

# GLOBALISATION, NATURAL RESOURCES AND AGRICULTURAL POLICIES IN THE MEDITERRANEAN REGION

NAJIB AKESBI (\*) - JOSÉ-MARÍA GARCIA-ALVAREZ-COQUE (\*\*)

It is widely recognised that farming and conservation of the natural environment are closely linked. This is true for the Mediterranean area, where agricultural systems have been a source of environmental value by maintaining landscapes, conserving bio-diversity and protecting historical features.

Agriculture can also be a source of environmental problems.

However, when environmental impacts related to farming activities are significant, they are often the effect of how the agricultural systems are managed rather than of agriculture itself.

In most cases, environmental problems become a constraint upon rural development and there is a need to achieve development strategies that allow the conservation of the natural resource base and, at the same time, promote growth and reduce poverty in rural areas.

Environmental concerns must be integrated into development programmes in a way that makes environmental protection an instrument of growth rather than a restraint on development or trade. Almost three-quarters of the poor in the Southern and Eastern Mediterranean countries live in rural areas (Bishay, 1998). Alleviating rural poverty in the de-

## ABSTRACT

This paper aims at discussing the implications of globalisation in the agricultural sector on the environment and the natural resource base in the Mediterranean region. Once established the links between poverty and resource conservation, the effects of economics policies on environment are analysed at two levels: macroeconomic and sectoral. From the macroeconomic point of view, the discussion focuses on the short-term consequences of the adjustment programmes in developing countries, which usually neglect the consequences on environment. As far as the agricultural sectoral policies are concerned, the impact of agricultural trade liberalisation on the environment is ambiguous. However, some agricultural policies, such as those illustrated by the agricultural intensification in the European Union countries and the promotion of an export sector in developing countries, have proved to increase the pressure on the natural resource base. The paper provides examples on how policies are affecting the environment in the Mediterranean area. On the other hand, links between trade and environment are considered through the concept of multifunctionality. Pros and cons of this approach are discussed from the view point of developing countries, with a view to the international trade negotiations and to the Euro-Mediterranean Association strategy.

## RÉSUMÉ

*Le travail que nous allons exposer va permettre de voir l'impact de la globalisation sur le secteur agricole de la région méditerranéenne, ainsi que la relation qui existe entre la préservation de l'environnement et des ressources naturelles et le niveau de la pauvreté. L'analyse se fera à deux niveaux, macroéconomique et sectoriel: pour le premier on essaiera d'exposer le résultat à court terme du programme d'ajustement entrepris par les pays développés qui ont depuis longtemps négligé la question de l'environnement. Au niveau sectoriel on notera l'existence et cela depuis l'application des règles du libre marché, d'une initiative portant la préservation du capital naturel dans la zone méditerranéenne, au contraire l'intensification de la production et le développement de l'exportation agricole étaient toujours prioritaires à la celle de l'érosion du capital naturel. Ainsi l'objectif de notre étude sera de montrer l'impact négative de la politique agricole entreprise par les pays développés de la région méditerranéenne sur l'environnement, c'est à dire illustrer le concept de multifonctionnalité de cette politique, ses avantages et inconvénients.*

*En conclusion on essaiera de montrer la conséquence de cette politique sur les négociations internationales et la stratégie d'association Euro-méditerranéenne.*

velopping world is increasingly understood as essential for economic and social development (Khan 2000). In several countries, demographic pressure and limited water and land availability have led to mass emigration to large cities where rural migrants settle with few employment possibilities and limited access to social services. Rural poverty can be conceived as both a cause and an effect of pressure on the natural resource base and degradation of the environment. The rural poor are frequently exposed to the dangers of an already miserable productive base; but some environmental problems seem to worsen with poverty (Esty, 1999). Poverty leads to short-term decision-making that is often environmentally destructive, as already stated by the Bruntland report.

It is difficult to ask an agricultural producer to stop degrading the soil and to switch to environmentally friendly farming methods, when exchanging some of the natural capital stock for cash may be the only prof-

itable alternative. Links between globalisation and environment are also relevant to the discussion of the choice of appropriate public strategies to deal with environmental problems. In the case of agriculture, a standard line of argument is that liberalised trade in most countries will result in reduced product prices and, by implication, less environmental stress since lower product prices imply lower production and less intensive use of inputs. Further, environmental gains would follow indirectly from the redistribution of production be-

(\*) Institut Agronomique Vétérinaire Hassan II, Maroc.

(\*\*) Universidad Politécnica de Valencia - Spain.

This paper is a synthesis of the first chapter of the CIHEAM report 2000 on Agricultural Development and Agrofood policies in the Mediterranean region.

