of development and life we are going to propose for our present and future?

Economists in the first part of this century proposed a quantitative development perspective, based on the concept of the possibility of replacing natural capital with human-produced capital. In 1930, J.M. Keynes asserted that in a future perspective the limiting factor of development would no longer be capital, but natural resources. Georgescu-Roegen (1982), Tinbergen (1977) and the Club of Rome with Pestel and Mesarovic (1974), discussed the need for a new development model, more sensitive to the problem of using natural resources. Natural resources were beginning to become non-renewable economic goods, which will be limiting for future development. The "bridge" between economists and environmentalists is being constructed. Today, Pearce (1991), Nijkamp (1974), Romero (1987) have provided real tools and methodologies for evaluation and planning of environmental resources. Economists are now able to evaluate, in monetary terms too, externalities, so that this part of economics is defined as a "New Frontier". P. Kennedy (1993) says that the world population in 2025 will be about 8.5 billion; in a similar perspective, mankind must manage development so as to guarantee conservation and the proper use of natural resources.

Until the 1980s, the industrial and Community agricultural sectors worked mainly on the quantity model in a way that was detached from the increasingly substantial demands for a new economic policy centered on sustainability and inter-generational equity. The need to direct a move towards an innovative agricultural policy went side by side with the problem of health and food hygiene. In the period 1960 - 1970, the CODEX ALIMENTARIUS initiative was being set up at the U.N.. This is a program of activities which seeks to harmonise, at the world level, regulations on qualitative standards for food products and especially on overriding regulations for health standards in foods which are to go on the market. For the reasons given here, a widespread ecological phase among both individuals and groups came into being during this period and had a variety of consequences. Some aspects of this phase were scarcely reasonable or rational. The above reasons have led to a new type of agriculture aimed at and polarised on low inputs, eco-compatibility and quality.

The phenomena of an instinctive return to ancestral agriculture were based on the theory of biodynamics as well as experimentation with so-called organic agriculture.

Nevertheless, this was escapist activity and was guided more by an instinctive Utopia rather than rational ideas for concrete progress.

The model of development polarized at the industrializations areas the growth of the city and urbanization with quantitative targets of GNP it has not produced a good results.

For to show the evolution trend of the population, the use of resources and the state of the soil and the distribution of wealth on have arranged the tables 1,2,3,4.

Table-1-Trend of World Population from 1825 to 2025

Years	Time Difference in years	Population in Billion
1825	-	1
1925	100	2
1976	50	4
1990	15	5.3
2025	35	Minimum Variant 7,6 Average Variant 8,5 Maximum Variant 9,4

Reference: Paul Kennedy (1993), Toward the XXI century, Ed. Garzanti, Milano, pagg. 36-66

Table-2-Trend of world soil degradation from 1945 to 1991. (000.000/Ha)

REGION	Excessive Pasture	Deforestation	Bad Agricultural Management	Other	Total	Degradated area in total %
ASIA	197	298	204	47	746	20
AFRICA	243	67	121	63	494	22
S.-AMERICA	68	100	64	12	244	14
EUROPA	50	84	64	22	220	23
N.&C.AM.	38	18	91	11	158	8
OCEANIA	83	12	8	0	103	13
WORLD	679	579	552	155	1965	17

Reference: World Watch Institute (State of the World, 1994) based in the data of "The Extent of Human Induced Soil Degradation", 1991.

Table-3-Trend of evolution of Population and the Availability of Renewable Resources (Values in 000.000)

Subject/Year	1990	2010	Variation %	Var. Pro-capita
POPULATION	5290	7030	+33	-
FISHERY(t)	85	102	+20	-10
IRRIGATED SOIL (Ha)	237	277	+17	-12
ARICULTURAL SOIL(Ha)	1444	1516	+ 5	-21
GRASSLAND AND PASTURES (Ha)	3402	3540	+ 4	-22
FORESTRIES(Ha)	3413	3165	- 7	-30

Reference: International Data Base, fsc. 2, Nov. 1993, Production Yearbook of F.A.O. (1990), Forest Resources Assessment of F.A.O. (1990), Worldwatch Institute, State of the World, 1994.

Table-4-Distribution of Global Income(1960-1989)

YEAR	Fraction of G.I. due at the 20% of more riches	Fraction of G.I. due at the 20% of more poors	Ratio between more riches and more poors.
1960	70,2	2,3	30/1
1970	73,9	2,3	32/1
1980	76,3	1,7	45/1
1989	82,7	1,4	59/1

Reference: UNEP, Human Development Report 1992, Oxford University Press, New York, 1992

In a global vision we must consider that we have ,in the world,about ,1,2 billion peoples that live under the minum level of alimentary needs. Also we heve in the U.S. more than 30 million people that are considered poors. There are some countries as Brazil were about the 50% of population live under the level of subsistence. This situation in many metropolis , more and more, is caracterized ,day by day,for by the worsening of the quality of live as for the environmental and for social relanshioship..

After these considerations we deduce we cannot assure to the future a real development without an adequate rural development.

#### 4. The concept of integrated, diversificated and sustainable rural development. (Macro and Micro consideration)

##### 4.1 General aspects

In many cases the policy of growth has been linked at the strategy of strong specialization and in the agricultural activity at the monocultivation. It's in this area where the "environmental turbulence" of the market provoke sometime the shock of decrease in prices and incomes of farmers. The main problem caused by the relationship of activity productions and environmental management are present in this situations. The sectorial approach of development policy has caused the disequilibrium among different areas, cities, entrepreneurs, workers and citizens.

To achieve a general minum level of quality of life we need to change the model of development. We must remark that the integration strategy, for different sector of production, city and country areas, can garantee a balanced development. With a new connection to natural resource and activity production we can achieve the sustainable strategy. In this way natural resource and environmental management can change the position for each entrepreneur, from suffered action of the regulation in opportunity of strategic business.

At the micro level we must envisage that the administration has moreover, considered, two fundamental rules for the management:

- THE ECONOMIC AND FINANCIAL EQUILIBRIUM
- THE DEVELOPMENT AND THE INNOVATIONS.

The management of the enterprise it is caracterized for the following key-points :

- a) the economic, financial and property cycle of the enterprise ,
- b) the typical and extratypical manegement.

The traditional balance statement of a farm is shown in Figure 1. It includes operating management and financial and fiscal management.

In particular for medium and small farms the diversification permit, in general terms, to decrease the risk of climate and the price variation. The vertical and horizontal integration permits to get more added value in the sale of products.

In this manner the operative income can be a better level and more stable. The traditional crop pattern in the farms is characterized for a large time of output of cash in relation at the input. The farmer, many times, for his small capacity of negotiation, must pay in very short time the means and services of production and he must wait a long time to collect the money from product sale. Consequently the general situation for the farm activity is the scarcity of cash and the unbalanced cash flow that causes negative interest in the extratypical management. We can have in this case a very good farmer on the technical aspects but the final pretax-profit would be small or negative because of the high level of interest at the bank. First the farmer must change the approach to the market and improve his cash flow by reducing the time of collecting money of sales and enlarge the time of payment when he buys the means of production.

