The agricultural sector in Malta

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Introduction

Malta has a relatively small agricultural sector, contributing under 2% of GDP. The Maltese agricultural sector consists mostly of small holdings on terraced strips of land, and soils tend to be shallow. Agricultural land covers 10 000 ha, which is about 30% of the whole land area. The labour force in this sector is ageing. The method of production is generally based on small-scale machinery or manual tools, since the small size of holdings does not permit the use of large machines.

The sector is characterised by a low productivity per capita with businesses being typically run by family members. Many farmers in Malta tend to place low opportunity cost on their leisure time, and are therefore prepared to work long hours at low remuneration rates, so that total income rather than net profit would be the motivating factor. There is substantial involvement of the sector in informal economic activities (mainly for the purposes of tax evasion). Although the National Accounts Statistics makes an allowance for imputed income from agricultural activities, the informal sector may by underrepresented in official agricultural statistics.

In spite of the low productivity in this sector, Malta is self-sufficient in fresh vegetables, eggs, poultry, rabbit meat, pork and fresh milk, while a relatively large proportion of beef and fruit is imported. In recent years, horticultural production has tended to increase.

Maltese agriculture is beset by a number of handicaps which explain its current precarious condition and which warrant appropriate policy intervention.

Contribution to economic activity

The principal source of data for this brief is the Census of Agriculture compiled by the National Statistics Office in 2001, which has not yet been published, and other National Statistics Office publications. However, as farmers operate also in the informal market, official statistics are likely to understate the true contribution of the sector to the national output and employment. Analyses and interpretations based on official statistics are thus subject to this important caveat.

Employment

The contribution of the agricultural sector to employment has declined markedly over time, as shown in Table 1. In terms of full-time employment

Table 1. Employment in agriculture

Employment	Census 1981	Census 2001*
Part-time	10 923	10 414
Full-time	4 352	1 130
Total (excluding hired labour)	15 275	11 544
Hired-labour full-time*	422	370
Total employment	**15 697**	**11 914**

* Data on part-time hired labour is not available

(i.e. adding part-timers and transforming them into full-time equivalents), the agriculture's share of the total employment in Malta is currently reckoned to be around 4%. The sector's contribution to GDP (including fisheries) is estimated at 2.3%, however again here this excludes considerable production sold in the informal markets.

Female employment

According to the Labour Force Survey, women constituted around 7% of full-time employees in the agricultural sector in 2001.[1] Circumstantial evidence, however, indicates that the role of women in agriculture is significantly more pronounced in the case of part-time informal work. The Census of Agriculture is expected to yield information on this issue in the coming weeks.

Value of output

The value of the formal sector's gross output is reported to have increased by an average of 2.7% per annum between 1996 and 2001, to just under Lm55.6 million[2], as shown in Table 2. This amounts to about 1.8% of the total final sales of the Maltese economy. Two thirds of the value of agricultural output consists of animals and animal products, with crop production for local consumption accounting for just under one third. The share of exports in the output is minimal. Just under half of the crop output is transacted through organised markets, the rest through direct sales, often informally. This implies that the share of agriculture in GDP is potentially double that reported in the official statistics.

[1] For the purposes of the labour force survey, agriculture would also include public sector activities.
[2] Lm1 = 2.5 euros

Table 2. Estimated total output by category (Lm000)

Item	1996	1997	1998	1999	2000	2001
Animals	20 424	22 165	22 756	22 839	23 468	24 870
Animal products	9 993	11 473	11 842	11 224	11 440	11 223
Crop products for local consumption	17 302	17 801	19 104	18 253	16 749	18 063
Exports	918	1 442	1 053	1 267	1 080	1 438
Total	**48 637**	**52 881**	**54 755**	**53 583**	**52 737**	**55 594**

The production of animals and animal products includes mainly pork and milk. The most important vegetables are potatoes, tomatoes and onions, and the most important fruit are citrus, stone fruit (e.g. peaches and plums) and grapes. The most important agricultural export is potatoes. Table 3 shows the relative importance of the subsectors of Maltese agriculture.

