Mediterranean countries and world food markets

Alexandratos N.

in

MEDITERRANEAN COUNTRIES
AND WORLD FOOD MARKETS

Nikos ALEXANDRATOS *

FAO, Rome

ABSTRACT

Most Mediterranean countries are net importers of basic foodstuffs. The region's gross imports account for about one quarter of world cereals trade. France's rapidly growing exports mostly counterbalanced the net deficit of the rest of the region in recent years. The prospects are that the region will revert to being a large net importer again, of about 15 million tons by 2010. Its capability to provision itself in world markets will depend on how other major importers and exporters, often in far parts of the world, will act. Future prospects in world cereals markets are briefly reviewed in the light of frequently expressed concerns that the balance between effective demand and supply may worsen. This is not a very likely prospect, in part because of the rapid transformation of Central/Eastern Europe and the former Soviet Union from being large net importers to nearly self-sufficient at present and perhaps net exporters in the future. The recent sharp increases in world market prices of cereals may subside once the effects of the climatic factors that brought them about are over. However, the policy reforms under the Uruguay Round may lead to world prices being a little above what they would have been without such reforms. Price variability may not be lower, and may actually be higher, because the policy reforms will lead to reduction in excess production in the main exporting countries, part of which was held by governments in stocks and acted as a buffer. The policy reforms of the UR are not expected to restrict significantly the scope for policies in support of agricultural development in the developing countries of the region. At the same time, such reforms imply little progress towards improved access to import markets for their main agricultural exportables, fruit and vegetables.

I. INTRODUCTION

The countries bordering the Mediterranean sea, plus Portugal[1], are very heterogeneous as regards the factors that determine the rates and patterns of their participation in world agricultural markets. Differences in the levels of development, population growth rates, agricultural resource endowments and policy regimes determine the extent to which developments in demand and production of agricultural products give rise to trade. Developments in agriculture are major factors in the overall economic and social development of several countries in the region, just as they are less so for others.

The region as a whole is a net importer of agricultural products to the tune of $9.5 billion in the 3-year average 1991-93 (excluding forest products, fish and fisheries products). The data for the individual countries and the major commodity groups which generate this outcome are shown in Table 1. On both the import and the export sides, the value of agricultural trade is dominated by two countries, France and Italy, with the net export surplus of the former being almost equal to the net deficit of the latter. France is a large net exporter of cereals and this contributes to the emergence of a small net cereals surplus for the region as a whole. Italy is a large net importer of livestock products and this is the main component of the large net deficit of the region for these products. Exclude these two countries from the regional totals and the net deficit of the region remains virtually unchanged at $9.3 billion, but with one half of it being due to the cereals deficits of most countries, foremost among them those of North Africa.

Among the major dimensions of concern here is the dependence of several countries of the region on world markets for significant shares of their consumption of basic food products, foremost among them cereals. For the countries outside the EU, fruit and vegetables are the main commodities which generate an agricultural trade surplus and contribute to finance their large deficits of basic food products. The issues

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[1] The countries covered are listed in Table 1. The data for the countries of the former Yugoslavia are lumped together given the non-availability of most historical data for the individual countries.

relating to the trade of fruit and vegetables are the topic of several other papers in this seminar (see also Swinbank and Ritson, 1995; Akesbi, 1995; Anania *et al*, 1996). Therefore, this paper focuses mainly on historical and prospective developments in the participation of the different countries of the region in world cereal markets up to 2010, against the background of global developments in such markets. Much of the discussion of these issues is based on a recent FAO study (Alexandratos, 1995).

II. HETEROGENEITY OF MEDITERRANEAN COUNTRIES

Tables 2 and 3 present data for salient features of the overall and agricultural economies of the Mediterranean countries. There is no very clear distinction between "North and "South" in the region, at least as far as the overall developmental indicators are concerned. Thus the country with the lowest per capita income and the highest dependence of its population on agriculture - Albania - is in Europe, not in the Middle East or Africa; while Israel, a high income country, is in the (non-oil) Middle East. These differences have significant implications for the food and agriculture issues facing these producing countries, as will be discussed below. Even within the group of the Mediterranean countries belonging to the European Union, there are stark differences in the role of agricultural trade in their economies: in the 3-year average 1991-93 France had a net deficit of about $3 billion in its trade of non-agricultural goods and services but $11 billion surplus in its agricultural trade, with the result that it generated a net surplus of about $8 billion in its aggregate current account. As noted, the mirror image is provided by Italy, the country with by far the largest agricultural deficit in the region. Its $3 billion net surplus in non-agricultural goods and services was turned into an aggregate current account deficit of $8 billion due to its $11 billion deficit in agricultural trade.