It is in this part of management that the integration and diversification activity can improve the final net income of the farmer. Diversification integration means the achievement of a flexible cycle of production in several cases similar at the industrial and service activities. For example the dairy activity improves the timing of collecting money and also the small animals and direct sale like wine, vegetables and fruits.

The improvement of the timing of input cash flow provokes the possible transformation of general weakness of financial management of the farms in a strong point for it. This analysis is also suitable when we must involve the environmental aspects in the enterprise management.

If we take into account the environmental costs and benefits, the balance statement is as shown in Figure 2. In the financial and fiscal management, in addition to financial and fiscal aspects, there is the environmental balance, that is an algebraic addition of positive and negative environmental impacts, and the accounting of environmental tax, linked to the principle "those who pollute must pay". Therefore, this is a new paradigm of the production cost, and of the balance statement of the net income. The most important problem is the monetary measurement of the positive and negative environmental impacts, and today the above-mentioned methods can be helpful tools.

Taking into consideration that a monetary evaluation of all the impacts is not possible, as this is an on-going field of research, we agree with David Pearce (1991), who asserts: "The absence of markets in environmental services creates a practical problem of measurement - i.e. if one of finding out what people preferences actually are in a context where there are no apparent market-but it does not generate a conceptual problem of measurement".

When the valuation methods improve, environmental costs and benefits will have a specific monetary place in the farm balance statement. The proposed systematic and methodological approach seems to be valid, as shown in Figure 3.

When the approach of the environmental and natural resource will be planned towards the opportunity of business, new employed etc. the environmental management can also improve, in an integrated vision of enterprise, the balance of net income.



Figure 1. - Traditional balance statement

ITEM	KIND OF MANAGEMENT
Sale proceeds + Household consumption + Stock variations + Livestock variations + Livestock purchase Gross output - Resources utilized - Utilities - General and land expenses - Other production costs + Hires to outside parties Added value - Hired labour - Social charges for family labour - Depreciation Operating income	<i>Operating Management</i>
+ Financial revenues - Financial charges + Rents to outside parties - Rents from outside parties - Farm taxes Net income	<i>Financial and Fiscal Management</i>

Figure 2. - Balance statement considering the new Agriculture environmental relationship

ITEM	KIND OF MANAGEMENT
Sale proceeds + Household consumption + Stock variations + Livestock variations + Livestock purchase Gross output - Resources utilized - Utilities - General and land expenses - Other production costs + Hires to outside parties Added value - Hired labour - Social charges for family labour - Depreciation Operating income	<i>Operating Management</i>
+ Financial revenues - Financial charges + Rents to outside parties - Rents from outside parties - Farm taxes Temporary net income	<i>Financial and Fiscal Management</i>
+ Positive environmental impacts - Negative environmental impacts - Environmental taxes Final net income	<i>Environmental Management</i>

Figure 3. - Final systematic and methodological proposed approach

ITEM	KIND OF MANAGEMENT	VALUATION METHODS
Sale proceeds + Household consumption + Stock variations + Livestock variations + Livestock purchase Gross output - Resources utilized - Utilities - General and land expenses - Other production costs + Hires to outside parties Added value - Hired labour - Social charges for family labour - Depreciation	<i>Operating Management</i>	Traditional monetary Methods
Operating income + Financial revenues - Financial charges + Rents to outside parties - Rents from outside parties - Farm taxes	<i>Finacial and Fiscal Management</i>	Traditional monetary Methods
Temporary net income + Positive environmental impacts - Negative environmental impacts - Environmental taxes	<i>Environmental Management</i>	Monetary methods based on WTP
		Traditional monetary Methods
Final net income		

#### 4.2-The diversification.

We have to turn to diversification of agricultural production, level of trasformed products and activities.

The differentiation of the agricultural productions'typology needs to distribute the economic risk that is caused by the price's variations and of the products themself and of technical means on market. Moreover it needs to distribuite the technical risk caused by some climatic turbulences such as: cold, drought, hail, etc on different elements.

Anyway, ,we can observe that, today, the agricultural enterprise that produces the basic, original products only, is no more considered in any country's reality , generally.

When the farmer makes the direct sale of his products on the roads, he distributes milk, fruit and fish or small domestic animals to families; he offers his services to other farmers with his own implements, sels vegetable and wheat's seeds. Moreover he offers hospitality in his own farm. on the weekend and offers typical products, takes part in management of the natural reserves and parks. What has been said is nothing more that the concrete achievement of the new tendency of the diversification of the enterprise.

The agritourism and the rural tourism are the interesting sample and opportunities in this way

That because with your activity in the farm is possible to achieve a virtuous circle to the differentiation by improvement of financial activities and consequently the better result in net income.

#### 4.3-The integration.

Today the agricultural enterprise must be seen as a cognitive system and put itself in a position of the continuous synergy with other productive fields and, in particular, services.

Thus, the *agricultural enterprise* with its potentialities and its human and natural resources changes into a *rural enterprise* which united with the traditional activity must be into service of the territory.

New other immaterial goods are forming (landscape, rustic tradition, ect.).

It is for the agricultural enterprise to be, today and in future, evidence of daily history of most inhabitant of earth.

It is not possible to hope to activate this strategy with information programmes above mentioned. On the contrary, the capability and the will to make progress of the men living in this area must be stimulated. The process of rural development in future must not base itself on the autogenous capabilities of local entrepreneurs.

In this context, the U.E. policy move, for example, with the LEADER I and II programme.

#### 4.4- Sustainable development

There are problems of territorial equilibrium such as situation of Environmental Foot-Print for Netherlands that is 12 times over own capacity; the savage destruction of some lands of Brazil or Africa or Asia united with the hunger problem.

Today, the perceptions of the environmental aspects- as landscape that is derive by the perception of the man and it is a virtually good- became new goods to sell and add in the agricultural enterprise.

From this point of view, it's put the sustainable development strategy.

The Brundtland Report (1987) defines Sustainable Development as "*development which meets the needs of the present without compromising the ability of future generations to meet their own needs...*" This is a very complex way to define development because sustainable development is aimed at a combination of economic, social and environmental goals. All different sectors of development are involved in this strategy; for example, sustainable agriculture is already an important reality. Sustainability in forest use and management is a basic concept in the more general understanding of sustainable development. To achieve sustainability, one of the most important rules is to give priority to natural capital stock rather than to the flow of income it could make possible. This concept is the basis for sustainable agriculture: to achieve food products, but also to save natural capital stock, in other words to bring together preservation and development. It is possible to use another definition of sustainable development: "*Sustainable economic development involves maximising the net benefits of economic development, subject to maintaining the services and quality of natural resources over time*" (D. Pearce et al., 1987).

The Department of Rural Appraisal and Farm Accounting of Perugia University has been undertaking research in this area in recent years.

5-The contents of Cork declaration and the development strategy in E.U. and recently declaration of Ministers of OECD.

