

## Towards rural revival in the Mediterranean

Mediterranean rural areas have been witnessing, for several decades now, significant changes. Widening disparities between the hinterland and the intensively developed plains, between rain-fed areas and irrigated areas, poverty in the South and the East, degradation of the environment and landscapes, are the overriding symptoms of a situation that has grown critical.

This situation is likely to even grow worse if the liberalisation of agricultural trade in process of negotiation were not to be controlled. In addition, global warming would entail severe impacts on Mediterranean agriculture.

## Blue Plan Notes

Environment and Development in the Mediterranean

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### The Mediterranean rural areas: Originality and vulnerability

In the Mediterranean, the originality of rural areas is due to nature (climate, relief, vegetation) and to the action of civilisations that have shaped the landscape over millennia.

Figure 1: Major agricultural and natural systems in the Mediterranean



Source: *Méditerranée*, Tome 97, no. 3-4 "40 ans de géographie méditerranéenne", 2001

Due to summer drought, growing more acute towards the South, and to variability of rainfall, the issue of water supply for cultivated and natural vegetation (pasture and woodlands) is always crucial. Farming is, for the major part, of a rain-fed type. Irrigated areas account for a mere 20% of all arable land and permanent crops (100% in Egypt), but they had doubled up within 40 years to reach 23 million hectares in 2000 and would exceed 28 million ha by 2025.

The diversity of landscapes and soils, as well as the marked contrast between, on the one hand, large sets of mountains, hills and steppe plateaux and, on the other hand, sets of plains - often coastal plains - which are of small expanse and very densely developed, also constitute main features of the region. The high wood cover rates in the North

(42%, with a large part of shrubs) are strongly on the increase, while they are quite low in the South and the East (4.7%), where the large pastoral areas are also to be found (Figure 1).

Such a diversity is an asset, but environmental constraints (little availability of fertile land and water, frequent droughts and irregular water regime, uneven relief...) generate vulnerabilities that claim a heavy toll on agriculture and the rural populations.

### Increasing pressures on the environment

In 2004, all rim countries counted 166 million rural population, of which an agricultural population of 82 million.

Between 1960 and 2000, the overriding feature in the North (from Spain to Greece) was the drastic drop (74%) of the agricultural population, which passed from 46 million to 12 million (Figure 2). Following a significant phase of rural migration, several regions of these countries have witnessed a rural revival. The development of quality products, agrifood industry, tourism and residential economy has led to a diversifying rural economy, but has often failed to prevent an environmental degradation. Urban sprawl, along with the agricultural abandonment and the poor management of mountainous regions, have resulted in closure and trivialisation of landscapes, loss of

productive capital and biodiversity, and increased vulnerability to floods or fires. Environmental degradation is also due to the impacts of the overwhelmingly "high productivity" agricultural model: water and soil pollution from pesticides and nitrates, soil compacting and fertility losses, over-exploitation of water resources.

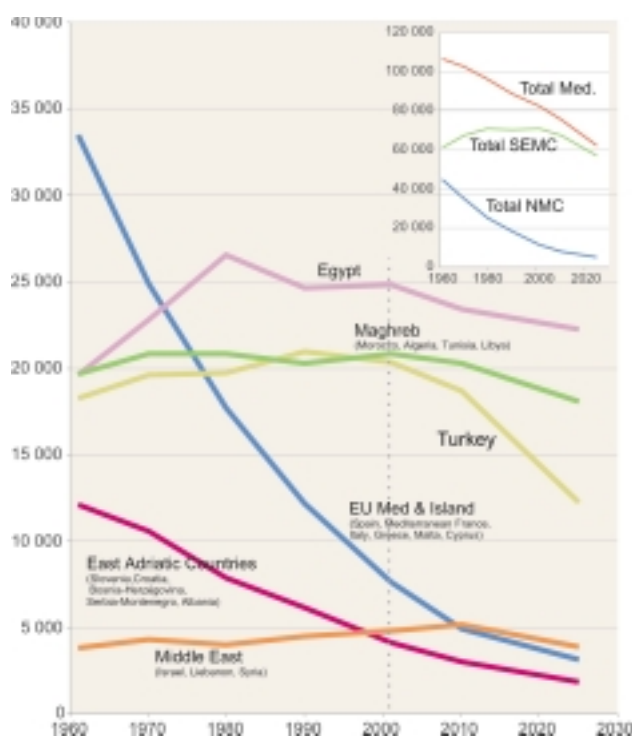
In the South and the East (from Morocco to Turkey), in spite of rural migration, the agricultural population increased by 10 million (16%) within 40 years, reaching 71 million in 2000 (Figure 2). The agricultural productivity gap with respect to the Northern rim of the Mediterranean has been increasingly widening. Non-agricultural rural jobs are still quite few. Agriculture, therefore, continues to play there a vital social and economic role. It presents a growing highly dual character, between a modern agriculture and a vast majority of small subsistence farms on the way of disintegration. Rural poverty and country-city disparities (population below the poverty line, access to basic services, schooling rate, illiteracy rate) are high. Considerable pressures are exerted on natural resources, leading to deforestation, erosion and desertification, rapid silting-up of dams and irreversible biodiversity losses. Land degradation affects 80% of the arid and dry areas, especially pasturelands and rain-fed croplands, even though irrigated land is also under threat.

Such degradations are mainly due to overgrazing, to farming in pastoral or wooded lands, to improper soil work, to insufficient drainage of irrigated land, as well as to over-collection for fuel wood. In Turkey, 1.5 million hectares have, within 40 years, been made unfit for agriculture by salinisation. In Tunisia, annual land loss is estimated at 37,000 hectares, 13,000 ha of which have suffered irreversible damage.