tween countries so that more production would be produced in countries with the best natural conditions and higher production efficiency (Anderson, 1999). However, the actual situation is a little more complex. Improvements in the eco-efficiency of the agricultural sector in developed countries do not only depend on the market conditions but are also due to exogenous technical developments as a result of agricultural research and changes of the farmers' behaviour. Furthermore, although agricultural price support has encouraged farmers in some countries to cultivate on marginal lands, which often require more intensive production techniques, agricultural trade liberalisation could in turn produce the abandonment of marginal lands. This could therefore lead to increased erosion and deforestation. In contrast, in some developing countries, where agriculture is less supported, enhanced market access in the developed countries could increase exports of products cultivated at irrigated areas. Trade liberalisation could lead immediately to a negative effect, normally concentrated locally, as a result of the pressure on water resources and bio-diversity and of the pollution caused by the increased demand for cash products. Therefore, from the drawn picture, it is difficult to forecast any clear net effect in the levels of environmental degradation as the result of agricultural trade liberalisation. While free trade may or may not contribute to an overall reduction in pollution, it cannot produce by itself the incentives to secure the provision of public goods from agriculture. Even if agricultural policy reform, including trade liberalisation, enhanced the potential for environmental improvement it would not guarantee it, because of the need to implement appropriate policies for the environmental targets (Ervin, 1997). In this paper, a discussion is carried out on the impact of globalisation of the Mediterranean agriculture on environment and on how agricultural policies are responding to this pressure. We consider first how macro-economic and sector policies affect natural resources. We then identify the interrelation between globalisation and the concept of multifunctionality. Finally, we will conclude with a reference on to how environmental issues are tackled in the ongoing process of Euro-Mediterranean partnership.

## 1. STRUCTURAL ADJUSTMENT POLICY AND NATURAL RESOURCES MANAGEMENT

Although there is abundant literature on the analysis of micro-economic measures designed to protect the environment, it is a fact that studies endeavouring to integrate the environmental dimension into macro-economic policies are fairly rare. In the next paragraphs, we shall examine the impact of economic policies on natural resources, with attention paid to economy-wide policies (and the case of structural adjustment policies) and to specific agricultural policies.

Most developing countries have been pursuing reform policies since the 1980s. They are based on structural adjustment policies, in coordination with certain international financial institutions, in particular the International Monetary Fund and the World Bank. The assessment carried out prior to the implementation of a structural adjustment policy attributes the imbalances mainly to internal factors aggregated diagrammatically around the fact that demand exceeds supply. This excess demand is reflected in more rapid development of consumption than of production and a growing gap between savings and investment on the one hand and between expenditure and public resources on the other. It is the financing of the budget deficit by means of inflationary finance and/or of the external loans which it generates, that is considered responsible for the balance of payments deficit. Adjustment policies, -stabilisation and structural programmes- are advocated as a remedy for these imbalances. We shall now analyse the impact of these on natural resources. It must be pointed out from the outset that adjustment programmes are above all economic and financial programmes, so that the principle of conditionality on which they are based still actually disregards environmental considerations.

### 1.1. Stabilisation programmes

The initial phase of the adjustment policies consist of a short-term stabilisation phase, where efforts focus primarily on reducing domestic demand in order to restore macro-economic balances. The reduction of its budgetary possibilities leads to a sudden drop in investments and the decrease in public expenditure. The credit restrictions and the raising of interest rates contribute to trigger a recessive dynamic. Staff reductions and wage freezes give rise to the deterioration in the population's purchasing power and thus restrict the possibilities for recovery through the domestic market. There is a further drop in the utilisation rates of production capacities in industry, resulting in a loss of jobs. As a reflection of the drop in consumption and investments, the reduction of imports acts as a further disincentive for any entrepreneurial plans of domestic or foreign investors. And the devaluation of the national currencies usually has unanticipated effects, resulting less in the encouragement of exports than in the increase in import prices and in the cost of debt service stock (Jacquemot, 1989). The sharp decrease in social expenditure also contributes to worsen the degradation of the living conditions of the weakest part of the population and to intensify social and regional disparities.

For the reduction of public expenditure begins with expenditure that is considered less urgent or less essential. And decision-makers are unfortunately often inclined to consider that "green" expenditure belongs to that category. So they begin with cutbacks in expenditure on soil protection and rehabilitation, re-afforestation or an-

ti-pollution installations. But even if one is convinced of the need for green expenditure, how are resources to be appropriated whenever vital needs in terms of food, health or education have barely been satisfied? This direct impact is not the only effect; certain "indirect" effects can have even more serious consequences. And, as argued in the outset, it is now a fact acknowledged by all that poverty and environmental degradation are closely related.

In the field of monetary policy credit restrictions or the raising of interest rates are having the effect of making it more difficult to invest and thus of allowing rates whose profitability can sustain high levels of return on capital. Since this is rarely the case with "green investments" it is easy to see that these investments are highly likely to be deferred or even cancelled in such circumstances.

The restrictions imposed on imports also inevitably begin with what seems to be relatively "secondary" in that context, where foreign exchange shortage leaves very little leeway. But the volume of "priority" imports (food-stuffs, energy, spare parts, etc.) is generally so great that other acquisitions are practically impossible, particularly when decision-makers are not convinced that they are urgently needed. The devaluation of national currency increases the cost of access to imported goods and services; the resulting scenario is similar to that resulting from an increase in interest rates. It is also a fact that even if devaluation succeeds in appreciably improving export competitiveness, in doing so it can lead to a certain degree of overtapping of exportable natural resources.

However, all of these remarks must be qualified and brought into perspective. There is an alternative for overcoming such obstacles, provided that there is a firm will to invest in the "things green": self-financing can be sought instead of resorting systematically to borrowing; the difficulty in obtaining supplies from abroad can prompt efforts to seek local solutions or even to "return" to age-old local and sustainable know-how; devaluation also increases the domestic price of imported oil products, which can lead to a drop in consumption and thus to the reduction of atmospheric pollution.

## 1.2. Restructuring

Numerous economic reforms have been carried out within the framework of structural adjustment policies. We shall review the policies concerning taxation, prices and subsidies, the opening of the economy and liberalisation of trade, and the continuing indebtedness, in that order.