5.1-By a quantitative approach towards qualitative approach of agricultural

It is starting from ,80 years that we can registered, the significant changes in direction in the C.A.P. of the EC and in the USA

In 1984 in the Stuttgart EC agreement, a clear reversal of the trend prevalent in the CAP was adopted. The application of physical production quotas as well as co-responsibility taxes triggered off a turn away from quantity production towards quality production. On the international market the qualitative factor became increasingly more important particularly when confronted with an increasingly marked destructure of food consumption where, for many social groups (especially the affluent), food became less the search for satisfaction of a basic need and more the realisation of a status symbol. The stimulus of the GATT treaty in the recently concluded Uruguay Round and the new regulations of the Mac Sharry plan have imposed both a liberalisation spirit and quality agriculture on the markets. In the U.S.A., the LISA (Low Input Sustainable Agriculture) program has been under discussion for many years. By means of instinctive and hard-to-control actions concerning output, we are entering a rational-management phase. That which perhaps appeared to be an impromptu phenomenon connected with the dramatisation of serious facts and situations today appears to be the start of an interesting trend involving a now-respectable group of farmers.

A correct policy in the management of natural resources is a very important contribution to the achievement of a new model of development which concentrates more on quality aspects than in the past.

As indicated in the introduction, the EC began to change course, at first very slightly and then increasingly so, in order to build an agricultural development strategy directed at the quality of life, the conservation of natural resources, balanced markets, and sustainable development. In this context, it is important to briefly analyse the contents and the guiding principles of the four regulations which have tended, in a synergic way, to achieve these objectives.

The EEC policy takes this into consideration: in 1988 EC Regulation 1094 on Set-Aside, in 1991 EC Regulation 2092 on organic agriculture; in 1992 Reg. 2078 was issued concerning environmental measures in agriculture, and Reg. 2080 concerning afforestation on tillable land. The 2088/85 Regulation by the IMP(Integrated Mediterranean Plans), the Life Programme, the Ith and Iith,Leader Programme.,they are the more significant actions the the E.U. to promote towards a new model of development.

But in this last year we think that we have three very strong proposals that, implemented for diffents targets, they presents a significant sinergy towards the modern vision of rural development .

5.2-Cork declaration

First at the closing of the Rural EuroConference in Cork at the 7-9 november 1996 was implemented by the participants the Cork Declaration concerning the guidelines of the future development in E.U.

The main contents of Cork Declaration are the followings:

Point 1 - Rural Preference

Sustainable rural development must be put at the top of the agenda of the European Union, and become the fundamental principle which underpins all rural policy in the immediate future and after enlargement. This aims at reversing rural out-migration, combating poverty, stimulating employment and equality of opportunity, and responding to growing requests for more quality, health, safety, personal development and leisure, and improving rural well-being. The need to preserve and improve the quality of the rural environment must be integrated into all Community policies that relate to rural development. There must be a fairer balance of public spending, infrastructure investments and educational, health and communications services between rural and urban areas. A growing share of available resources should be used for promoting rural development and securing environmental objectives.

#### Point 2 - Integrated Approach

Rural development policy must be multi-disciplinary in concept, and multi-sectoral in application, with a clear territorial dimension. It must apply to all rural areas in the Union, respecting the concentration principle through the differentiation of co-financing for those areas which are more in need. It must be based on an integrated approach, encompassing within the same legal and policy framework: agricultural adjustment and development, economic diversification - notably small and medium scale industries and rural services - the management of natural resources, the enhancement of environmental functions, and the promotion of culture, tourism and recreation.

#### Point 3 - Diversification

Support for diversification of economic and social activity must focus on providing the framework for self-sustaining private and community-based initiatives: investment, technical assistance, business services, adequate infrastructure, education, training, integrating advances in information technology, strengthening the role of small towns as integral parts of rural areas and key development factors, and promoting the development of viable rural communities and renewal of villages.

#### Point 4 - Sustainability

Policies should promote rural development which sustains the quality and amenity of Europe's rural landscapes (natural resources, biodiversity and cultural identity), so that their use by today's generation does not prejudice the options for future generations. In our local actions, we must be aware of our global responsibilities.

#### Point 5 - Subsidiarity

Given the diversity of the Union's rural areas, rural development policy must follow the principle of subsidiarity. It must be as decentralised as possible and based on partnership and co-operation between all levels concerned (local, regional, national and European). The emphasis must be on participation and a 'bottom up' approach, which harnesses the creativity and solidarity of rural communities. Rural development must be local and community-driven within a coherent European framework.

#### Point 6 Simplification

Rural development policy, notably in its agricultural component, needs to undergo radical simplification in legislation. Whilst there should be no renationalisation of the CAP, there must be greater coherence of what is presently done through many separate channels, a limitation of EU law on general rules and procedures, more subsidiarity in decisions, decentralisation of policy implementation and more flexibility overall.

#### Point 7 - Programming



The application of rural development programmes must be based on coherent and transparent procedures, and integrated into one single programme for rural development for each region, and a single mechanism for sustainable and rural development.

#### Point 8 - Finance

The use of local financial resources must be encouraged to promote local rural development projects. More encouragement must be given to using financial engineering in rural credit techniques in order to mobilise better the synergies between public and private funding, reduce financial constraints on small and medium size enterprises, promote productive investment, and diversify rural economies. Greater participation by the banking sector (public and private) and other fiscal intermediaries must be encouraged.

#### Point 9 - Management

The administrative capacity and effectiveness of regional and local governments and community-based groups must be enhanced, where necessary, through the provision of technical assistance, training, better communications, partnership and the sharing of research, information and exchange of experience through networking between regions and between rural communities throughout Europe.

#### Point 10 - Evaluation and Research

Monitoring, evaluation and beneficiary assessment will need to be reinforced in order to ensure transparency of procedures, guarantee the good use of public money, stimulate research and innovation, and enable an informed public debate. Stakeholders must not only be consulted in the design and implementation, but involved in monitoring and evaluation.

#### Conclusion

We, the participants at the European Conference on Rural Development assembled in Cork, urge Europe's policy-makers:

- to raise public awareness about the importance of making a new start in rural development policy;
- to make rural areas more attractive to people to live and work in, and become centres of a more meaningful life for a growing diversity of people of all ages;
- to support this ten-point programme and co-operate as partners in the fulfilment of each and every one of the goals, which are embodied in this declaration;
- to play an active role in promoting sustainable rural development in an international context.

#### 5.3-Agenda 2000

An other proposal that is linked to the Rural Sustainable and Integrated Development is the Agenda 2000. Its title is: Agenda 2000: For a Stronger and Wider Union. It is defined in this sense as "An historic opportunity"

Agenda 2000 is a strategy for strengthening growth, competitiveness and employment, for modernising key policies and for extending the Union's borders through enlargement as far eastwards as the Ukraine, Belarus and Moldova. As President Santer explained to the Parliament, these objectives are closely related: "We cannot think of pursuing agricultural reforms or the reform of structural policies without at the same time taking into account enlargement and the financial constraints," he said. "It is this mix of equations that the Commission has sought to solve in developing the communication, Agenda 2000."

The Commission's 1,300-page communication gives a scrupulous assessment of the preparedness for membership of the ten applicant countries from Central and Eastern Europe and recommends that accession negotiations start with Hungary, Poland, Estonia, the Czech Republic and Slovenia. These are judged closest to fulfilling criteria set by the European Council at its summit in Copenhagen in June 1993. Negotiations with them will open early in 1998, as well as with Cyprus whose application has already received a favourable opinion from the Commission. The first accessions could be as soon as 2001, although Agenda 2000 assumes 2003 as more likely.