### By 2025, risks of economic, ecological and social misbalance

The scarcity of water and soil resources, as well as the high demographic growth, has exacerbated, in several countries, the deficit of the agricultural trade balance and the volume of grain imports. Only France, Spain and Turkey posted a surplus in agricultural trade balance in 2004. Syria has managed to maintain its balance somewhat even, while Algeria and Egypt have become net importers. Foreseeable agricultural development would lead to increase agricultural production by a half in the South and the East by 2025, without improving self-reliance rates though.

Figure 2: Agricultural populations in the Mediterranean countries: Trends and projections (thousands)



Source : FAO, Plan Bleu prospective  
NMC : Northern Mediterranean countries ; SEMC : Southern and Eastern Mediterranean countries

The Blue Plan *baseline scenario* is founded on four assumptions: a mutual, but gradual, liberalisation of agricultural trade between the two Mediterranean rims; a Common Agricultural Policy extended only to the new countries joining the EU; the emergence of a "precision" agriculture in the north, with high technology and capital content; and a weakness of sustainable development policies, which insufficiently integrate climate change concerns.

Under these assumptions, the evolution of the agricultural population would remain differentiated: still a reduction by a half in the North; significant decrease in Turkey; start of a decreasing trend in the South and East, where rural migration, which is already fairly high, could still increase in case of accelerated and mutual liberalisation of Euro-Mediterranean agricultural trade.

Accordingly, the baseline scenario comprises several risks:

- Continued or increased rural poverty in the South and East, in spite of rural migration;
- Exacerbated direct and indirect impacts on water and soils, rapid silting up of dams, biodiversity losses;
- Increasing pressure on rapidly growing cities, loss of over 1.5 million hectares of quality agricultural lands through urban and infrastructure development;
- Increased difficulties for quality water supply, increased vulnerability to forest fires and floods.

#### Possible impact of free trade on rain-fed agriculture in Morocco

A study carried out by Plan Bleu has shown that an immediate alignment of Morocco's cereal prices with world prices would probably result in: a 20% drop in usable agricultural area for cereals; a drop in the area actually used for soft wheat, durum wheat and sweet corn; and an actual increase in the area used for growing barley.

Subsistence and semi-subsistence farms of less than 5ha (67% of the total number of farms) would be the most threatened, given the area devoted to soft wheat (33% of the UAA), the low margin per quintal and their dependence on the market.

Source: A. Jorio, in PNUE/PAM/Plan Bleu (2002). *Libre-échange et environnement dans le contexte Euro-Méditerranéen*, Montpellier-Mèze, France, 5-8 octobre 2000. (MAP Technical Report Series no 137)

Besides, a global warming of 2°C by 2100 would entail serious impacts on agriculture in the Mediterranean, with exacerbated water deficits and changes in the duration of crop cycles, as well as in crop productivity. On the whole, climate change may induce a displacement of bio-climatic stages towards the North: part of southern Europe would become unsuitable for tradable grain production, and vegetable production would experience certain difficulties.

## Towards rural revival policies

In certain countries in the South and East, rural development policies have often remained weak; in particular, they have not sufficiently integrated policies against desertification. Some experiences in the Maghreb countries show, however, the appropriateness of new participatory approaches, in which the rural actors become partners in rural development. However, several obstacles still need to be overcome before generalising the shift from administered development to self-driven development.



In the North, changes towards more integrated Community policies have been incepted: agro-environmental measures, reform of the Common Agricultural Policy, the rural development Leader programme, setting up the *Natura 2000* network. Italy has become a leading country in the development of organic farming, which accounts for 11.4% of the total area of arable land and permanent crops. New generations of protected areas (regional natural parks, biosphere reserves) have been established and become drivers of sustainable development.

All these experiences show that the current adverse trends are not inevitable and may be reversed by alternative policies aimed in particular at:

- A faster transition towards rural revival in developing countries;
- Improved recognition of the value of the multiple roles of Mediterranean agriculture and forests, as well as of the *water tower* role of mountains;
- Valorisation of the quality and diversity of the products, the landscapes and the land space, particularly around the *Mediterranean garden* concept, and this based on the increasing international and domestic demand for typical products, and for rural and green tourism;



Figure 3: Biosphere reserves in the Mediterranean



Source: UNESCO

The objective of the "biosphere reserves", established since 1976 under the aegis of UNESCO, is to align the requirements of protection of the ecosystems with the development needs of local populations. These reserves recover terrestrial, coastal or marine ecosystems, the value of which is recognised on international level.

► Reduction of irreversible environment degradation, particularly *desertification*, the building-up of quality farmlands and biodiversity losses. The objective would be a rapid reduction, by at least a third, of the loss rates of sub-urban farmland and of the speed of silting up of dams.

### The necessary reforms to invert current trends

The shift from the baseline scenario to a more sustainable development scenario will imply a significant change of policy and administration patterns towards de-concentrated, territory-specific and integrated approaches, which would mobilise the local and professional actors. For so doing, flexible inter-ministerial funds may be required. Approaches such as *biosphere reserves* or *regional natural parks* are particularly relevant for the sustainable management and economic enhancement of the Mediterranean "natural" areas. Poverty reduction and the development of national economies require parallel progress in basic facilities and services, agricultural modernisation, diversification of rural economies and

clarification of rights and rules on access to natural resources.

The shift to a sustainable rural development scenario also requires the integration of the sustainability objectives of agricultural and rural development within the framework of the Euro-Mediterranean Partnership. This implies heightened European awareness of the Mediterranean challenges and risks, a progressive and asymmetrical approach to liberalisation and significant support to developing countries, accompanied by de-concentrated cooperation programmes.

Finally, in view of climate change threats, the issue of adaptation strategies becomes crucial, with such measures as improving water demand management and soil protection, developing the mobilisable water potential, and changing crop growing patterns.

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### Blue Plan Notes



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