### 1.2.1 - *Taxation, prices and subsidies*

The tax reforms recommended to developing countries are based on the idea that simplification and rationalisation of the taxation system, restructuring and mea-

sures to broaden the tax base accompanied by the reduction of tax pressure should stimulate growth and generate an increase in revenue. In practice, the model advocated is based primarily on several taxes on domestic consumption, which are extremely productive (VAT and specific levies), and comprehensive and slightly progressive income taxes. The external taxation system, on the other hand, is liable to decrease progressively until it is finally abolished (Akesbi, 1993).

Fiscal reforms may have been inspired by financial, economic or even social considerations. However, they virtually ignore any environmental concerns. "Green taxation" evidently does not yet appear to arouse enough interest to enable it also to become a tool for regulation. It must be said that the international financial institutions, which prompted structural policies, remain reluctant, considering that the application of environment levies in developing countries would be a "laborious" task for various reasons, particularly from the administrative and political point of view (Kelly & Ghandi, 1993). What can be detected at the very most is the occasional reduction of an import duty on a specific piece of energy-saving equipment or the supplementary taxation of fuel oils activated by purely financial considerations and hardly an ecological measure.

Yet taxation specific to the broader issue of natural resources can contribute to induce the agents concerned to include ecological concerns in their economic calculations while at the same time procuring funds for the state for the financing of environmental measures. It can be developed as such (ecotaxes, for example), just as the same purpose can be achieved by fixing prices/tariffs which take account of the same considerations. Subsidies have been frequently used to encourage certain types of behaviour or to stimulate the use of certain materials, which did not prove to be environmentally harmful, until some time had elapsed. This is the case with the subsidisation of certain agricultural production factors (pesticides, fertilisers, etc.), coal, hydrocarbons, gas and electricity. It thus now seems necessary to abolish these subsidies or at least to reduce them considerably. This should bring various economic and ecological advantages.

However, all of these means of action produce effects whose impact is of course debatable. All in all, it is a fact that taxation/subsidisation measures designed to protect the environment are bound to influence essential macro-economic variables such as production, investments, foreign trade, prices, etc. The impact will of course differ according to the nature of these measures and to the specific economic and social conditions in which they are carried out. The "net" effect may also be difficult to assess. For example, supplementary taxation or the abolition of the subsidisation of a pollutant form of energy penalises industries which are intensive users, and this will induce them to adjust to the new situation,

particularly by reducing the production concerned or adopting new technologies which are less dependant on the undesirable input (with all the consequences this can entail for employment, production systems, etc.). There will also be an impact on prices, which will probably have to be raised in consequence.

### *1.2.2 - Trade liberalisation and promotion of exports*

Within the framework of the structural adjustment policies, developing countries have to place more emphasis than ever on opening their markets to the outside world. The fact is that the production of basic commodities for export is often an important source of ecological degradation in these countries. Around the Mediterranean itself, agricultural commodities which are produced for export are treated with pesticides, which are known to have negative effects on biodiversity, to tend to increase resistance to harmful organisms and to present direct health hazards. One can also mention the pollution problems that can be attributed to the deforestation, which is the corollary of efforts to seek arable land and pasturage. And in the field of fisheries one can deplore the catch volumes that are sometimes incompatible with the regeneration thresholds of fish resources.

This state of affairs is even worse in the context of the conditions determining the trading of goods at the global level. When exchange rates drop but commitments and foreign currency needs remain at the same level the countries concerned often have no choice but to exacerbate the pressure on natural resources—simply in order to maintain the same level of foreign earnings or to prevent it from collapsing completely. The increased competition, characterising many world markets, does not favour the internalisation of environmental constraints into the private cost calculations. The question remains of whether environmental protection measures and investments would not dangerously affect the competitiveness of countries which agree to undertake them when others refrain from doing so.

### *1.2.3 - Debt versus environment?*

The debt problem is still unsolved for the vast majority of the developing countries concerned (Watkins, 1998). All of the attempts to find solutions which have been made successively since the mid 1980s (Baker Plan, Brady Plan, Swap scheme, partial moratorium for the “the less developed countries”, etc.) have been fairly inconclusive. The only tangible reality is still that of the unfairness of the debt burdens and the endless labyrinth of reschedulings which follow and precede other reschedulings.

Since the debt question is still so topical, its relation with the environment must be carefully examined. As S. George explains, “debt and environment can be associ-

ated at two levels: first of all, one borrows in order to financing disastrous projects for ecological balance and then in order to pay off the debt one gaily draws on natural resources” (George, 1988). Many projects concerned have proved to be “ecological catastrophes in themselves” - to the extent that the author who has just been quoted barely hesitates to talk about “financing the ecocide”. There are quite a few examples, from the Tuccurui Dam in the Amazon (sedimentation and reduced fertility downstream, flooding of arable land and forest, destruction of the fauna and increase in soil salinity...) to the “Transmigrasi” programme in Indonesia (displacement of populations from certain islands to others where the forests have been devastated, the soil has been damaged, and animal and plant species have been exterminated...).

As one of the principal sponsors of such projects, the World Bank does not escape from criticism (Kleiner, 1996 and 1998). The results of the study conducted by the Environmental Defence Fund, an American NGO, are even more revealing: in the case of one-third of the 158 World Bank agricultural projects examined for the period from 1990 to 1995, no environmental impact assessment whatever had been carried out. An exhaustive study of the impact on the natural environment including the consultation of the local communities and the examination of alternative solutions was only considered necessary for 5 of these 158 projects. And finally, a quarter of the agricultural loans granted by the World Bank concerned sectoral programmes for which no prior ecological analysis is required (Kleiner, 1996) <sup>(1)</sup>.