While large agricultural deficits are not a major developmental problem in countries like Italy with robust industrial and services export sectors, they present a serious challenge for countries with low incomes, scarce foreign exchange resources, high population growth rates, growing food demand and limited agricultural resources. Several Mediterranean countries are in this class, foremost among them the countries of North Africa. Countries such as Libya and Algeria had in the 3-year average 1979-81 cereals self-sufficiency ratios of 12% and 31% respectively which means that they depended on imports for 88% and 69% of their cereals consumption respectively. The dependence of several countries of the region on food imports has been increasing over time as food demand grew rapidly and faster than domestic production, reflecting high population growth rates and increases in per capita consumption (see Table 3). These gains in food consumption place many developing countries of the Mediterranean near those of the high income countries of Europe and well above those of the great majority of other developing countries, but only in terms of total dietary energy availabilities (calories). Diversification of diets towards livestock products remains well behind the levels reached by the high income countries on the European side of the Mediterranean.

This, together with their continued high population growth rates, implies that further sustained increases in the demand for food are in store when incomes rise. Not that the diet diversification towards high levels of meat consumption is necessarily desirable from a nutritional standpoint. But it can be expected that the Mediterranean countries with low meat consumption will tend to replicate in the long term future (though perhaps not so much in the period to 2010 examined here) in varying degrees the experiences of other countries of the region (e.g. Greece, Spain and Portugal) which increased their consumption of meat very rapidly in the post World War II period. A similar path has already been followed by those Gulf states (e.g. Kuwait, Saudi Arabia) which reached high income status. In conclusion the potential for further rapid growth of food demand in several countries of the region is considerable and will manifest itself as incomes grow. Given the paucity of land and water resources of several countries, particularly those of North Africa, it is likely that, as in the past, part of the demand will spill over into further increases in food imports.

III. WORLD CEREALS MARKETS TO 2010

The large deficits of several countries notwithstanding, the Mediterranean region as a whole has in recent years been nearly self-sufficient in cereals and, in some years, a small net exporter. This was not so in the past and the region was a net importer from the rest of the world up to the mid-1980s, with peak net imports of 17 million tons in 1977. Since then the region has been reducing its import dependence on the rest of the world and became an occasional net exporter in recent years. This was mostly on account of the large and growing net cereals surplus of France, the agricultural powerhouse of the region. Excluding France, the region kept increasing its net imports of cereals to a peak of 35 million tons in 1993 and of gross imports of 43 million tons. Given that world cereals trade is about 200 million tons, the region is a major player in world cereals markets, both influencing the evolution of the demand-supply balance and

being influenced by it. It all means that, in viewing the agriculture and food security prospects of the region, account must be taken of the influences exerted on world food markets by other major players, both importers (e.g. Japan, China, the countries of the former Soviet Union (FSU), the Gulf States, South Korea, Mexico) and exporters (North America, Argentina, Thailand, Australia).

The prospect is that the Mediterranean region as a whole might revert to being an ever-growing net cereals importer. This is mainly because the trend for France's net surplus to continue growing would not be as strong as in the past, while the net import requirements of the other countries as a whole would continue to grow. The net result would be that by 2010 the whole region may need net cereal imports from the rest of the world of about 15 million tons compared with 1 million tons in the latest 3-year average 1992-94. Would the rest of the world be able to generate such a net surplus and at what prices? This will depend on what the other major players in the world food markets will be doing. There are several significant changes in prospect, reflecting the impact of policy changes brought about by the Agreement on Agriculture of the Uruguay Round (UR) but also of other policy reforms. In the latter category there belong the systemic reforms in the former centrally-planned economies of Europe (Central/Eastern Europe and the FSU) which may cease to be the large net importers they were in the past; this process already under way. Even the agricultural policy reforms in the European Union are only partly linked to the need for this region to adapt its policies in conformity with the dictates of the UR Agreement on Agriculture, e.g. reduction of overall support and protection, tariffication and reduction of subsidized exports. The net result of these changes is likely to be that the net cereal exports of the EU, including its five Mediterranean countries, will not continue growing as fast as in the past, and may actually decline somewhat in absolute terms if world market conditions and developments in agricultural productivity in the Union itself were not to permit unsubsidized exports. Under the circumstances, the EU may see its market share in world cereals trade reduced to the benefit of other major exporters, like North America and Australia (see OECD, 1995).

How the demand-supply balance of cereals in world markets, in terms of the net trade positions of the main groups of countries, may develop is shown in Section 6. As noted, the Mediterranean region is projected as a growing net importer. Its net import requirements, together with those of other major importing regions, define the amounts of net export surplus that must be generated in the future by the major exporters. To discuss how these surpluses may be generated and how the demand-supply balance may develop in world markets, we need a broader overview of the food security *problematique* of the world as a whole.