Meanwhile, the door remains open to Bulgaria, Romania, Latvia, Lithuania and Slovakia and they will be invited into partnerships with the EU to help speed up their preparations for membership.

-A triple challenge

Agenda 2000 confronts three challenges facing the Union:

*-how to strengthen and reform the Union's policies so that they can deal with enlargement and deliver sustainable growth, higher employment and improved living conditions for Europe's citizens;*

*-how to negotiate enlargement while at the same time vigorously preparing all applicant countries for the moment of accession;*

*-how to finance enlargement, the advance preparations and the development of the Union's internal policies.*

The Commission's purpose is to orient internal policies much more resolutely towards Europeans' economic and social goals while also reshaping key policies with an eye to enlargement. Its main agenda items are:

a-Further institutional reform and a review of the Commission's organisation and operations.

b-Develop internal policies for growth, employment and quality of life.

c-Maintaining economic and social cohesion through more effective Structural Funds.

◆ **Rural Policy:** growing demands for a more environmentally sensitive agriculture coinciding with the increasing use of the countryside for recreation create new obligations and opportunities for agriculture. The Commission favours giving a more prominent role to agri-environmental measures, especially those which call for an extra effort by farmers such as organic farming, maintenance of semi-natural habitats. Other aspects of sustainable rural development will be pursued by a reorganisation to make existing structural policies more targeted.

◆ **CAP Management:** a new emphasis will be put on a radical simplification of the rules and applying them in a more decentralised way. Although the last reforms made the CAP more effective and transparent, they also bred inconsistencies and overlaps between policies. The Commission believes Member States and regions should be given more responsibilities for implementation.

In the part where it's focused the Rural Policy we can derive that the strategy of Agenda 2000 it's much linked at the modern rural development.

#### 5.4 -The 5<sup>th</sup> framework programme of R&TD

The Communication "*Inventing Tomorrow*" dated 10 July 1996 set out the broad guidelines proposed for the 5th Framework Programme. In this document, the Commission underlined its readiness to mark, with this new Programme, a distinct break with earlier Framework

Programmes, by focusing efforts to a greater extent, by improving the consistency of the overall approach and by paying greater attention to the exploitation of results and the management aspects.

The 5<sup>th</sup> Programme of R&TD is significant for our scheme of analysis in the part where it describes the criteria for selecting the objectives and areas and the contents and objectives of the programme itself.

*-The criteria for selecting the objectives and areas.*

The basic task of the European Union's research and technological development policy is to ensure that advances in knowledge and technologies serve the purposes of the Union and its policies. From this perspective, the two inseparably linked objectives of this policy are:

- to maintain and enhance, in the context of a genuine "European research area", the research potential of European laboratories, universities and companies and their ability to produce knowledge of the highest level and high-quality technologies;
- to help ensure that European research serves the Union's economic and social objectives, in other words European research at the service of the citizen and European competitiveness in a global framework.

*-Criteria related to social objectives.*

The scientific and technological objectives selected must help to further major European Union social objectives reflecting the expectations and concerns of EU citizens:

- improving employment;
- promoting the quality of life and health;
- preserving the environment.

*Criteria related to economic development and scientific and technological prospects.*

The scientific and technological objectives selected must correspond to areas:

- which are expanding and which create good growth prospects;
- in which European firms can and must become more competitive;
- in which prospects of significant technological progress are opening up.

*Criteria related to the European "value added" and the subsidiarity principle*

The scientific and technological objectives selected cannot be achieved through private research alone and are more effectively pursued at the European level and can be achieved more easily with projects at that level:

- because a "critical mass" in human and financial terms needs to be established, and a mixture of complementary expertise found in the various countries is needed;
- because a significant contribution can be made in this way to the implementation of one or more European Union policies;
- because these objectives concern European problems, aspects of standardisation and the development of the European area.

*The contents and objectives of programme.*

The structure of the 5th Framework Programme takes this into account the criteria.

Three "thematic" programmes:

*"Unlocking the resources of the living world and the ecosystem"*

*"Creating a user-friendly information society"*

*"Promoting competitive and sustainable growth";*

Three "horizontal" programmes:

*"Confirming the international role of European research"*



*"Innovation and participation of SMEs"*

*"Improving human potential"*

We think that the thematic and the horizontal programmes are implemented, to follow the integrated and sustainable development..So that we will have now not only special action to support the integrated development but also a strong research programme.

Consequently for the one of the more important part of European people the future way of development is the integrated rural development because the 20% of population live in rural areas and these represent the 80% of total surface.

5.5-The conclusion of the meeting of the committee for agriculture at the ministerial level of OECD.

The past 5-6<sup>th</sup> March 1998 was in Paris the Meeting of the Ministry of Agriculture of the OECD.

The discussion paper of the meeting focuses the following aspects. "There is greater emphasis on environmental measures in agriculture policy and some improvement in the environmental performance of agriculture has been observed.

The polluter-pays principle can be difficult to apply and is not widespread in agriculture but there has been greater use of regulatory measures, of voluntary and cooperative approaches, and of payments to producers to alter agricultural practices damaging to the environment.

Increasingly OECD countries are providing incentives to producers for the provision of environmental amenities. More could be done to make agri-environmental measures more effective such as improving transparency and targeting and by reforming those agricultural policies which result in harmful effects on the environment.

By increasing farm incomes and expenditures, agricultural support has maintained living standards and employment in rural areas, but not necessarily in the most cost-efficient manner.

Traditional agricultural support policies have a declining influence on rural economies as the relative importance of primary agriculture itself declines. Agricultural policy reform can enhance the agrofood sector's contribution to rural development, but the benefits are neither instantaneous nor costless. The rural economy in New Zealand, for example, became more diversified and efficient after agricultural reforms. Most OECD countries, including E.U. Member States, Japan and Norway, have implemented programmes to help diversify and revitalise disadvantaged rural areas."

In the conclusion the Committee sustains, for the first time, the new vision of the role of the agriculture.

For the first time also the Ministry of Agriculture of USA has approved the role of "multifunctionality of agriculture".

The conclusions of this meeting at the point 10<sup>th</sup> say that over the "own primary function to produce foods and fibers, the agricultural activity, can be modelize the landscapes, send some environmental advantages as the soil conservation, sustainable management of natural and renewables resources and the conservation of biodiversity and to contribute to the socio-economics liability of many rural areas. In many countries partners of the OECD in relation to this character of multifunctionality the agriculture play a role much important for the life of rural regions".

Following the suggestions and contents of the programmes concerning the role of agriculture and the framework of the policy in this sector and also in the future main target of research we can conclude that the rural integrated development strategy is a very strong and enrapturing challenge toward the need of change for a new development model in the world.

#### 6-The role of rural tourism in the rural integrated and sustainable development.

In the polity of the sustainable development that take consistences in the crossing between:

*-The polity about defence and conservation of the environment and the territory by an intergenerational view;*

*-The most required change of the development model from a quantity to qualitative one;*

*-The need of conciliating the sustainability ,the equity and the poverty in many areas in the world,by adjusting actions about the income levels.*

Today we talk about agritourism and rural tourism all over the world and in many scientific and other spheres.