Debt can also be “ecocidal” when it comes to repayment. For debt servicing obviously means so many resources less for financing development projects or protecting the environment. And what is more, this constraint of debt repayment is inducing more and more countries thus cornered to take measures which are clearly prejudicial to the environment but are intended to bring in foreign currency (eg. by expanding environmentally aggressive exports) <sup>(2)</sup>.

## *1.3 - Sectoral policies and natural resources management: the case of agriculture*

### *1.3.1 - Water*

The water sector is a key area for the protection of the environment and sustainable development in the Mediterranean. Water is a scarce and fragile resource, widely exploited and unequally distributed throughout the region. Rainfall is low, erratic, and poorly distrib-

<sup>(1)</sup> See World Bank (1995) for a presentation of the Bank’s strategie in this field.

<sup>(2)</sup> In this context, George (1988) note the following “coincidence”: the five countries that deplete a largest area of tropical forests are also among those with highest debt service.

uted. Droughts and deserts are common in several countries of the region. Water demand in the region is growing fast and the balance with supply needs to be taken seriously. Salinisation, overexploitation (often due to irrigation) and losses are different consequences of an irrational use and management of this natural resource. Pollution of water can have negative effects on health. It can lead to soil degradation, as well as to loss of valuable wetlands and bio-diversity.

Agriculture is a major consumer of water compared with other sectors. Between 1981-85 and 1997, the area of irrigated land expanded significantly in the Mediterranean countries (by about 37%), particularly in the Southern Mediterranean (57%) (Hamdy and Lacirignola, 1999). Irrigation is mainly used on annual and permanent crops to boost or stabilise yields as well as to ensure high-quality produce. In many cases, precedence has often been given in irrigation systems to the "large-scale water project" model involving vast conventional irrigation networks incorporated into areas where demarcation take little account of ecological imperatives. As Barghouti and Le Moigne (1991) pointed out, that "badly designed, badly constructed and badly managed irrigation facilities have serious negative effects on the environment". Many years of experience in the field have shown that in addition to the fact that dams and irrigation networks can begin by causing population displacement in the zones that are submerged - they also result in the water-logging and salinification of the soil. Furthermore, irrigation can have other detrimental effects when inhabited regions are supplied with standing water from canals and drainage zones: this gives rise to public health problems such as schistosomiasis, malaria, yellow fever and other diseases.

### 1.3.2 - *Agricultural intensification*

Agricultural intensification has usually been a source of environmental damage. The encouragement of mechanisation - in particular by subsidising farming equipment - has encouraged the cultivation in marginal zones, accelerating the desertification process in those zones. It is the case, for example, of the steppes in the Maghreb (see below). With the structural adjustment policies, the authorities tended to abolish this type of subsidy. But this abolition sometimes also proved to be a disadvantage for the natural environment! In Algeria, for example (Bédrani & Elloumi, 1994), the elimination of subsidies penalised the efforts for combating desertification, in which equipment was used for combating

erosion (construction of embankments and djessours, development of flooding zones, etc.).

With regard to artificial fertilisers, excessive use of these chemicals may cause the loss of organic material in the soil. The eutrophication of streams, rivers and waterways with phosphates has already caused a great deal of damage in many countries. What is more, these substances are harmful for fish and thus deprive the population of precious proteins and promote the proliferation of anopheles and bulins (Bouguerra, 1996).

The use of chemical pesticides is also steadily progressing, particularly whenever it is subsidised and concerns cash crops for export <sup>(3)</sup>. Although the use of these chemicals is dictated by economic imperatives, it raises environmental, social and even ethical questions. It actually stems from the will to blindly eradicate all organisms that are considered harmful to the crop in question, and this can wipe out many other species which are necessary to the balance of the ecosystems (Philogène, 1996). And in fact the effectiveness of the same pesticide is limited, since the targeted insects can rapidly develop high resistance. Furthermore, many pesticides are suspected of damaging the immune system or disturbing the hormone balance. Developing countries only use 20% of the pesticides produced in the world, yet they suffer the majority of the cases of poisoning and deaths caused by these compounds. Some prohibited insecticides in the producer countries are still imported by developing countries under the pressure of several multinationals which dominate this sector and can afford huge publicity budgets to promote their products. Countries such as China, Indonesia or India are even still producing organochlorine pesticides with harmful effects for the entire biosphere in the long term.

However, the impact of agricultural intensification with regard to the "real problems" of developing countries is still an open question. J.R. Mercier (1991) considers that this is a non-debate sustained by hard-line "ecologists". Although there are abuses in the use of imports such as fertilisers and pesticides, "this abuse is particularly absurd in Europe, where the problem is more one of over-production. In Africa, on the other hand, the use of chemicals in agriculture is not the main environmental problem." Other mechanisms which are much more "treacherous and adverse", such as the general extension of crop areas, in particular in areas with a high erosion potential.

### 1.3.3 - *Agricultural policy and desertification*

The United Nations Convention to Combat Desertification defines the latter as "the degradation of the land in arid, semi-arid and sub-humid dry zones as the result of various factors including variations in climate and human activities" <sup>(4)</sup>. According to the Worldwatch Institute in Washington, 50% of the agricultural land

(<sup>3</sup>) Throughout the third world almost 70% of pesticides are used on export crops of such as coffee, sugar cane, tea, bananas, etc. so that the argument that pesticides are essential for fighting famine and achieving food security does not stand up to analysis.

