# Comments on the National Reports and Conclusions

**Di Terlizzi B., Sabanadzovic S., Savino V.**

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# Comments on the national reports and conclusions

B. Di Terlizzi, S. Sabanadzovic[1] and V. Savino[2]

## Position of Agriculture in the Mediterranean economy

Agriculture represents a very important sector in the economy of all participant countries, contributing to Gross Domestic Product from 5% in Cyprus up to 55% in case of Albania. Contribution of agriculture in overall economy in major part of the Mediterranean ranges from 12-20%. It represents an important share of goods for export in many Mediterranean countries, contributing from 10% (Turkey) up to 25-30% (Cyprus).

It is worth mentioning that in the Mediterranean area agriculture gives job opportunities, providing a main source of income for a large segment of the population (i.e. 20% in Palestine, 25% in Tunisia, 40% in Turkey and Albania, etc.) and has also great cultural, social, political and environmental importance.

The level of agricultural production in different Mediterranean countries is still insufficient and can not fulfil domestic needs, especially when faced with rapid population growth. From the documents it appears that agricultural production only partially meets total food requirements and vary from 25% in Lebanon up to 60-70% in Egypt and Albania.

[1] Istituto Agronomico Mediterraneo di Bari (Italy).
[2] Dipartimento di Protezione delle Piante e Microbiologia Applicata, Università di Bari (Italy).

## Sector policy

Agriculture is a priority in Government policies of all participating countries. All official strategic documents underline the importance of modernization and liberalization of the agricultural sector through innovations aimed at upgrading the level of national agriculture to international standards. This should allow to meet the challenges of the new global economy such open market policy, free exchange, environmental protection, etc.

To achieve these objectives, governments of different Mediterranean countries are willing to promote research, innovation and education as the basis of future agricultural development. At the same time, governments of different countries are taking also legislative measures, encouraging privatisation and investments, to improve productivity and quality standards so as to meet local food requirements and competitiveness on the international market. Such activities have under way or being planned in Egypt, Albania, Turkey, Tunisia, Lebanon, etc.

## Fruit tree industry

The Mediterranean basin is one of the most important areas in the world for the production of olives, grape, fruits and citrus. The region is the center of origin and diversification of many fruit species and varieties.

Among the different agricultural sectors, fruit industry is of utmost importance, especially in some countries such as Turkey (fruit trees) and Egypt (citrus). The contribution of the stone fruit industry to overall agriculture production ranges from 10 to 15% (i.e. Turkey) up to 60% in Palestine. Even if production is increasing in almost all countries, examples of Mediterranean countries which produce enough to meet local consumption are few. So, the primary objective of governments is to establish a modern and long-lasting fruit industry through various measures, which can be summarized as follows:

- to reduce the gap between national production and local needs;
- to increase competitiveness of local production at the international level;
- to encourage and support production, maintenance and use of healthy propagating material;
- to reduce the use of pesticides through integrated pest management;
- to prevent the entrance and spread of quarantine and other economical important diseases;
- to favor the introduction of new technologies

Such objectives can be achieved only through the establishment of a serious and well organized phytosanitary service (certification of propagating material and quarantine programs) based on internationally accepted criteria.

## Nursery sector

In the majority of southern Mediterranean countries plant propagation material is produced in private and public outfits. Just a decade ago this sector was mainly managed by public institutions, but recently Governments of different countries have encouraged the establishment of private nurseries, so that today the private sector is prevails in various countries (i.e. Albania, Lebanon, Palestine, etc.). Nursery production in these countries has increased, but it is characterized by a low-phytosanitary standards consequent to uncontrolled importation of propagative material.

The fruit industry of Mediterranean countries (olives, apricots, citrus, grapevine) is still based on exploitation of local varieties, which are still most appreciated on the local markets. However, the sanitary status of local germplasm used for propagation is frequently unknown, even in countries where all nursery production is under public responsibility.

Over the last five years, Mediterranean countries have understood the importance of the high-quality nursery production and have tried to improve their

standards through international cooperation programs (Malta, Egypt, Albania, Tunisia, Turkey, Lebanon, *etc.*).

## Sanitary status of crops with particular reference to quarantine agents

The general picture of the Mediterranean sanitary situation related to Sharka disease (PPV), tristeza (CTV) and fire blight (*E. amylowora*) is not reassuring for future development of the fruit tree industry in the region (Table 1)

Table 1. Presence of quarantine diseases in the countries involved in the study

| Country | Quarantine agents/diseases | | |
|---|---|---|---|
| | Sharka (PPV) | Tristeza (CTV) | Fire blight (*E. amylovora*) |
| Albania | + | + | + |
| Algeria | - | + | - |
| Cyprus | + | + | + |
| Egypt | + | + | + |
| Jordan | + | - | + |
| Lebanon | - | + | + |
| Malta | - | - | - |
| Palestine | - | + | + |
| Syria | + | - | - |
| Tunisia | - | + | - |
| Turkey | + | + | + |

+ present; -: absent

The absence of quarantine agents/diseases in some countries might be more apparent than real because of lack of adequate monitoring and reliable diagnostic procedures used.

Where present, quarantine agents represent veritable stumbling blocks for the production of certified propagating material. Prompt eradication of infected trees (for PPV and CTV) and the production of propagative material in pathogen-free

areas are the best way to control quarantine diseases.

## Legislation, resources and facilities needed for certification

Among participating countries, Cyprus, Turkey and Tunisia seem to be the most advanced in addressing certification-related issues. A fairly well established agricultural research system, the support of scientific institutions and the interest of nurseries and farmer's associations, has created a favourable environment to the establishment of clean stock programs.