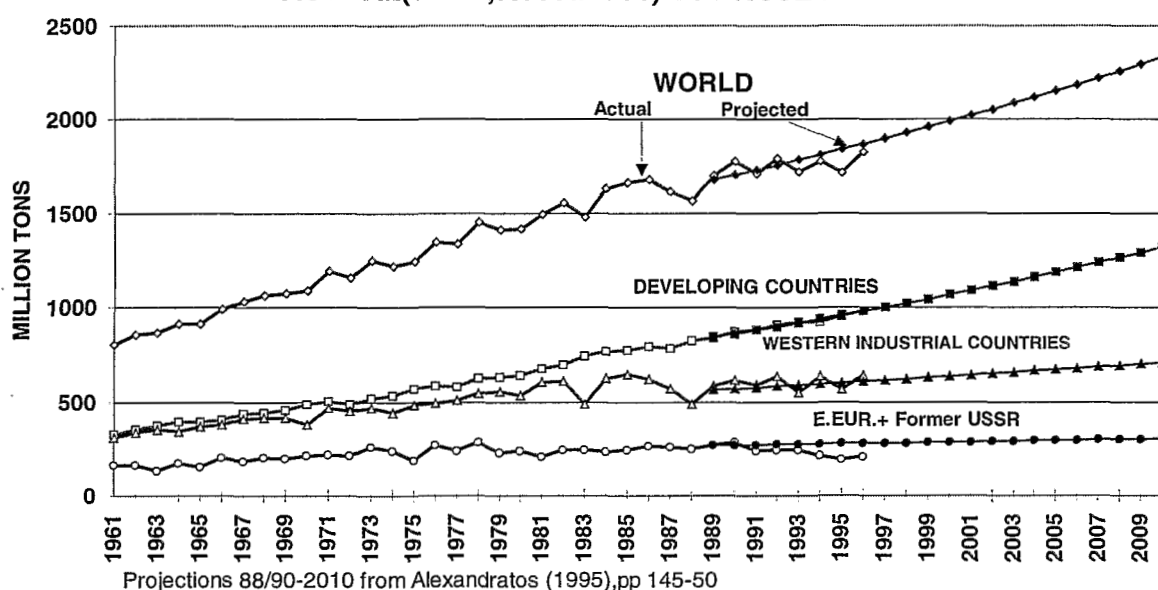## IV. WORLD FOOD AND AGRICULTURE ISSUES

Serious concerns are often expressed about the capacity of the world to produce enough food to sustain the ever growing population (Brown and Kane, 1994; Ehrlich *et al*, 1993). Present (1995) world population is estimated to be 5.7 billion and the medium variant demographic projections of the UN have it rising to 8.3 billion in 2025 and on to 9.8 billion in 2050 (UN, 1994). Obviously, the world will have to produce a lot more food, not only to keep up with population growth but also to improve the per capita food consumption levels of the significant part of the world population with very inadequate nutrition at present, including those of the some 800 million people estimated to suffer from chronic malnutrition. Although some estimates of the required growth of world food output are clearly exaggerated (see Alexandratos and de Haen, 1995), there is little doubt that the world is faced with a need to increase food output at a rate of between 1.5% and 2.0% p.a. for several decades.

These growth rates are not too high if judged by historical standards, but the fact that they have been achieved and exceeded in the past is no guarantee that they will continue in the longer term future. The concerns of those who view the food security *problematique* in terms of the world capacity to produce more food, reflect the fact that the world's land and water resources keep declining (in per capita terms) and they are coming under increasing pressures leading to degradation because of ever higher intensification of agriculture, and the bringing under cultivation of more fragile areas. In addition, the potential for further technological progress that would sustain the growth of yields is now seen to be much more limited than in the past, particularly in comparison with the period of rapid yield growth that characterized the heyday of the green revolution (Oram and Hojjati, 1995; Pingali *et al.* 1990).

There are those who foresee catastrophic declines in the growth rate of world food production and inability of the major food surplus countries to supply more than a fraction of the burgeoning food import needs of the developing countries, including those of a giant country like China (see Brown, 1995 and a critical review of such statements in Alexandratos, 1996). FAO's assessment of the possible future course of events does not lend support to this type of catastrophic prediction (Alexandratos, 1995).The recent drastic decline in world cereals production has been mostly due to the collapse of production in the region CEES and the FSU, following the systemic reforms in their economies. With the eventual recovery of

production in this region, the world could be back on the production expansion path indicated in the FAO study for up to 2010 (see Figure 1). This outlook is similar to the ones generated by other studies, e.g. by the World Bank (Mitchell and Ingo, 1993) and the International Food Policy Research Institute - IFPRI (Rosegrant *et al*, 1995). However, all such studies conclude that progress towards a world with less severe food security problems is likely to be slow and very uneven. Totally inadequate nutrition levels for significant parts of the world population are likely to persist in the foreseeable future. This is less because the world as a whole cannot produce the additional amounts of food required to eliminate the problem, but rather *because widespread poverty (and hence inadequate growth of the demand for food) is likely to continue to* afflict significant parts of the world population, with high concentrations in sub-Saharan Africa and, to a smaller extent, South Asia. Obviously, when such persistence of poverty in the different countries is largely due to failures in their agricultural development, and when the latter can be partly ascribed to severe scarcities of their land and water resources, it is legitimate to speak of persistence of food security problems due to local food production constraints, even though such constraints may not be significant for the world as a whole.