Table 3. Relative importance of subsectors within agriculture (in %)

Item	1996	1997	1998	1999	2000	2001
Animals	42.0	41.9	41.6	42.6	44.5	44.7
Animal products	20.5	21.7	21.6	20.9	21.7	20.2
Crop products for local consumption	35.6	33.7	34.9	34.1	31.8	32.5
Exports	1.9	2.7	1.9	2.4	2.0	2.6

Agricultural land

Agricultural land decreased by about 50% between 1971 and 2001, as can be seen from Table 4.

Table 4. Agricultural land as a percentage of total land area

Year	Agricultural land (in ha)	% total land area
1971	15 000	47
1991	12 000	38
2001	10 000	31

The contribution to economic activity of the agricultural sector, however, extends beyond the direct production of farm output. As a matter of fact, the sector has a multi-functional role and positive externalities associated with culture, tourism, food security and environmental conservation. The sector employs people whose skills, age and cultural orientation render it difficult to employ them elsewhere, with the ensuing social repercussions if this sector is to be wound down. The 'Singapore Option' that is, letting the sector die a natural death, is therefore not an attractive option.

Sector constraints and opportunities

The sector is heavily sheltered from foreign competiton, and protection is particularly high with regard to pork, beef, dairy products, processed vegetables, fruit and products used for the agro-industry as inputs. Even with such protection, there is a high dependence on imports of wine-grapes, fresh fruits and beef. Malta is not a producer of cereals, sugar, rice, butter, cheese and most fresh fruits, all of which have to be imported.

Recent studies on agriculture in Malta (Ciheam, 2000 and 2001) lament the lack of vision on the part of the Maltese authorities. Agriculture on the Maltese Islands faces a number of serious problems, mostly associated with inefficiencies, and it was only in recent years, in the run-up to the EU, that the issue of sustainable future for the sector has been given attention. This has rendered policy design and implementation a major challenge for the Maltese authorities.

In its current state, the agricultural sector on the Maltese Islands will continue to dwindle, and the sector will have to be restructured if it is to survive irrespective of whether Malta becomes an EU member or maintains some kind of Association Agreement with the EU.

Major constraints

The development of agriculture in Malta is constrained by a number of factors, including:

- The high opportunity cost of land, with the resultant high economic rental value compared to that in other developing and neighbouring countries.
- The geographical characteristics which limit the size of holdings and increase fragmentation.
- Ownership of the land often does not pertain to the producer, inhibiting capitalisation of this asset for the purposes of business development.
- Scarcity of water for irrigation, with a very large proportion of Malta's water supply originating from costly desalinisation processes – the sustainability of the sector would be further threatened as efforts to clamp down on illegal tapping of underground acquifers are stepped up.
- Scarcity of agricultural land with the resultant over-cropping, poor soil fertility, low yields per hectare, and lack of crop rotation methods.
- High costs of hiring labour in a situation where the rate of national unemployment is only about 5%.
- The need to import practically all the required agricultural inputs.

• An economically inefficient distribution system which puts a significant markup between the final wholesale price and the price received by the producer – direct sales not passing through organised markets are generally more lucrative for producers.

• Pervasive regulation and arrangements which protect producers but also limit their business activities, thereby inhibiting innovation and development, as in the case of tomato production, whereby farmers are protected from foreign competition but also obliged to supply agri-processors at specific prices.

Opportunities

Opportunities that can be envisaged at this stage include:

• Taking advantage of the multifunctional role of agriculture. In Malta's specific circumstances, a restructured multifunctional format for Maltese agriculture is perceived to have great potentialities, especially because of its externalities with regard to tourism, rural landscaping and conservation.

• Improving production methods through the consolidation of agricultural land and the structural modernisation of farms.

• Improving the marketing of products by concentrating on high-quality niche products.

• Implementing agri-environmental measures aimed at conserving the traditional rural character.

• Strengthening the administrative and technical capacity of the Ministry of Agriculture.

• Setting up producer organisations to overcome excessive fragmentation and ensure planned production that is responsive to demand while improving product quality with reduced production costs – a Producer Organisation Act is scheduled to be adopted by Maltese Parliament during 2002.

• Providing incentives to encourage sustainable farming practices and technologies.

Restructuring and negotiations towards EU membership

The major changes that will occur on accessions and during the run-up to accession relate to:

• The removal of existent protective levies. Malta has negotiated with the EU the adoption of a Special Market Policy Programme for Maltese Agriculture (SMPPMA) primarily to overcome the effects of the removal of protective levies, which takes into account local conditions and restructuring requirements (Ministry for Agriculture and Fisheries, 2002).