The UNEP,1968 ,Conference sanctions a fundamental principles for the prospects and contents of Rural tourism.Was affirmed that "the policies of social and economic development of humanity must move in a integrated and coherent way with action and protection and conservation of the natural resources".EEC Policy in Stresa Agreement(1958) has put in the center of Common Agricultural Policy in the Euopean Agriculture.In the E.U.From one firts operative stage based essentially on the prices we changed after the Mansholt Memorandum to the 1972 structural and social-economic Directives n. 59/60/61.The scarce succes for delaiies and mainly plafonds wiche were scarcerly reached in the mediterranean areas has strengthened the principles of intervention and support policy focused on the Integrated Development.In the 1985 it's issued the Regulation 2088/85 wich promotes Mediterranen Integrated Plans(M.I.P.) It's the strong action from wich,in our country,mainly in the Center and South the agritourism and rural tourism activities spread and increase in strength.

The OECD in an report about Rural Tourism of 1994 substain that the Rural Tourism can be divided in :

-Agritourism;

-Ecotourism;

-Tourism of Adventure;

-Countryside Tourism.

The Agrotourism it's the activity of tourism that is maneged by the farmer.

Ecotourism,Tourism of adventure and Countryside Tourism cab be managed by the farm but it's very rare and in prevalence by operators outside of the agricultural reality.

This aspects it' very important because we must to analyze if the opportunity of rural tourism it's linked at the agricultural sector or there are some option for the other subjects.

Agri-tourism is becoming an important income source for farmers in industrial countries facing over production. However, how farming and agri-tourism activity should be integrated into farm management has not yet been fully studied. The authors think that this study is necessary for the successful introduction of agri-tourism and the stable development of pluriactive farms. We have examined the connection between the activities of agri-tourism and farming in Umbria, one of the fastest growing regions of agri-tourism in Italy. We found that farm size is closely connected with the level of agri-tourism activity; that middle-sized farms are most active in agri-tourism, while larger farms prefer to offer apartments due to severer labour

constraints, and that smaller farms tend to offer rooms to avoid heavy investment in facilities. We attribute these tendencies to variations in resource endowments largely corresponding to farm size, which impose different constraints on farms. Thus, it is important to introduce tourism activity corresponding to the managerial resource endowment which differs according to farm size. In this case support measures will also be more effective.

Concerning the European and Italian situation there are different back-ground between Italy and other country of E.U.

The European Union does not provide a specific definition about agritourism and there are not a distinct discipline for the rurale tourism and agritourism.

But exists, a series of provisions that have been changed into measures turned more or less directly to agritourism after they have been accepted from the Regions of each Community Countries.

This measures can be synthesized in this way:

Reg.CEE 2052/88-Reorganization of Structural Funds, ob. 5b-

Regions make developing rural plans and inside each one of these, operative multiple-fund programmes that can moreover provide measures for the agritourism to realise exclusively in the specific areas identified from the CEE.

Reg.CEE 2328/91-Measures of modernizing the agricultural structure.The CEE gives the right to their Countris to carry on polities to favour the tourism managed from the agricultural entrepreneurs inside their own enterprises.

Reg. CEE 2078/92-Helping measures to the agricultural echo-compatible activity-Incentives are provided for the agricultural enterprises that however manage lands for the public access for free time and realize areas of naturalistic interesting.

Reg. CEE 2081/93-Rioorganization of the Structural Funds. ob.5b- It reports the measures for the economic planning, related to the ob.5b for the period 1994-1999.

Reg.CEE 4253/88-It reports the LEADER project- It provides the licence of community contributions for initiatives that help the rural development.These initiatives, realized exclusively from association of enterpreaneur and being (public and private),have to fit into the OB.1 and Ob.5b's areas.

Reg CEE n.2081/93-It reports the LEADER II project-It provides the licence of community contribution for initiatives adopted to help the rural tourism (for operative plans related to the period 1994-1999).

Only in Italy exists a precept about agritourism and cosnequently we have a national legislation(Law 5 decembre ,1985,730) and Regional legislation.The national legislation get the fundamental inspiring principles of agritourism and the regional legislation it's the adaptation of framework of national law a the specific reality of the Region.

The objectives of the National law are:

- To facilitate the stay of the farmers in the rural areas by an itegrative activities of income;
- To balance the different agricultural realities;
- To recover the rural housing;
- To revalue the cultural and natural resources;
- To revalue the typical lines;
- To defend the tradition of the rural area;
- To promote initiatives of the rural area.

It's confirmed the complementary nature of the agrotourism activity of farm management. In any case concerning to begin an agritourism activity we have in any case to know and to apply:

- national legislation;
- regional legislation;
- precepts about the release of the administrative authorization;
- fiscal precept (accounting, VAT, etc.)
- Law about the direct sale of the enterprise product;
- precepts about the prevention fire

In the other countries of E.U. there are not a specific legislation that separate the rural tourism and agritourism.

In consideration at the role of the rural tourism for to improve the income of the farmer the Italian choice to regulate the agritourism it's a good policy for to guarantee, in this opportunity, the primary role at the farmer.

The farmer are the first actor for to conserve the natural and natural resource, the amenity, the landscape the traditional production of crafts, textile, and store of peasant culture and traditions.

In the other countries of E.U. the operator manage an indifferenziate but also interesting and growing rural tourism activity in different form. French, Ireland, Spain, Germany and Austria are the nation where the rural tourism it's in a high position as for the quality of the service as for the thematic niche market.

In the last years it's growth the attention to rural tourism in Eastern European Countries, in the Center and South America, in Asia.

The Government of Israel in the April 1995 have organized a International Symposium concerning the opportunity of Rural Tourism in a Region of Galilea, Chili start last year with a national plan, for to strenghtening the sector. In Costa Rica was established four year ago the School of Livestock and Ecotourism Management.

In the last May in Rumania at Cluj-Napoca was the International Symposium and was created the International Association of Experts in Rural Tourism.

In all the world there are now much attention for this activity and also some expert of International Cooperation of Development say that the Rural Tourism it's one of good opportunity also for the Third World.

## 7-The rural tourism and agrotourism in Italy and Umbria region.

### 7.1-Premise

The Umbrian region is characterised by a development that it can be defined fairly homogeneous.

There not exist zones with strong differences concerning income distribution, productive activities, know-how, services fruition, access to cultural activities architectonic and to historical and architectural heritage.

The urbanisation is a nebula-like process in which it is not easy to identify the typical tertiary, industrial and rural environment

The Umbria is a reality strongly integrated into traditional rural environment which has been modelling a very high level of life quality.

This rural model that is installed in Umbria is the most relevant resource of the region since it implies great indirect benefits in the public services management and of their positive quality level which are determinant prospect for the present and future sustainability of the growth and development process.

The agricultural farm is strongly transforming itself from a traditional agricultural farm voted itself to the bases production and almost disconnected from the market, towards a rural-type farm where next to the traditional activities of bases production it is enable to supply with different function and task, consulting ,transformation process, marketing, advertising, innovations of products and of work process, moreover the presence of the human been becomes a considerable rule to the safeguard and maintenance of the soil and territory in general.

In this prospective it appears fundamental to point out on models of farm organisation linked to a productive diversification (like as agritourism) and with high elastic degree.