(<sup>4</sup>) This convention, which was recommended by the Earth Summit in Rio in 1992, entered into effect on 26 December 1996, and was ratified - in early 1998 - by 113 countries including 43 African countries.

throughout the planet have been moderately degraded and 16% are highly degraded; 3.5 billion hectares are gradually turning into desert (Van Den Hove, 1998).

After many years of experience it has transpired that human action is at the core of the process: desertification, deforestation and poverty – particularly in rural zones – constitute a triptyque which must be analysed interactively (Lo & Diagne, 1996). There are two series of factors causing desertification: physico-ecological factors and socio-economic factors. While the former are mainly related to soil and climate – droughts or floods – the socio-economic factors are more related to policies. The choices of crop and crop-growing systems and the trade policies pursued during the colonial period and maintained by the states after independence have led to overcropping and soil depletion. This is the case with the precedence given hitherto to cash crops to the detriment of food crops. But given the deterioration in terms of trade, the population explosion and the decrease in agricultural yields, the only strategy remaining for the populations concerned is to clear land for crops, extend the arable areas, and resort to overgrazing... And as for energy, wood remains the only source that this still accessible to most rural and suburban households. There can be further factors, such as ownership, which are reflected in inappropriate land laws, absence of measures to delegate responsibility to the populations in the management of natural resources, inequalitarian distribution of natural resources and illegal appropriation of those resources by a minority.

But amongst all of these factors which foster the desertification process, poverty seems to be the major one and structural in nature. In rural zones, poverty is reducing peasants to forms of subsistence where the production system is based almost exclusively on natural resources and on practices which destroy the environment. Peasants are seeking to use increasingly barren land to maximum (rather than best) advantage, and this is leading to degradation in the form of (wind or water) erosion and salinification and acidification of the soil. This vicious circle of poverty and pressure on resources is dramatically affecting vulnerable groups, and women and children in particular.

According to Bédrani and Elloumi (1994), there are three causes of desertification in the Maghreb: excessive human pressure, excessive orientation of a certain type of capital to extensive farming, and inadequate and inefficient state investment in efforts to combat desertification. Demographic pressure takes the form of strong pressure on the land. Since the populations have to produce their means of subsistence, cost what it may, they have very little other opportunity to do so than by raising stock on pastureland and growing crops (the only areas of activity which are still relatively accessible to them). But livestock activities are proved to be too extensive for the fodder resources that are naturally

available. It is destroying the protective plant cover while making the ground surface pulverulent since the animals stamp on it. Furthermore, efforts to seek supplementary food have not led to the intensification of fodder crops but rather have led to the frenzied clearing of steppe rangelands. Within 2 or 3 decades, the ploughing of fragile land and a crop-growing system which is tending more and more to exclude the practice of fallowing have been transforming relatively prosperous rangelands and grasslands into stony fields. The ploughing technique generally used by peasant farmers is particularly erosive (consisting of covering seeds strewn on unprepared soil by going over them with a skim plough).

The second category of causes concerns the pronounced tendency of investing on extensive farming on the steppes – a tendency which is to be explained by the profitability that is guaranteed, since the fodder is free –, tax exemptions in the sector, and ignorance or lack of opportunities for alternative investments. And finally, the inefficiency of the public resources allocated to the zones concerned and the efforts to combat desertification are also in question (meagre shares of investment budgets, bad choices, non-participation of the populations concerned, etc.).

## 2. MULTIFUNCTIONALITY

### 2.1. Is multifunctionality a meaningful concept?

The idea that agriculture affects the well-being of society beyond the value of its food production is not new but the concept of multifunctionality has gained ground lately, especially within the OECD (see, for example, OECD 1998). But the term “multifunctionality” still lacks any clear definition, rousing suspicions amongst its opponents, in whose view multifunctionality is merely a convenient pretext which some developed countries have found for justifying the exemptions that have so far largely excluded agriculture from the obligations of multilateral trade reform. Moreover, many public goods can be produced independently of agriculture, and a range of policy instruments and private actions are available for achieving each objective related to non-food outputs.

Multifunctionality may be perceived to establish a link between the production of food and the production of public goods (Vatn, 1999), such as preserving the rural environment and landscape and contributing to the viability of rural areas and to balanced regional development. The position of the US and the Cairns Group (Bohman et al., 1999) is clearly against linking multifunctionality with trade protection measures. Following the principle of targeting policies to their specific objectives, the most efficient and potentially most effective approach to achieving multifunctionality objectives is to use specific payments targeted at specific multifunc-



tional objectives. Consequently, there is no need to use broad-based agricultural protection. Since protection is not being targeted at the specific objective, it is unlikely to be effective or efficient.

One of the most difficult issues in the present debate on the term “multifunctionality” concerns the possible relationships between commodity production and the production of public goods. The stronger the connections, the more difficult it will be to keep trade and “non-trade concerns” apart. Some countries have argued that the production of food outputs and that of non-food outputs are “joint products”. Thus, advocates of this argument claim that, instead of a targeted policy, production-linked payments are necessary to obtain socially desired non-food outputs. This issue is easily illustrated by looking at the Mediterranean landscapes. Is the product valued differently if it is part of an agricultural system compared to an open landscape produced without any connection with agriculture whatever? In the Mediterranean area many landscapes are in a significant way the result of the formative influence of agriculture. The rise of agriculture enabled and fostered the development of civilisations, and in so doing it became the dominant land use.