• The introduction of the common external tariff on products which do not originate from the European Union, which may increase the prices of these products.[3]

• As a non-EU member, Malta currently imports a number of agricultural products from the EU at low prices in view of export subsidies applicable to sales outside the EU. Once Malta joins the EU, such export subsidies will no longer be applicable. This could result in price increases in certain products imported from the EU by the local agro-industry. On the other hand, domestic farming activities could become more competitive as the price of competing imports increases.

A Ciheam (2001) study shows that there will be additional costs borne by the government in terms of revenue foregone due to the removal of levies (about Lm3.5 million at 1999 prices) and the co-financing of rural development and structural changes, amounting to about half a million liri, leading to a net government disbursement of about Lm4 million. According to the same study, another negative impact relates to the support lost by farmers, amounting to about Lm7.2 million, but they will likely receive about Lm1.5 million from the EU support for rural development and structural changes. This loss could be made up by the government in terms of income support.

An important hurdle in the restructuring process in general and in obtaining EU assistance towards this end could be the dearth of data on the sector. Although this is being remedied through the efforts of the National Statistics Office, producers tend to be, in general, reluctant to give data concerning their activities due to their substantial involvement in informal markets aimed at tax evasion. Thus, the tax status of producers is an issue that has to be adequately considered in formulating policies towards the restructuring of the sector.

The outcome of the negotiations for EU membership made considerable provision for the handicaps facing Maltese agriculture and for its restructuring needs (Busuttil and Demicoli, 2003). The main results of the negotiations were:

– direct income support to be given to farmers under the SMPPMA to replace protective levies;

– financial support to be given for the restructuring of the processing industry;

– a five-year safeguard is to be put in place to protect the sector in the case of difficulties, mainly mass imports that would disrupt market conditions;

[3] It is to be noted here that the EU has adopted a regulation to eliminate quotas and duties on all products, except arms, from Least Developed Countries (LDCs), with effect from March 2001 for all products except sugar, rice and bananas, where such liberalisation will be introduced in phases until July 2009. This means that by 2009, at the latest, Malta will be able to benefit from the liberalisation process in sugar if it joins the EU, since sugar will be imported by the EU at world prices.

– a Rural Development Plan is to be implemented to provide support specifically directed towards the restructuring of the sector;

– Malta is to have a status of Less-Favoured Area for the purposes of EU funding.

Under these provisions, Maltese farmers are to benefit from a total financial package of 184 million euros running up to 2014. This effectively implies a subsidy of 1300 euros per annum per person working in the agricultural sector, or an annual subsidy of 20% of the value added generated by the sector. This package is to be paid in part by the EU and in the other part by Malta. Further details regarding this package can be found in Busuttil and Demicoli (2003).

In addition, the agricultural sector in Malta is to benefit from funds that it manages to obtain by proposing feasible restructuring projects under the Rural Development Plan. It is indeed this aspect which will secure the long-term survival of the sector, as direct subsidies to farmers will eventually have to be phased away. In this context, we next present some ideas that would enhance the chances of the sector surviving and thriving in the face of international competition.

Strategies for restructuring Maltese agriculture

It is suggested that the overall strategy for Maltese agriculture should be based on the development of agricultural *niche* quality products, best suited for the type of soil and climatic conditions of the Maltese Islands, and on specialisation in these products. Ideally, it should be possible for farmers to produce these products competitively without requiring large tracts of land (i.e. they should be produced efficiently in relatively small production runs, where quality competitiveness would play an important role).

Upgrade local products

Although income support for farmers is very important for the survival of the sector, it is vital to complement this by capacity building and incentives aimed at upgrading the agricultural products to make them more marketable locally and internationally, price-wise and quality-wise. Potatoes and tomatoes should continue to be the backbone of Maltese vegetable products. Other fresh vegetables such as cabbages, cauliflowers, carrots and marrows will continue to have an edge over imports due to the proximity of the local producers to the domestic market and the preference of Maltese consumers for fresh vegetables. With more efficient production, these products will of course have a better chance of competing with imports. This premise also applies to animal breeding.