Figure 1. CEREALS PRODUCTION ACTUAL(61-95;forecast 96) Vs PROJECTED

Projections 88/90-2010 from Alexandratos (1995),pp 145-50

V. WORLD CEREAL BALANCES

The following figures (in million tons) give an overall idea about how the Mediterranean region's net import requirements in the future may be matched by changes in the net import and export balances of the rest of the world.

	3-Year Average 1989-91	Current Year (1995/96) forecast	2010	Change 1989/91-2010
Mediterranean Countries	0.1	...	-15	-15.1
Developing countries, excluding those in the Mediterranean	-66.6	-87	-128	-61.4
Central/E. Europe + former Sov. Union	-37.0	0	5	42
OECD Area, excluding its Mediterranean countries	107.3	...	138	30.7
WORLD	3.8		0	-3.8

It is seen that the major source of additional import demand for cereals in world markets is the growing deficit of the developing countries. Together with the projected net imports of the Mediterranean region, the

rest of the world (in essence, the OECD area minus its Mediterranean countries and the region of CEES and the FSU) would need to more than double its net surplus, from 67 million tons in 1989/91 to 143 million tons in 2010, an increment of 76 million tons. Some of the concerns expressed relate to the perception that all this additional burden will be placed on the main exporting countries of the OECD area (excluding France which is included in the balance of the Mediterranean region). These are North America and Australia, which in 1989-91 had net exports of 130 million tons. If their net exports were to rise by the whole increment to 205 million tons and given that their domestic demand would also grow by some 20%, their production would need to grow to some 490 million tons by 2010, compared with 340 million tons in 1989-91, or 1.8% p.a. In practice, however, a good part of the additional import demand of the developing countries will be counterbalanced by reductions in that of the CEES and the FSU. This latter group of countries may eventually turn into a small net exporter of cereals (see Johnson, 1993). The latest forecasts indicate rapid movement towards such an outcome: their net imports are forecast to be zero in the current marketing year 1995/96, following reduced net imports of the FSU and increased net exports of several CEES countries (Romania, Bulgaria, Hungary, Poland). It follows that the additional net exports required to be generated by the main OECD exporters will be modest and are unlikely to unduly stress their capacity to increase production for export.

VI. THE URUGUAY ROUND

There are two aspects of the new trade policy regime resulting from the Agreement on Agriculture of the Uruguay Round that are of relevance to the issues discussed here. The first is the possible impact of the Agreement on the demand-supply balance and prices in world markets of cereals. The second concerns the extent to which the freedom and flexibility of the cereals-deficit countries of the region, particularly the developing ones, to adopt policies to protect their agricultures and reduce their dependence on imports may be unduly restricted by the requirement that such policies conform to the dictates of the Agreement on Agriculture.

Prices and Other Conditions in World Cereal Markets

Concerning price developments, most studies (e.g. the above mentioned studies by the World Bank and IFPRI) conclude that the long-term movement towards declining prices in real terms would continue. This result is essentially based on the finding that the growth of effective world demand will be slow, while yields would continue to grow, albeit at rates lower than in the past. Some studies indicate that the limited trade liberalization of the Uruguay Round would just cause these prices to decline by less (see, for example, the IFPRI study and FAO, 1995). In other words, prices would be 5-10% higher than they would be otherwise. This is mainly because the reduced domestic support and the restrictions on production in the main exporting countries (e.g. land set-asides in the EU) would cause their production to be less than it would have been if the old levels and system of support had been continued. In addition, the related restrictions on export subsidies will limit the quantities of subsidized exports pouring into the world markets.

It must be noted, however, that these predictions are shrouded in great uncertainty and should be interpreted with caution. For the moment, the early effects of the policy reforms in combination with weather-induced production declines, mainly in the USA and Australia, have led to a strong rise in international cereal prices, virtual disappearance of export subsidies (and indeed the imposition of an export tax on wheat and barley exports by the EU) and reductions in food aid flows. The price peaks of recent months may subside if there are no further weather shocks. In the meantime, however, they are causing great hardship to the countries which have traditionally depended on cheap cereal imports for a considerable part of their consumption. The example of Egypt helps to illustrate this point. In the marketing year 1994/95 Egypt imported 6.2 million tons of wheat of which 176 thousand tons was food aid. The balance were commercial imports and the average CIF price was $189/ton. But Egypt received an export subsidy of $179 million from the US Export Enhancement Program (EEP), thus reducing the average price of all its commercial imports to $159/ton. In 1995/96 the world market price is likely to be around $238, food aid will be reduced and probably no EEP subsidy will be granted. The net result will be that if Egypt were to maintain the same total level of imports, it will have to import a higher quantity than in 1994/95 on commercial terms and at an effective price that would rise from $159 to $238 or 50% .