The aspects to be considered in setting up a national certification service are numerous, and we will try to compare some of them reported from the TAC participants for this study.

Certification services (dealing with genetic and phytosanitary aspects) are operative in Cyprus since 1994 (fruit trees, citrus, olive) and Turkey since 1997 (fruit trees, citrus and grapevine). Tunisia, Egypt, Malta Algeria, and Albania are establishing certification services for the production of propagating material. Other countries, i.e. Jordan, Lebanon, Palestine and Syria are willing to start, but still face difficulties in term of facilities or human resources.

## Legislation

The legislation aspect is very important in setting up a successful certification program for propagating material. The majority of the countries need still to issue the necessary legislation (Egypt, Jordan, Malta, Palestine and Syria). Albania and Lebanon have already issued by laws but still need to revise and improve it in terms of technical protocols to be followed during the sanitary assays. Legislation exists in countries like Algeria, Cyprus, Tunisia and Turkey (Table 2).

Even where issued, extant legislations need to be harmonised and updated to meet international

requirements (EPPO Standards and EU Directives on certification schemes) for facilitating the international trade of plant propagating material.

## Scientific Institutions involved

Scientific institutions involved or expected to be involved in National Certification programs belong mainly to the Ministry of Agriculture. These are Plant Protection and Pomology Institutes with relevant experience in the field.

Table 2. Status of legislation on certification of propagating material

| Country | Legislation status | | |
|---|---|---|---|
| | Present | To be updated | No legislation |
| Albania | | + | |
| Algeria | + | | |
| Cyprus | + | | |
| Egypt | | | + |
| Jordan | | | + |
| Lebanon | | + | |
| Malta | | | + |
| Palestine | | | + |
| Syria | | | + |
| Tunisia | + | | |
| Turkey | + | | |

## Facilities

Generally, there are no facilities in the countries where certification activities are not operating. The main facilities lacking are greenhouses for biological indexing and insect-proof screen houses for the conservation of virus-free propagating material.

In some countries (i.e. Jordan, Palestine, Syria, etc.) the facilities are totally lacking, whereas in other countries infrastructures have been recently established or their construction is an ongoing phase (Malta, Albania, Egypt). Adequate facilities are operational in countries like Cyprus, Turkey, Tunisia and Algeria.

Diagnostic laboratories for certification purposes are present in the majority of the countries i.e. Albania, Algeria, Egypt, Jordan, Lebanon, Malta, Syria, Tunisia and Turkey, but not in Palestine (Table 3).

## Human resources

Some of the participating countries have personnel trained in plant protection (and especially certification) through long-term and Master courses held abroad, particularly at CIHEAM/Mediterranean Agronomic Institute of Bari, where over 250 people (mainly researchers) from Mediterranean countries received a plant virology training. Some countries, i.e. Albania and Lebanon in particular have profited from the opportunity and have trained a consistent number of experts. Other countries, are still lacking enough skilled personnel (i.e. Egypt, Turkey, Jordan and Syria). These countries urgently need special training regarding general plant virology, diagnosis and certification of plant propagation material.

Table 3. infrastructure needed for the certification service. Present situation in the Mediterranean countries

| Country | Facilities needed | | | |
|---|---|---|---|---|
| | Climatised Greenhouse | Diagnostic laboratory | Screen house | Sanitation facilities |
| Albania | u.c. | + | u.c. | no |
| Algeria | + | + | + | + |
| Cyprus | + | + | + | + |

| | | | | |
|---|---|---|---|---|
| Egypt | u.c. | + | u.c. | no |
| Jordan | no | + | no | no |
| Lebanon | + | + | + | + |
| Malta | + | + | + | + |
| Palestine | no | no | no | no |
| Syria | + | + | no | + |
| Tunisia | + | + | + | + |
| Turkey | + | + | + | + |

+: present; no: not present; u.c.: under construction

## Role of International cooperation

The international cooperation, both bilateral and multilateral, has been active for the establishment of certification services in several Mediterranean countries.

It is to underline the role of Italian bilateral cooperation through IAMB in establishing active co-operation with Albania and Malta, where projects are underway. Efforts now being extended to start similar activities in Lebanon and Palestine.

German cooperation through the GTZ Agency is active in Algeria and Egypt for similar projects. Recently a good synergic collaboration has been established between IAMB and GTZ in the above countries. Bilateral cooperation is being carried out by France with reference to stone fruit certification in Egypt.

PNUD-FAO Regional Project RAB/88/025 on “Control of virus diseases of fruit trees”, operative in the ’90 was an example of multilateral cooperation in the Mediterranean. This project embraced seven countries (Morocco, Algeria, Tunisia, Libya, Egypt, Syria and Irak) and was structured in three networks dealing with grapevine, citrus and stone fruits.

## Conclusions

Based on "country report" data collected from participating countries it emerges the undoubtful will of different governments to implement certification programs in order to improve quality standards of the own nursery sectors. The general information from countries report the lack of different factors indispensable for the successful implementation of such programs (i.e. needs for updating of human resources, lack of the proper infrastructures and facilities[3], total lack or necessity to update legislative sector, etc.). Due to the limited economic power of majority of governments, they are not able to ensure all of these factors alone.

A common project (a draft of possible project is included at the end of this document), in order to harmonise the actions, may represent the best solution to establish certification programs in all participating countries.

It should promote and facilitate the free exchange of the plant propagating material and represent an important contribution towards creation of a global free-trade area in the Mediterranean.

[3] Several experts of MAI.B during the missions in some of these countries have underlined that the majority of diagnostic and conservation facilities are obsolete or/and inadequate for certification purposes. Many of these need to be adapted when possible or constructed ex novo according to revised technical standards.