Promote Maltese food specialities

There is potential for marketing Maltese food specialities locally and for exports. Such specialities include cheeselets, sausages, honey, sun-dried tomatoes, traditional tomato sauces, carob products and capers. Producers should be helped to market and upgrade the quality of these products to meet EU safety requirements. The Maltese government should seek possibilities for funding a study on the marketing and export of these specialities.

Promote agricultural education

Agricultural education should be promoted to upgrade the abilities and image of agricultural workers, to influence attitudes conducive to modern production methods and to train administrators and technical personnel in the private and public sectors. This should upgrade the capacity of human resources in Malta and improve capacity for the absorption of income support and response to incentives.

Exploit the multifunctionality of the sector

The multifunctionality of the agricultural sector and its contribution to tourism and rural conservation should be highlighted and given major importance in development plans. Agri-tourism and rural tourism should feature more in tourism marketing exercises. The engagement of agricultural workers in rural conservation should raise the status of employment in this sector and could enhance participation of women.

Halt and reverse the deterioration of rural areas

A considerable proportion of agricultural land on the Maltese Islands is very fragmented and often not viable if labour is remunerated at market rates. As a result, one finds many abandoned and deteriorating terraces and rubble walls in Malta. This is likely to continue in the future unless financial support for the maintenance of the traditional rural infrastructure is provided. Abandoned terraced fields also lead to soil erosion. The high rate of soil erosion in Malta and Gozo is exacerbated by poor structures of retaining walls and the undulating landscape.

It is therefore important for farmers to obtain assistance in maintaining and upgrading rubble walls and retaining structures to prevent soil erosion and to improve the aesthetic appearance of terraced fields and rural areas. The forestation and vegetation cover in areas where agricultural land is abandoned and/or cannot be feasibly commercially cultivated should be stepped up. This would also be beneficial for the tourist industry.

Promote female employment in the sector

The employment of women in the sector could be stepped up if there is a shift away from informal to formal activities, leading to more organised and respectable business methods. The development of ancillary activities such as clerical work, grading, packing and packaging and related work could also provide considerable female employment. Female employment could also increase if the status of agricultural employment is enhanced, and if there are more possibilities for flexible working hours.

Conclusions

Natural constraints and inadequate inward-looking policies are putting significant constraints on the development of the agricultural sector in Malta. It is, however, desirable that this sector thrives and survives, mainly because it gives employment to a vulnerable segment of society and has important external effects connected with tourism and the environment.

The prospect of EU membership presented the threat of the removal of protectionist measures for the sector, with the possibility of accelerating the process of natural wastage which it was undergoing. On the other hand, the outcome of the negotiations forms a reasonable environment within which the local farming sector can survive and thrive in the face of international competition. It is, however, to be emphasised that this cannot rely solely on the provision of direct subsidies. The opportunities available to the sector to effectively restructure so as to be fully able to withstand international competition on its own two feet must be exploited to the utmost. In this regard, a number of strategies can be envisaged, including the upgrading and branding of products, the improvement in the quality of human resources employed in the sector, and the exploitation of positive externalities created for other sectors in the Maltese economies.

Appendix

A brief description of principal agricultural activities in Malta

Open-field vegetable and fruit production

The most important open-field vegetables grown in Malta are potatoes, tomatoes, melons, onions, marrows, cabbages, cauliflowers and carrots. Most horticultural produce includes tomatoes, cucumber, aubergines and green pepper. The most important fruit grown in Malta are oranges and lemons, grapes, peaches and strawberries. Indicative statistics for output in 2001 are:

Total output of fruit and vegetables (000 tons)		103.6
of which:		
Vegetables	94.8%	
Fruit	5.2%	
Sold through organised markets	48.5%	
Direct sales (including sales to processors)	51.2%	

Value of output of fruit and vegetables (Lm M)		22.0
of which:		
Vegetables	90.1%	
Fruit	9.9%	
Sold through organised markets	59.0%	
Direct sales (including sales to processors)	41.0%	

Vegetable production (Fig. 1) tended to be stable over the years, if declining somewhat in 2001. Prices in organised markets have generally followed a declining trend, with an increased degree of volatility.