For these reasons in the last years the agritourism sector has marked an heavy, dynamic and innovative growth and indeed, in Umbria Region it has found in the rural ambience, which is part of the typical characteristic of the region, one of its own peculiarity.

## 7.2-Agritourism features on national

The agritourism sector represent a relevant phenomenon in our Country that witness the enterprise capacity of re-organising itself from farm to rural enterprise, clearly oriented toward a process of revitalisation involving natural, cultural historical and environmental resources and also proposing itself as a new way o enjoying free time and foodstuff.

The Umbrian agritourism has a recent story.From the first results of the recent researches it can be highlighted that the agritourism enterprises started their activities mainly since 1986 when the 1st Regional Law on Agritourism was in force.The farms that have joined the regional professional list are now 1800 whereas those currently operating are 400.

According to a national survey ("Il Sole 24ore", July 10, 1994), in Italy there are 7000 Agritourism farms providing a receiving capacity of 100.000 beds and an invoiced of about 700 billions of Italian Liras which put this sector in a higher position in comparison with the national truffle market.

Compared to other countries such as France , Ireland, Germany with an average of 3% of agritourism farms out of the total farms, Italy has only 0.3%.

In the national scale as sample in the Tab 5 it's show the economic result of the average and representative case of investment in agrotourism.

Tab.5-Economic financial feasibility of a agritourist investment (Data in 000.000/L)

Budget in terms of net income and operative income.

	VALUES 000.000 L.
<b>A- INVESTMENTS</b>	<b>170</b>
Purchase of immovable	30
Burden of transfers, etc.	300
Reconstruction, furniture and equipments	500
<i>Total invested capital</i>	
<b>B- PROCEEDS</b>	<b>80</b>
Proceeds from overnight stay	40
Proceeds from restoration	25
Extra proceeds (alimentary handicraft)	145
<i>Total annual proceeds</i>	
<b>C- OPERATIVE COSTS</b>	<b>10</b>
Materials of consumption	16
Raw material of restoration	4
Maintenances/replacements	15
Reintegrations	20
Personal extra nucleus	65
<i>Total operative costs</i>	
<b>D- EXTRA-TYPICAL COSTS</b>	<b>15</b>
Refounds interests	15
Tax and contributions	30
<i>Total extra-typical costs</i>	
<b>E- OPERATIVE INCOME (B - C)</b>	<b>80</b>
<b>F- NET INCOME (B - C - D)</b>	<b>50</b>
<b>G- R.O.I. (E/A)</b>	<b>0,16</b>
<b>H- I.R.R.</b>	<b>10,70%</b>
<b>I- NPV</b>	<b>88</b>

### 7.3-General features of the Umbrian agritourism activity.

Troughs the analysis of the data concerning the Umbrian agritourism universe and reported in the list of the agritourism farms by the Umbrian Regional Council in 1994 "Agriturismo in Umbria Ospitalità 1994" the following general features have been rising. The Umbrian agritourism farms are located between 1,200 and 100 meters above sea level, with an average of 410.9. They have on average 5.5 rooms, 3.1 apartments 13 beds. The 39.2% of the farms have bedrooms while the 48.6% have apartments and the 12.2% of then have both bedrooms and apartments. The medium dimension of the agricultural farms, including woodland, is of 68.5 ha, with the biggest one which is of 110 ha and the smallest one is of 2ha. So, this farms are bigger than the medium agricultural Umbrian farms whose the extension is approximately of 11.7 ha.

This shows us how the agricultural activities are more easily undertaken from the bigger farms rather than from the smaller farms.

Woodland, olive grove, cereal grove, forage grove and pasture lands are the most frequent productive activities that can be found in the farms according to the typical Umbrian agricultural production.

Regarding the animal farming the most representing ones are the equine and the ovine farming.

As for comfort, heating and telephone are considered as necessary to provide a proper service to guests. As for entertainment, Ping-Pong is present in 34% of the cases and swimming pool in 25%. Among the possible activities in the open air, notably spread is a trekking course, followed by the presence of parks (32%) and horse rides. Tennis courts are not very common in Agritourism farms, only 9% of the cases. Among the products sold in the farms wine and olive oil are the most spread. Half the farms sell these products. Some of them sell honey, ham, vegetables (as second major products) although they represent less than 20% of the total. Other products, but just scarcely sold, are poultry eggs, cheese and fruits.

The farms which don't offer any kind of service to the guests beyond the accommodation and the restorative are the 17%.

From a typological classification related to the types of accommodation it could be possible to make an analysis dividing the Universe observed: the Type I represents the agritourism farms that have only departments, the Type II the ones which have only bedrooms and the Type III are those farms that have both bedrooms and departments.

To make more understandable the relations among the dimensions of the farms and the typology of the accommodations offered by the farms we point out that the Type I is the most represented among the farms having a surface of 10ha, as the Type II is the most represented in the class of farms under 9ha and the Type III is in the class including areas between 10 and 49 ha.

The Type I is not specialised in farming since this kind of farms are very vast. This is the reason why the farms belonging to the Type I have apartments rather than bedrooms since these require more attention for the guests than the apartments.

The Type II class is represented from farms having a more intensive agricultural activities with production of vegetables, fruits farming and in second part cereals.

The Type III is more characterised for the cereal, vegetables, olive grow, viticulture and in second place for the bovines

Although the Type I farms have less comforts, like the heating, telephone TV and dining room inside the accommodations than the Type II and III farms, the global judge about what it is offered from this kind of farms is a little bit higher than the medium.

About the entertainment activities the Type II have more horse riding, tennis, and less Ping-Pong and swimming pool, this demonstrating that the type II is more orientated in giving the guests more services out from the accommodations.

The Type III are generally better equipped specially with the presence of kitchen.

The type II is the most active in the selling of farmer products.

#### 7.4- Data Umbria agritourism.

Data regarding the trend of the last seven years highlight that since 1988 to 1994, arrivals have been rising from just a little more than thousand to 3,500 and the presence from, 5,500 to



148,000. In 1994 foreigners were 7,055 out of a total of 35000 and the presence 49000 with the average of presence of them of 7 days against the 3.6 Italian people. The flow is continuous during the year, especially in the week ends and in the places located near to artistic towns ; peak months are July, August and September which absorb more than 50% of the entire flow. In the same period agritourism farms rose from 17 to 221 and beds from 188 to 2685 with a current average of 12.1. Prices for accommodation amount -for a single room- to a minimum of Lit.31000 (about US\$20) for the room only to Lit.81000 including shower and full board. As for a double room prices range from a minimum of Lit.74000 to 93000.

Net income of management (thus gross of family labour and capital payment), for agritourism alone, range in the sample observed from 124 to 170 millions per year.

Umbrian agritourism is showing a good vitality ; many farms are able to get, for each accommodation, an annual presence of 180 days. From the survey (26 agritourism farms) has emerged that the average days per bed is 79 days with 14 guest per bed ; the average presence per farm is 294 and an average presence of 5.67. All the data are well above the national average and show a positive level of image of the sector. The sector seems to demonstrate a policy aimed at service quality. This data can be verified from the total investment of the sample which, for the 26 farms and a total of 540 beds, amount to 13.738 billions and 25.5 millions per bed. The internal rate of return is about 11.5%.