While this effect is to be ascribed more to the weather-induced production declines and less to the policy reforms, the latter are expected to have some lasting impacts (beyond the above-mentioned price effect) on the terms and conditions under which the cereal-importing countries can provision themselves in world markets for significant parts of their consumption. The major impact of the policy reforms is likely to be the reduced scope in the main exporting countries for policies that in the past encouraged production above what could be sold at the going price. In the old policy system, the surplus was absorbed through government purchases/stock accumulation and subsidized exports or, in the initial stages in the net

importing countries, by domestic consumption through import restrictions leading to import substitution. Whether through import substitution or subsidized exports, the ultimate effect was that the surplus of production generated by the support policies was unloaded onto world markets with the aid of subsidies, while publicly held stocks were higher than normally required for purposes other than producer price support. Under the new policy regime ushered in by the UR there is much less scope for policies that would generate surpluses: further import substitution is limited by tariffication (with tariffs subject to gradual reduction) and the provision for minimum access, and subsidized exports are limited by ceilings on both the monetary value of subsidies and the quantities exported. Under these circumstances, the new rules impose a strong disincentive for governments to accumulate stocks, first because of the limitations on subsidized exports (except for *bona fide* food aid) and secondly, because any support provided to producers through purchases to sustain prices is limited by the ceiling on internal support (the Aggregate Measure of Support or AMS, see below).

It follows that production support policies are being adjusted to make production much more responsive to the ups and downs in world markets and reduce the scope for systematic overproduction. Under these circumstances, any significant weather-induced production declines will be transmitted from/to world markets much faster than in the past because the excess stocks accumulated in earlier years will not be there to act as a buffer.[2] At the same time, the higher world market prices will induce production to respond, but with a time lag. This entails the risk that in the subsequent one-two "normal" years, output will be higher than required to restore the demand-supply balance to that of the pre-weather shock situation and prices will decline again, a typical pigmeat cycle phenomenon. The implication is that world price variability will likely be higher than it was under the previous policy regime. This is because in the latter regime, the system was geared to generating a quasi-permanent surplus but was also prevented from overreacting to world market price spikes, at the same time as it was acting (because of the stock buffer) to prevent such price spikes from appearing in exaggerated form in the first place. An additional factor that may make for more instability is the prospect that changes in trade patterns following the UR could lead to a higher percentage of world exportable cereals output being produced in countries more prone to weather shocks, e.g. if most of the additions in such supplies were to originate in North America/Australia rather than Europe, as is likely. At the same time, the eventual emergence of the CEES\FSU region as a net exporter would tend to mitigate such effects as it would diversify the geographic base of origin of world exportable supplies.

I conclude that these are aspects for which many models investigating the UR impacts failed to account fully. Such models (though not all[3]) generally conclude that world price variability would be less, not more, after the UR. The main reason for this finding is that the movements in world market prices would be permitted to penetrate the previously strongly protected markets and thus force them to also absorb part of world production fluctuations through adjustments in their demand. This would indeed be the case, but it still remains to be seen whether this predicted effect will be sufficient to counterbalance the one described above, coming from the change in the production support system, the shifts in location of production and the new environment for public stockholding.

Impact of the UR on Policy Options of the Developing Countries

The preceding discussion made it clear that the UR imposes important restrictions on the policies of the countries which previously relied heavily on policies which were systematically geared towards generation of surplus production. But what about the policies of countries which were not in this category? Here belong the bulk of the developing countries of the Mediterranean. Of interest is the extent to which the UR provisions may restrict the policy options these countries have to stimulate their agricultural development.

Concerning border measures, the key novelty is that all protection must be provided in the future by tariffs which, once submitted and accepted by the other WTO members (bound tariffs), cannot be increased unilaterally, though lower levels can be applied in practice. The significance of this change in the method of external protection cannot be evaluated without reference to eventual restrictions as to its level. The general rule is that countries which did not already have bound tariffs in the base period 1986-88 must compute the tariff equivalent of all other import restrictions, the level of which will be the starting level of the bound tariff. Then all bound tariffs must be reduced by 36% on the average for all tariff lines between 1995 and 2000, but no tariff line may be reduced by less than 15%. For the developing countries the period of implementation is extended to 2004 and the percentages are 24% and 10% respectively. However the

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[2] It can be expected that privately held stocks will substitute, but only in part, for the reduction in the previously publicly held ones. Such private stocks can be expected to be more responsive than the public ones to changes in world market conditions (Konandreas and Greenfield, 1996).

[3] Simulations with FAO's World Food Model indicate that, following implementation of the UR provisions, production shocks would generate price variability not significantly different from that which would occur without the UR (FAO, 1995).

developing countries for the commodities without bound tariffs in the base period, could select a base-year bound tariff, which might be different and possibly higher, than the tariff equivalent.[4]

It follows that developing countries in this category were not necessarily required to reduce the level of external protection but only the method. In fact, by setting the future bound level of ceiling tariffs at a sufficiently high level, they can impose levels of protection equal to or higher than those they had in the base year. It will just take a higher level of policy analysis skills to apply a tariff level (within the maximum permitted) that would generate a level of protection from imports equal to the one that they would otherwise have pursued by other import restrictions.