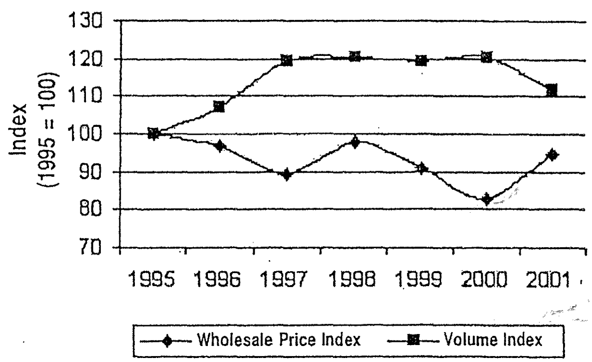

Fig. 1. 'All items' – Vegetables

Fruit production (Fig. 2) declined markedly over the past three years, with prices following an increasing trend, which, however, did not prevent a drop in the total value of sales.

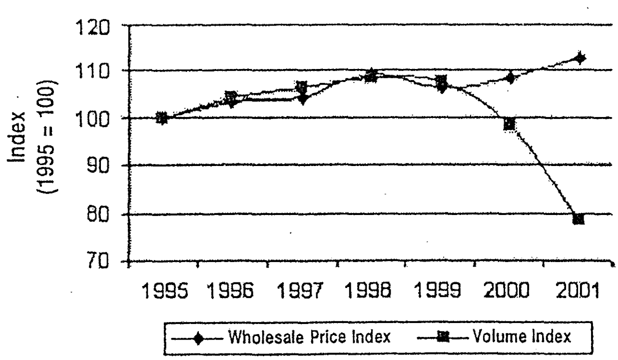

Fig. 2. 'All items' – Fruit

Livestock

The most important livestock raised on the Maltese Islands are cattle, pigs, goats and sheep, poultry and rabbit.

Cattle industry

In June 2000 there were 260 cattle farms in Malta and Gozo. Of these, 143 farms were engaged in both beef and milk production, 83 were engaged solely in beef production while the remaining 34 farms specialised in milk production.

The total herd of cattle was estimated at 20 326, of which 9306 were milking cows and the remaining were breeding stock. Most of the cattle farms, or 138, were between 1000 and 4999 m^2 in size. Only 28 farms were more than 10 000 m^2 in size. More than half of the farms had a herd smaller than 50 head, 19.2% – 51 to 100 head, 13.8% – between 101 and 150 head, and 14.6% – over 150 head. In 2001 a total of 6019 cattle head with a total weight of 1.6 million kg were culled; an average of 116 head per week.

The Maltese milk production is rigidly regulated by a quota system assigned to each farm, with each farm being guaranteed a price for the amount produced within that quota. Processed products include traditional cheeselets and yoghurt. Skimmed milk powder and butter are not produced.

Dairy herds consume a significant share of imported cereals as well as of locally produced fodder. Breeders are practically compelled to buy their feeds from a cooperative which mixes the imported cereals. The dairy plant to which farmers must sell their milk has a major financial stake in this cooperative.

Pig farming

In 2000 there were 174 pig farms on the Maltese Islands. The stock amounted to 80 074 head, consisting of 21 875 piglets, 24 732 young pigs weighing between 20 and 50 kg and 25 284 fattening pigs over 50 kg. There were 441 boars, 6918 sows and 824 gilts.

Pig slaughtering is a stable activity with around 10 000 pigs slaughtered on a monthly basis, with demand in winter being slightly higher than in the other seasons. 121 227 pigs weighing 9 518 792 kg were slaughtered in the year 2000. On average, this amounted to a yearly consumption of 25 kg per head of the Maltese population.

The pig industry in Malta operates through a quota system, which provides considerable price support for breeders.

Goats and sheep

These are bred mainly for the production of cheeselets, and the sheep's fleece is used as a raw material for woven carpets and other textile production. Another product is fresh lamb meat and mutton.

Chicken breeding

Chicken breeding is mostly undertaken for meat processing and egg production. Approximately 7000 tons of poultry meat and 6000 tons of eggs are produced in Malta each year.

Rabbit breeding

Many households in Malta and Gozo rear rabbits and these are also bred commercially on a few farms. There is an informal distribution system. The amount of rabbits bred is not known with a sufficient degree of precision.

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