Translating the data from the sample surveyed into the whole regional reality it can be evaluated that people employed in the sector are about 1500, 500 of which outside the farms with prevalence of temporary employees.

The prospects of the development outlined by national organisations are those of aiming, in the short-medium term, at achieving the average of 3% of the whole farms, which means in absolute numbers about 100,000 enterprises.

In relation to macro analysis as that prospected by J. Naisbitt in "Global paradox" which may foresee a notable increase in tourism activities especially of niche typologies based on the fruition of natural resources, it can be surely asserted that, given the Umbrian reality which is rich of such resources, it should be possible to reach in the Region in the short-medium term a figure of 2500 enterprises with an employment potential of 12,000 units and an annual G.N.P. of 250 Billions.

## 8-General perspectives of rural tourism in the world

At the national and international level the demand potential existing ,stimulates rural tourism activities, the fruition of minor artistic, architectural and cultural heritage as well as then environmental and scenery ones.

A virtuous circuit and an osmosis of significant and positive evolution are growing, with the creation of an integrated synergy involving the primary agricultural activity, the self-valorisation of typical products, the promotion of production, image and the characteristic of each regional rural context. What is starting, and needed to be stimulated, is a process in which many countries the "weak rural areas" are changing and could be changed to "area of strength" for the future model of sustainable rural development.

In such prospective we need to research and stimulate actions for product and process innovation which would allow the sector to pass the current spontaneousness to become a prospective of a solid rural development towards the 20th century.



The vision of multifunctionality of agriculture is the main way where each government and each people in all the world nowadays must implement the Territorial and Rural Planning. Much disadvantaged areas and much weak rural areas in the world don't have any future if they don't catch the opportunity of the growing demand of diversity by the tourism. This sector of tourism will be the more important business activity in the next century. The trend of demand shows that it is increasing thematic tourism. The activity more and more transforms itself in a strong and dynamic market. The growing demand of environmental thinking that can affect the rural areas and a multifunctional agriculture can be caught only in these areas will increase Rural Tourism. The potentiality of natural resources, environmental amenity, landscapes, cultural, peasant tradition must be explored in a sustainable way: the rural tourism is this way.

## 9-Conclusion

European agriculture is increasingly destructured and involved in a market which is ever-more competitive, global, and characterised by the presence of environmental turbulence making the development of a strategy fragmented and problematic and reducing vitality and competitiveness.

Throughout the sector, the problem of environmental protection clashes with agricultural policy strategies at the Community level and with the recent decisions of the Uruguay Round. The problem of environmental protection and land resources has gone beyond the passionate and ideological stage and is now an obligatory strategic choice for the whole planet. As we have seen, it is imposing a new model of development at world level.

In 1968, MIT with a contribution which feared for the near future (our times) the prospect of exhausting many natural resources referred to with the aim of an obligatory way of development, (given the under-feeding of more than a thousand million people) the strong role of intellectual investment. In 1972, the Club of Rome with a paper on Limits of Development posed to the world the reflection about the necessity of rethinking the quantitative model of the production and a new relationship between the north and southern hemispheres of the world. In the same years arising out of the essay by Paul Sauvy (1974): The quality of life, many meetings began to take into serious consideration, going beyond the instinctive phase, coherent and scientific analytical procedures set against a new option for world society.

The conclusions of the Brundtland Commission (1989) with the report: "Our Common Future" stated very clearly that the question of environmental protection and resources is a question of inter-generational equity. This all serves to confirm once more that the challenge is to manage complexity. A complexity for which the model of sustainable development seems still today to appear more a panacea for the future of the world than a certain and secure direction. It encompasses views like those of Vernon Ruttan (1991) who wonders whether sustainable development is politics, poetry or science and Giorgio Perotto (1993). The latter, in the Paradox of Economics, suggests breaking out of the systemic prison of the western development model and adopting new institutional paradigms such as the handing over to the public of the most important environmental areas and the abolition of private property. David Pearce uses quantitative analysis methods to outline procedures for examining and measuring to what extent a plan, or program, for a large area is sustainable. This complexity makes the situation dramatic for many areas in the South and is a combination of: sustainable development, essential modernisation, equity and extreme poverty. To confront this intricate

situation rationally and to offer a serene prospect to future generations it is necessary that the agricultural and land sectors emulate the advantages furnished by the information technology revolution. It is necessary to build, to validate and to run advanced management structures in both the analytical and decisional phases. These structures are linked to the principle of iterative and interactive model phases in order to guarantee continuous monitoring of the environment and with the aim of limiting and dominating, rather than suffering, environmental turbulence.

We should begin to refer to the agriculture concern as the rural concern: a concern which, besides the basic production activity typical of the primary sector which depends only on sound agricultural techniques, widens the farmer's range of activities. As well as agricultural production, the rural operator will be involved in service activities (consulting, hiring out services, land defence, natural park guide, ecological work, farm holidays etc.) and spreads his risk in financial activities too.

The strategy of sustainable development emerged after wide debate on environmental problems of world importance. Sustainable development envisages a new role for agricultural activity which is increasingly linked to choices and policies of a land management character. The land requires a type of dynamic management with choices which, being linked to public participatory proceedings envisaged by normal administrative procedures (such environmental impact hearings), should be characterised by their objectivity and hopefully be based on repeatable procedures.

The challenge for us is to find lines of research which guarantee three important skills: analysis, choice and operative, in order to acquire a firm intellectual grasp of the problems.

The contribution of the whole research and experimentation sector linked to advanced biotechnology lies at the heart of this question.

The latest information in the field of genetic engineering seem to hold out the prospect of having available, in a few years' time, many productive species which are resistant to adversity.

Objective, ethical, and at the same time, speculative, considerations seem to confirm that the challenge for the next century is, at a technical level, that of a compatible development.

Recently the E.U policymakers have sent us, three strong documents where the new way of developmet is the strategy of integrated development. For rural areas the way is rural, integrated and sustainable development.

In this way we must not forget that we can have good ideas, good financial and management supports, good planning systems and other thinks, but for the succeeding the main rôle is that of the man.

In this new process we must recover the man at the centrum of the question of the development, with his culture, skill, and operating capacity.

In this sense we underline the relevance that the activty of formation and information have where the new I.T.S. can and must play, its fundamental position, toward the future.

Of course this strategy can be achieved in the College and Faculty of Agriculture that are and have been in all countries the more important side of training for agricultural technicians.

In order to achieve the new rural integrated and sustainable development we must change the approach mentality, we must adapt, renew, transform ourself. All of this can be done and must be done.