Although developing countries in the category discussed in the preceding paragraph are not required in the future to have lower tariffs than the tariff equivalent of the base period, and indeed may have higher tariffs, there remains the case of those developing countries which in the base year only had bound tariffs which they are indeed required to reduce by 24% on the average. To what extent this will result in an actual decline in the rate of protection depends critically on the <u>actual</u> tariffs applied in the past. This is an empirical question. The data in the country schedules submitted to the WTO lead us to believe that the actual tariffs applied were in several cases well below those in the schedules (see Ingco, 1995). For example, in the schedules of Morocco, Tunisia and Turkey, the base-year tariffs for wheat (whether they were bound or otherwise calculated) are given as between 183% and 191% and these countries have undertaken to reduce them to between 138% and 172% by 2004. Now, if these base year rates were actually applied, it would have meant that domestic wheat prices were more than twice the CIF price of imported wheat, a situation which would have caused severe stress to consumers who depend greatly on direct consumption of cereals. Apparently this was not the case.[5] Even in the highly protected European Community with much less dependence of consumers on cereals, market prices of wheat were about twice the world market price in 1986-89 (USDA, 1990).

I conclude that the changes in the external protection imposed by the UR are unlikely to be a significant factor limiting the policy flexibility of the developing countries in this area.[6] But how restraining are the provisions of the UR in the other major area of policy, internal support? Here the provision is that the total support provided to producers (the AMS) from a list of policies deemed to be trade-distorting must be reduced by 13.3% by 2004 from its 1986-88 level in the developing countries (by 20% by 2000 in the developed countries).[7] The first consideration bearing on this issue is that, contrary to what is commonly thought, the UR does not prohibit the use of any policy instrument of producer support. Thus, input subsidies, state purchases to sustain prices, etc. are all permitted, as long as the aggregate support provided by trade-distorting policies, i.e. relevant for the AMS calculation, does not exceed the specified limit and other ("green box") policies providing support which does not concur well the formation of the AMS are not subject to limitations, e.g. decoupled income support, research and extension, environmental programmes, generally available investment subsidies and input subsidies to low-income farmers (developing countries only). In addition, there is the *de minimis* clause under which trade-distorting policies providing support of less than 10% of the farm-gate value of a commodity (5% for the developed countries) need not be included in the AMS calculations. This clause is especially important for the developing countries, the majority of which declared very low or zero levels of AMS in the base period (Konandreas and Greenfield, 1996).

In conclusion, the *de minimis* clause, the freedom to use "green box" policies and the flexibility in fixing the future levels of bound tariffs leave developing countries considerable scope for policies in support of

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[4] This does not apply to the developed countries which must set the starting level of bound tariffs at the tariff equivalent of all the import restrictions in force in the base period.

[5] Ingco (1995) has estimated the tariff equivalents (roughly, the difference between domestic and CIF import prices) of selected countries for 1986-88 as follows: wheat, Morocco 14%, Turkey 36%, Egypt -32%, average for the Maghreb countries 36%; coarse grains, Morocco 8%, Turkey 35% and average for the Maghreb 19%. For this latter group of countries the post-UR bound tariffs are declared to be: wheat, 196% in the initial year of implementation declining to 151% in the final year and for coarse grains 142% and 109% respectively.

[6] The "minimum access" provisions of the UR are also part of the external protection provisions. However, they are not directly relevant to the issue at hand because they apply only to the countries which are obliged to tariffy according to the tariff-equivalent formula. As noted, this is not the case of the developing countries for the commodities without bound tariffs in the base period.

[7] It is noted that this provision permits the countries with already high levels of support through trade-distorting policies (generally most developed countries) to retain 80% of it while countries with zero levels are not permitted to provide such support in the future except as allowed by the *de minimis* clause (see below). This characteristic can have far reaching long-term implications for both agricultural trade and those developing countries making the transition to developed country status. Indeed, the experience has been that such countries traditionally provide increasing support and protection to their agricultures in order to ease the pace and extent of adjustment of the sector in their transition to semi-mature industrialized economies (see Anderson and Hayami, 1986).

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agricultural development.[8] Perhaps of more interest to the developing countries is the extent to which the application of the UR provisions by other countries affects conditions in world food markets on which they depend for their food imports, and conditions of access to the markets of their trading partners for their major agricultural exportables. The former case (changes in the world cereals markets) was discussed earlier. The latter case is exemplified by the extent to which changes are being brought about as a result of the UR in the conditions of access of the main exportables of the developing countries of the region (fruit and vegetables) to their main import market, the EU. Although this is not the main focus of this paper, several authors conclude that little is changing from the pre-UR regime (Konandreas and Greenfield, 1996): in general, the reference prices used then to determine the level of the tariff imposed on imports are being replaced by minimum entry prices (varying by season and largely representing levels at which domestic production remains competitive vis-à-vis imports). So long as import prices remain above the entry prices, they attract only an ad-valorem tariff which, for most products, will be 20% below the base year tariff equivalent. But if the import price is below the entry price for the season, an additional specific tariff is also levied which can be prohibitively high. Thus, the new regime for fruit and vegetables retains high levels of protection and offers limited incentives to exporters to become more competitive and engage in price competition since lower costs and prices below the entry prices would attract prohibitive tariffs (see Swinbank and Ritson, 1995).