In the WTO context, agricultural multifunctionality has been linked to the so-called “non-trade concerns” addressed in Article 20 of the Uruguay Round Agreement on Agriculture. The term is frequently used by some countries such as Norway, Japan and the EU as an argument in the WTO. The debate continues in the WTO as to which interpretation of multifunctionality will prevail during the agricultural trade negotiations. In fact, the term multifunctionality can be used in different ways:

- i. as an excuse in favour of greater border protection justified by the specific nature of the agricultural sector.
- ii. as an argument in favour of greater use of rural development measures (within the “so-called” “green box” measures).
- iii. as a recognition of the links between trade and non-economic objectives (environment, social conditions, food safety).

The EU does not appear to follow only one interpretation of multifunctionality but a combination of the three approaches. One possibility would be to conceive “multifunctionality” as a defence of the “green box” policies (approach ii). The principal requirement for “green box” policies is that they have no, or minimal, effect on trade. The Cairns Group argues against the use of “multifunctionality”, as an excuse for special treatment for the rural sector in the WTO context. A related question is whether it is possible to promote multifunctionality without using trade-distorting measures. However, what is questionable is whether all the external positive functions of agriculture can be promoted without distortion of production and trade. For exam-

ple, in some places, the rural landscape is shaped by agricultural activities. Should citizens wish to preserve vineyards, whatever type of payments the public sector may wish to use will obviously influence the continuity of that crop. Some of the public goods could be very difficult to achieve through measures totally decoupled from production. As a consequence, a restrictive interpretation of public intervention in the agricultural sector would eliminate many opportunities to promote multifunctionality. The new WTO Round might end up rejecting the conformity of multifunctionality with the trading system, since no payment would fit a “green box” built on restrictive definitions and strict control.

Apart from the external constraints, current agricultural policies in most Mediterranean countries are far from being designed to achieve multifunctionality. From the domestic point of view, in the European Union, the multifunctionality argument served as justification for the Commission to introduce Agenda 2000 to European society. However, the CAP has not been forced into taking any more far-reaching steps towards purely rural development framework: for many the Agenda 200 is rather a declaration of good intentions. According to Massot (1998), the European Commission chose “the easy option”: slow reform but in the right direction. This strategy led to a new view of the EAGGF - guarantee as a “rural fund” which, following the Berlin agreement, has ensured a certain degree of defence against the reduction of the EU agricultural budget. Paradoxically, this budget is facing serious restrictions with regard to giving substance to the rural development approach, beyond the rhetoric. By the year 2006 rural development policies will only account for barely 10% of total CAP expenditure.

There is a substantial need for redirecting agricultural policy, in a more consistent formulation. The EU should resolve its inconsistencies in the matter and stop arguing for multifunctional farming while at the same time maintaining the standard approach to export subsidies. Once free of ambiguities, and with increased recognition of its legitimacy for the revised forms of public support, multifunctionality could present a clear strategy for all countries wishing to defend sustainable modes of production.

## 2.2 The asymmetries in the greening of agricultural policies

**Table 1** illustrates the subsidies provided by the world's largest agricultural trading powers, the US and the EU. Calculation of Producer Support Estimate (PSE), total domestic support (notified to WTO) and the “green box” reveals that the overall level of support in both countries remain high. “Green box” can be accused of being a sort of “subsidy refuge”, giving rise to leeway for those who can afford to provide outright financial supports.

**Table 1 Total agricultural support in the EU and US.**

	(1986-88)	1995	1996	1997	1998
European Union (million ECU) "Green box"	9,233	18,779	22,130		
Total domestic support	82,878	90,222	95,131		
PSE	90,392	83,442	74,970	96,729	116,075
United States (million \$) "Green box"	24,098	46,041	51,825	51,249	
Total domestic support	49,658	60,767	58,807	58,291	
PSE	41,428	15,205	23,500	30,616	46,960

Sources: OECD in Figures, 1999; WTO, 'Domestic Support', A/E/S2/Rev.2, 23 September 1999; OECD in Figures, 1996.

Developed countries will be able to finance multifunctionality while developing countries face difficulties in financing their own non-trade concerns such. In fact, in 1996, developing countries provided only 12.5% of all "green box" supports, with developed countries providing the other 87.5%. Many developing countries may feel that have been virtually ignored by the "green box", which they see as having been designed essentially to serve the interests of developed countries, whether advocates or opponents of multifunctionality. This asymmetry holds true amongst Mediterranean countries, as seen in **Table 2**, which shows that "green box" expenditure per agricultural worker is lower in selected Southern and Eastern Mediterranean countries than in the EU.

Prospects for the current agricultural negotiations con-

firm this asymmetry. Agricultural reforms in developed countries will lead to a further "greening" of their domestic support in order to achieve their multifunctional goals. The definition of the "green box", as claimed by the EU, will probably be flexible enough to include a wide range of measures. In fact, the term "minimally distorting" will require value judgements, even where some indicators for monitoring can be suggested. Huge amounts of apparently decoupled payments will inevitably increase farm incomes, allow access to improved technology and increase farm investment and production.