## References

- Adamowicz W. L., White W., Phillipps W. E. (1993), *Forestry and the Environment: Economic Perspectives*, CAB International, Wallingford, UK.
- AA.VV., (1973), *Verso un equilibrio globale*, Mondadori, Milano.
- Antonelli G., (1988), *Attivita' economiche ed ambiente: problemi e struttura di analisi*, Materie Prime, n.1, Bologna.
- AA.VV.(1976), *Oltre l'eta' dello spreco*, Mondadori, Milano.
- AA.VV.,(1989), *Alternative Agriculture*, National Academy Press, Washington.
- AA.VV.,(1973), *Verso un equilibrio globale*, Mondadori, , Milano.
- Biondi L., (1982), *Contabilita' energetica*, Corso applicativo di energy management, Fast, Milano
- Botta G.,(1974) *Difesa del suolo e volonta' politica*, Angeli, Milano, 1974.
- Bresso M., (1982), *Pensiero economico ed ambiente*, Loescher, Milano, .
- Bridge T.C., Smith E.M.,(1979), *A method for determining the total energy input for agricultural practices*, Transaction of the ASAE, n. 4.
- Cannata G.,(1974), *Saggi di economia dell'ambiente*, Giuffre', Milano.
- Carillon R.,(1978), *L'activite' agricole et l'energie*, Etude du CNEEMA, n 408.
- Carillon R., (1979), *L'analyse energetique de l'acte agricole*, Etude du CNEEMA, n.458.
- Cecchi G., (1986), *La nuova teoria neoclassica delle forme di conduzione*, Riv.E.A., n.4., 1986
- Ciani A. (1992), *Contabilita' e management delle imprese in agricoltura*, ETAS libri, Milano.
- Ciani A., Vignaroli p., Boggia A., (1989), *Agricoltura inquinata o agricoltura inquinante?*, Riv.Genio Rurale, n 7-8,
- Ciani A., Boggia A., Marinuzzi G. (1993), *Metodologie di valutazione di alternative di parchi: il caso del Parco del Nera*, Genio rurale, n.11, Edagricole, Bologna..
- Ciani A., Boggia A., (1994), *Agricoltura biologica e qualita'*, Rivista Bio-Agricoltura, n.28. Vignola (Modena).
- Clemente F. (a cura di ) (1984), *Pianificazione del territorio e sistema informativo*, Angeli, Milano.
- Colbi M. E. (1990), *Environmental Management in Development. The evolution of Paradigms*, The World Bank Discussion Papers n.80.
- Colomi A. Laniado E., (1988), *VISPA*, CLUP, Milano
- Costanza R. (1991), *Ecological economics: the science and management of sustainability*, Columbia University Press, New York.
- Club di Roma, AA.VV., (1972) *I limiti dello sviluppo*, Mondadori, Milano.
- De Benedictis M., Cosentino V., (1979), *Economia dell'azienda agraria*, Il Mulino, Bologna.
- Espinosa J.A., Smith V.K. (1994), *Implementing Thatcher's Full Repairing Lease: a CGE Analysis of the Role for Environmental Resources in Adjusting GDP*, ASSA meeting, Boston, 3-5 January.
- Ferro O.,(1986), *Agricoltura ed ambiente: alcune riflessioni ed alcune proposte*, Riv.Politica Agraria, n.4.
- Fusco Girard L. (a cura di) (1989), *Conservazione e sviluppo: la valutazione nella pianificazione fisica*, Angeli, Milano.
- Gerelli E., (1974), *L'Economia dell'ambiente*, Angeli, Milano,
- Georgescu-Roegen N., (1982), *Energia e miti economici*, Boringhieri, Milano.
- Goering C.E., Daugherty M.J., (1982), *Energy accounting for eleven vegetables oil fuels*, Transaction of the ASAE, n.2.

- Gordon P. L., Prince. R. (1994), Incorporating Environmental Quality and Natural Resource Availability into the National income accounts, ASSA meeting, Boston, 3-5 January 1994.
- Gregersen H., Contreras A. (1992), Economic assessment of forestry project impacts, FAO, Forestry Paper, n.106.
- P. Kennedy (1993), Verso il XXI secolo, Garzanti.
- J. M. Keynes (1930), Esortazioni e profezie.
- Jacoponi L., Andreoli M., (1987), Le implicazioni microeconomiche dell'introduzione di tecniche agronomiche alternative, in Agricoltura e ricerca, Maggio, Roma.
- Jarack M., (1985), Sui valori di equivalenza per l'analisi ed il bilancio energetico in agricoltura, Riv. Ingegneria Agraria, n 2.
- M. Mesarovic, E. Pestel (1974), Strategie per sopravvivere, Mondadori. Milano.
- Miele M., Jacoponi L., Rovai M., (1988), Strutture e tecniche produttive nell'agricoltura intensiva e riflessi ambientali, Atti del XXV Convegno SIDEA , Ancona.
- Munasinghe M. (1992), Environmental Economics and valuation in development Decisionmaking, Environment Department Working paper n.51, World Bank.
- Naisbitt J., (1994), Global Paradox, William Morrow and Company, New York
- P. Nijkamp (1974), A multicriteria analysis for project evaluation, Paper of the Regional Science Association, vol.35.
- Muraro G., (1984) ,Criteri di efficienza per la politica ambientale, F. Angeli, Milano,
- Noorgard R., (1984), Coevolutionary development potential, Land Economics , n.2.
- Panattoni A., (1987), Sintesi delle implicazioni macroeconomiche, In Riv. Agricoltura e Ricerca.,
- Pearce D. W. (1991), Blueprint 2: Greening the World Economy, Earthscan, London.
- Pearce D.W., Turner R.K. (1990), Economics of natural resources and the environment, Harvester Wheatsheaf, London.
- Perrings C., (1987), Economy and Environment, Cambridge University Press.
- Perotto P.G., (1993), Il paradosso dell'economia, F. Angeli, Milano
- Pulitini F., (1976), Divergenze fra costi sociali e costi privati: alcune implicazioni per l'analisi economica del diritto, In Note Economiche n 4-5,
- Romero C., Rehman T., (1987), Natural resource management and the use of multiple criteria decision-making techniques: A review, European R. of Agricultural Economics n.14.
- Romero C., Rehman T. (1989), Multiple Criteria Analysis for agricultura l decisions, Elsevier, Amsterdam.
- Ruttan V., (1991), Sustainable Growth in Agricultural Production: Poetry, Policy and Science, in CNR, Centro di Studio sulle Rilevazioni Contabili Aziendali, Lo Studio dei Sistemi Territoriali, Bologna, 1992
- Sauvy P., (1974), Crescita zero, Garzanti, Milano.
- Schumpeter J. (1984), Capitalismo, Socialismo, Democrazia, Franco Angeli, Milano
- Simonotti M., (1982), Introduzione alla valutazione del danno da inquinamento all'agrosistema., Catania,
- Smith V.K., Desvousges W.H., Fisher A. (1986), A comparison of direct and indirect methods for estimating environmental benefits, American Journal of Agricultural Economics, May.

- Tellarini V., Caporali F., (1989), Proposta per un modello di contabilita' energetica:il caso di due agrosistemi a diversi input di fattori esterni, Genio Rurale, n. 7/8,Edagricole,Bologna.
- Tinbergen J. (1977), Progetto RIO. Per la rifondazione dell'ordine internazionale, Mondadori.
- Van Ierland E.C. (1993), Macroeconomic Analysis of Environmental Policy, Elsevier.
- WCED, (1987), Our Common Future, (The Bruntland Report),Oxford,World Commission on Environmental and Development/Oxford Univeristy Press.
- Young M. D. (1992), Sustainable investment and resource use, UNESCO, Man and the biosphere series.
- Winpenny J. (1991), Values for the environment a guide to economic appraisal, ODI -HMSO, London.