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[8] Agricultural development may also benefit from the reduction of disincentives to domestic producers emanating from the world markets following the application of the UR provisions (reduction of subsidized exports, improved market access) on a world scale (see Alexandratos *et al.*, 1994).

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TABLE 1 - NET AGRICULTURAL TRADE[1] BALANCES BY MAJOR COMMODITY GROUPS, AVERAGE 1991-93 ($ MILLION)

Country	Total	Cereals	Livestock Producs	Oilseeds + Veg. oils		Sugar	Fruit + Vegetables		Tropical Beverages	Alcoholic Beverages		Feeding stuffs 2/	Agric. raw materials	Others
				Olive oil	Other		Citrus	Other		Wine	Other			
European-EU	-2750	4343	-7116	562	-1132	694	901	4091	-1804	6244	968	-2575	-5338	-2588
France	10662	5721	2892	-132	474	1159	-946	-752	-900	3614	1646	-339	-1287	-488
Greece	-283	90	-1262	374	-130	-11	113	722	-107	48	-159	-85	343	-219
Italy	-10866	-372	-7221	-511	-546	-125	77	1918	-305	1364	29	-902	-3322	-950
Portugal	-2118	-560	-317	-21	-285	-130	-14	-138	-124	437	-87	-351	-377	-151
Spain	-145	-536	-1208	852	-645	-199	1671	2341	-368	781	-461	-898	-695	-780
European, non-EU	-1101	-291	-290	-12	-127	-56	-23	87	-140	48	-23	-82	-80	-112
Albania	-233	-100	-68	-2	-20	-22	-1	2	-7	3	-2	-1	-7	-8
Cyprus	11	-74	-31	-1	-17	-9	36	67	-11	13	3	-22	85	-28
Former Yugoslavia	-707	-85	-129	-7	-84	-19	-54	35	-106	33	-21	-49	-156	-65
Malta	-172	-32	-62	-2	-6	-6	-4	-17	-16	-1	-3	-10	-2	-11
Middle East	602	-431	-185	24	-468	-181	388	1173	-136	6	-34	-205	-229	880
Israel	-170	-339	-53	0	-136	-113	249	263	-44	4	-1	-33	-53	86
Lebanon	-858	-127	-204	-6	-55	-43	18	-83	-39	-2	-26	-25	-170	-96
Syria	-95	-203	2	-1	-38	-116	4	182	-54	0	-3	-49	203	-22
Turkey	1725	238	70	31	-239	91	117	811	1	4	-4	-98	-209	912
North Africa	-6244	-2559	-1315	243	-801	-608	247	267	-459	21	-2	-414	-498	-366
Algeria	-2316	-761	-647	0	-182	-240	3	-13	-140	10	0	-79	-102	-165
Egypt	-2065	-866	-293	-3	-314	-151	36	92	-154	0	0	-118	-164	-130
Libya	-1219	-453	-204	-25	-122	-75	2	-61	-40	0	0	-152	-12	-77
Morocco	-492	-370	-101	60	-118	-86	196	197	-97	5	-7	-34	-156	19
Tunisia	-152	-109	-70	211	-65	-56	10	52	-28	6	5	-31	-64	-13
TOTAL	-9493	1062	-8906	817	-2528	-151	1513	5618	-2539	6319	909	-3276	-6145	-2186
Total excl. France	-20155	-4659	-11798	949	-3002	-1310	2459	6370	-1639	2705	-737	-2937	-4858	-1698
Total excl. France, Italy	-9289	-4287	-4577	1460	-2456	-1185	2382	4452	-1334	1341	-766	-2035	-1536	-748

1/ SITC 0 (excl. 03, 081.42), 1, 21, 22, 232, 26 (excl. 266, 267, 269), 29, 4 (excl. 411.1). It does not include trade in forest products, fish and fisheries products. Exports FOB, imports CIF.
2/ Cereals used for animal feed are included in the "cereals".