Some developing countries have criticised this situation by requesting a stricter control over all types of subsidies and agricultural payments, and request instead the creation of a "development box" for developing coun-

**Table 2 Total expenditure on "Green box" measures in selected countries.**

	"Green box" expenditure (million USD)		Expenditure for agricultural worker (USD per worker)		GDP per capita (USD per capita)
	1995	1996	1995	1996	1997
<b>Eu</b>	24110	28378	3258	3835	22046
<b>Morocco</b>	157	378	38	92	1246
<b>Tunisia</b>	30	39	33	43	2052
<b>Slovenia</b>	85	91	2833	3033	18202
<b>Israel</b>	292	414	1460	2070	16820

Source: MEDAGRI 2000 and FAO 1999, FAO Symposium on Agriculture, Trade and Food Security: Issues and Options in the Forthcoming WTO Negotiations From the Perspective of Developing Countries.

'Issues at stake relating to agricultural development, trade and food security', Paper No. 4.



tries to address their rural employment and food security concerns.

### 2.3 Trade and environment

In the Mediterranean context, the fear of competitive disadvantage in a global marketplace focuses the attention of farmers, environmentalists and politicians. In developed countries, there is a fear that some governments in developing countries may tend to relax the enforcement of their standards or fail to raise standards for fear of exposing their industries to higher costs than those of their competitors. Developing countries, in turn, fear that high-income countries enforce stricter national standards and laws extraterritorially.

In principle, WTO rules (see eg. Article 20 of GATT) do not impose any constraints on countries in their choices for protecting their environmental standards or preserving their resources. However, as the pace of economic integration increases, so do the number of trade-environment conflicts. Perceptions of the safety of different foods and food production methods and conformity assessment procedures differ widely - even among countries with similar income levels. The WTO Dispute Settlement case between the US and the EU on beef hormones showed that standards differences are difficult to resolve even with the best scientific advice. Other examples are irradiated food and genetically modified organisms. Over time such issues will arise increasingly under the Uruguay Round's SPS and TBT agreements. Current WTO rules only allow "production process" standards to be applied to imports when it can be demonstrated that the processes targeted have repercussions for the physical characteristics (quality) of the product concerned. But in many cases such links between processes and products are not clear and this has given rise to disputes at the WTO level.

In the long term, the WTO must find a more rational way of balancing trade and environmental goals. A common background of concern for the effects that trade liberalisation may have on the environment is not trade expansion per se, but the consequences of economic growth derived from the development of trade flows and the possible international reallocation of production. Therefore, the most appropriate way to prevent the possible negative impacts is not to be found in the use of trade policy measures, but in the adoption of policies that focus on the specific problems. If rural poverty is the issue, then economic growth, income distribution and rural development will become the long-term strategies for reducing negative environmental impacts. This will call for the separation of trade and environmental policies, although some authors believe that this is simply practically impossible (Esty, 1999). However, when the effects of environmental problems and policies go beyond the borders of a specific country, international co-operation in response to environ-

mental challenges could be the best approach to improve policy outcomes.

### 3. SUSTAINABLE AGRICULTURE

#### AND THE EURO-MEDITERRANEAN PARTNERSHIP

Five years after its launching in Barcelona, the Euro-Mediterranean Partnership has faced serious delays and difficulties, having managed to survive during a politically difficult phase in the Middle East. In the field of environment, although the Euro-Mediterranean Partners have committed themselves to "assessing the environmental problems in the Mediterranean region and defining the initiatives to be taken" (Work Programme, Euro-Mediterranean Partnership), so far little assessment has been carried out on the potential environmental effects of the Association Agreements.

From the viewpoint of benefits, the Association strategy will increase economic growth and help to fight poverty and resource degradation. Since environmental awareness tends to increase with socio-economic status, a rise in the average living standards would, in turn, result in stronger demands for environmental protection and more funding available for that purpose.

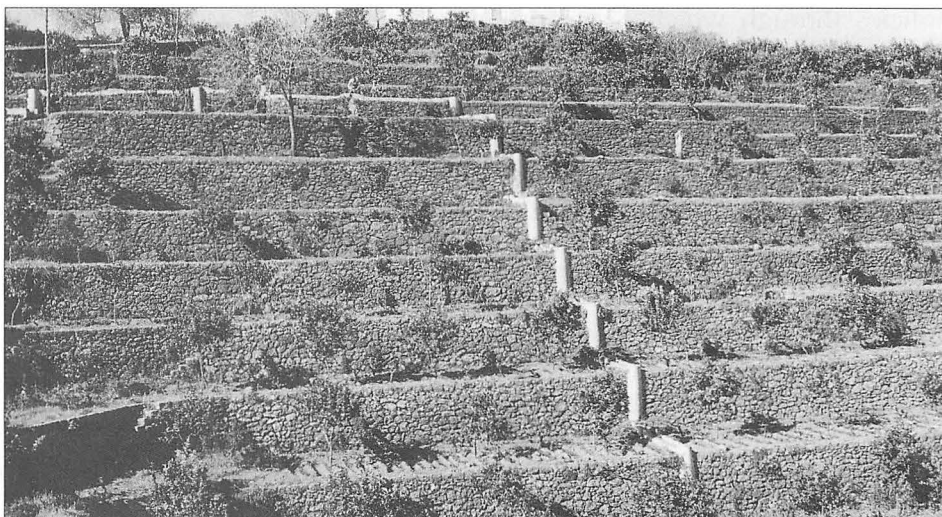
As far as agricultural trade is concerned, the Euro-Mediterranean Partnership agenda won't probably represent by itself a dramatic change in the next decade. The EMAs call for gradual and reciprocal liberalisation but offer very limited improvements in access to the EU markets. Moreover, many of the concluded bilateral FTAs in the Mediterranean region focus on a "traditional" trade agenda -tariff elimination (Zarrouk and Zallio, 2000). This is not enough for achieving a strategy of deep integration that will enhance issues that go beyond trade liberalisation. The Association Agreements (those signed so far) also contain limited commitments referred to environmental standards. They contain a generic article referring to co-operation on a series of environmental issues. Failure to address environment issues through regulatory harmonisation will leave future trade open to conflicts. Each country can claim the right to implement its own standards. In the Mediterranean regions, harmonisation of environmental standards will require a great deal of effort due to the large number of countries involved and the greater disparity between existing regulatory systems.