TABLE 2 - MEDITERRANEAN COUNTRIES: DEMOGRAPHY, INCOMES AND AGRICULTURE-IN-THE ECONOMY

	Population			Per capita GNP 1993 ($)	Agriculture in the Economy			
	million		Growth Rate 95-2010 % p.a.		% of GDP 1993	% of Labour Force 1990	Current Account Balance 91-93, $ billion	
	1995	2010					Total	Agricultural Trade
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
European-EU								
France	58.0	60.1	0.2	22490	2.9	5	7.9	10.7
Greece	10.5	10.5	0	7390	14.2	24	-5.5	-0.3
Italy	57.2	56.0	-0.1	19840	3.6	7	-8.0	-10.9
Portugal	9.8	9.8	0	9130	3.2	16	-2.4	-2.1
Spain	39.6	39.5	0	13590	3	11	-17.2	-0.1
	175.1	175.9	0					-2.7
European, non-EU								
Albania	3.4	4.1	1.3	340	40	49	-0.3	-0.2
Cyprus	0.7	0.8	0.9	10380			-0.1	0
Former Yugoslavia	22.9	24.2	0.4	3060*		22		-0.7
Malta	0.4	0.4	0	7970		4	-0.1	-0.2
	27.4	29.5	0.7					-1.1
Middle East								
Israel	5.6	6.8	1.3	13920	...	4	-4.7	-0.2
Lebanon	3.0	3.7	1.4	...	...	9		-0.9
Syria	14.7	23.6	3.2	...	...	24	-0.1	-0.1
Turkey	61.9	77.9	1.5	2970	15	48	-3.7	1.7
	85.2	112.0	1.8					0.6
North Africa								
Algeria	27.9	37.5	2.0	1780	13	25		-2.3
Egypt	62.9	81.5	1.7	660	18	40	0.1	-2.1
Libya	5.4	8.7	3.2	...	...	14		-1.2
Morocco	27.0	34.2	1.6	1040	14	37	-0.7	-0.5
Tunisia	8.9	11.2	1.5	1720	18	24	-0.9	-0.2
	132.1	173.1	1.8					-6.2
TOTAL	420	490	1.0					-9.5

* 1990; ... = data not available.
Sources: Columns 1-3, UN (1994); Columns 4, 7 and Column 5 for non-EU countries, World Bank (1995); Column 5, EU countries for 1992, CEC (1994); Columns 6,8, FAO.

TABLE 3 - MEDITERRANEAN COUNTRIES: FOOD AND AGRICULTURE DATA

	Agric. Land (arable + perm.crops) (ha/person) in:			Yields (tons/ha) Average 1992-94		Cereals Net Trade (mill. tons)		Self-Suffic.%		Food Supplies per capita 89-91 Cal/day	Kg/year		Total Agricultural Growth Rates, % p.a.	
	Total Popul.	Agri.Lab. Force	% Irrigated	Wheat	Coarse Grains	69-71	89-91	69-71	89-91	All Food	Cereals (all uses)	Meat	Demand	Domestic Production
European-EU														
France	0.3	14.3	8	6.5	6.5	10.8	30.1	149	213	3640	480	93	0.9	1.7
Greece	0.4	4.0	31	2.5	5.9	-0.3	0.7	96	117	3760	468	70	2.1	2.0
Italy	0.2	7.3	23	3.5	6.5	-6.0	-3.8	72	83	3520	364	79	0.9	1.0
Portugal	0.3	4.3	20	1.6	2.1	-0.8	-1.4	70	53	3570	310	62	2.1	1.0
Spain	0.5	12.9	17	2.2	2.3	-0.1	-1.2	93	96	3640	515	90	2.3	2.5
European, non-EU														
Albania	0.2	0.9	60	2.7	2.1	-0.1	-0.2	87	82	2710	305	20	3.2	2.7
Cyprus						-0.1	-0.5	61	18	3520	865	97	2.2	1.0
Former Yugoslavia	0.3	3.4	2			-0.3	0.3	101	103	3460	670	63	1.8	1.6
Malta	0.04	2.6	8	3.6	3.2	-0.1	-0.1	3	5	3300	455	65	1.5	1.5
Middle East														
Israel	0.1	5.8	47	2.2	0.9	-1.2	-2.2	15	9	3210	535	56	2.3	2.0
Lebanon	0.1	4.3	29	2.1	1.7	-0.5	-0.6	9	12	3200	245	30	3.8	2.8
Syria	0.5	8.5	11	2.4	0.7	-0.4	-1.7	79	56	3210	370	18	5.5	4.4
Turkey	0.5	2.4	13	2.0	2.3	-0.8	-0.5	100	102	3540	495	18	3.1	2.9
North Africa														
Algeria	0.3	5.1	5	0.7	0.7	-0.5	-5.9	74	31	2920	325	17	5.5	2.8
Egypt	0.05	0.4	100	5.2	5.6	-1.1	-8.0	77	60	3330	372	15	4.2	2.3
Libya	0.5	13.9	22	1.1	0.5	-0.3	-2.1	26	12	3270	525	28	6.5	5.1
Morocco	0.4	3.4	13	1.1	0.8	-0.3	-1.6	95	85	3030	350	16	4.0	3.2
Tunisia	0.6	7.5	6	1.4	0.9	-0.4	-1.3	62	56	3210	353	17	4.6	2.6
TOTAL						-4.5	0.1	96	102	3430	435	51		