Taking avoidance of the abuse of environmental standards as a new source of protectionism as a general principle, the harmonisation of standards could yield significant gains for the partner countries due to the positive impetus it gives technological transfer from the North to the South. However, to achieve this positive result, there is a need for measures to strengthen regional co-operation in order to make those standards a real opportunity rather than a constraint for the poorer countries in the region.

Based on the experience of the past five years, the EU

is currently in the process of revising and reforming its procedures for the execution of its Mediterranean policy (see European Commission, 2000). The centrepiece of a reinvigorated Barcelona Process will be the MEDA II Regulation, which will involve a budget of 5,350 million euros for the 2000-2006 period, as confirmed in the recent Euro Mediterranean Conference held in Marseille (15-16 November 2000). The MEDA I budget has devoted some attention to environmental projects, but to a limited extent, with around 17% of its budget allocated to projects related to the environment and rural development during the 1995-1999 period, with the Short and Medium Term Priority Action Programme (SMAP) as the main regional programme. The European Commission (2000) believes that the link between the implementation of the Association Agreements and funding under MEDA should be made more explicit and future financial allocations should reflect the willingness of partners to pursue the economic transition objectives of the Agreements. Similarly, a sustainability impact assessment of the future Euro-Mediterranean free trade area will be carried out, on the basis of which the Commission will make recommendations for future action. However, the hope that the Southern and Eastern Mediterranean countries will be able to finance development programmes is constrained by several problems:

- European interests are biased against financial solidarity. The financial solidarity with the Southern and Eastern Mediterranean countries has to compete with other financial priorities of the Union such as Eastern Enlargement and the BSE crisis.
- The Euro-Mediterranean Association will require that several Mediterranean countries accept a significant loss of import tariff revenue. For example, it is calculated that tariff revenue accounts for 46% of Lebanon's budget (CGP, 2000). Although, in the medium term, the Association's strategy should involve the financial sustainability of the States, the question remains as to the possibility of generating the resources needed for rural development.
- Only a small share of the MEDA budget (27%) was actually paid out between 1995 and 1999. The effectiveness of the European Investment Bank allocations was a little higher (32% between 1997 and 2000). The operation of the MEDA funds will probably improve in the future with the introduction of more automatic procedures and human resources for the financial execution of funds.



• Private investment will probably not do much to counteract the eventual fall in public investments. Moreover, the risks exist for a "hub and spoke" effect of the FTA, giving rise to the re-concentration of Foreign Direct Investment (FDI) into the European Union. There are significant handicaps to attracting private FDI such as the institutional environment, human capital and the administrative burden. Local entrepreneurs lack access to financial channels. The weakness of private investment also reduces the effectiveness of rural development policies. The absorption capacity for foreign aid and credit is limited in the recipient countries and is close to saturation point.

#### 4. ECONOMY FIRST, ECOLOGY AFTERWARDS?

Although the environment situation has no doubt deteriorated throughout the world despite the commitments undertaken (but not honoured) in Rio de Janeiro in 1992, the capacity for analysing and controlling situations has improved on the other hand. In many fields scientific knowledge is progressing rapidly towards providing means of better formulating appropriate solutions to the various ecological threats. At the same time, each party has been increasingly convinced by facts that the phenomena are global and that they are inter-related. It is now agreed by all, including the experts from the international organisations concerned, that ecological problems are the result of market shortcomings or policies implemented by governments. The market weaknesses are due to its inability to set a price of natural resources according to their real value for the individual and for society. Policies are taken by governments with a view to promoting development or providing economic and social regulations, but usually have certain harmful implications for environment (producer subsidies on pesticides or fertilisers, for example). Solutions seem to lie both in calling in question these damaging measures and in implementing new

policies through which distortions can be eliminated and social and environmental costs can be internalised. As for the structural adjustment policies, which to some extent constitute the "new standard" of the macro-economic policies, it must be stated that they are still highly controversial. Those who criticise them consider that the remedies they advocate take no account whatever of the environment and that they are consequently to a large extent responsible for the degradation of the ecosystems and natural resources of the planet since the 1980s. It must be added that things cannot be generalised or systematized in a superficial way.

What is certain is that the environmental impact of a measure of economic policy is unfortunately virtually never taken into account for the approval or rejection of that policy. At most, the constraints of good natural resources management are only taken into account at the stage of the consequences rather than that of determining an economic policy. The authorities prefer to consider that the negative effect can be better dealt with through appropriate intervention at the micro-economic level: for example, in order to offset the effect of devaluation on the overtapping of non-renewable resources the taxes imposed on the mining activities concerned can be increased. In short, processes are nevertheless marked by the classical order of things: the economy first, ecology afterwards... The question is now whether this "order" is still tenable at the current rate of degradation of natural resources. ●

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