

Dry Lands Development in Mediterranean Countries -Similarities between Tunisia and Spain-

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Abstract: Most local Mediterranean regions are suffering from a very alarming depopulation process. This problem has been treated depending on the characteristics of each country. The regions most affected are deficient of solid development projects, with a rural and desertlike character. The regions of Monegros (Spain) and Béni khédèch (Tunisia) can be very typical cases where the agricultural sector represents the unique solution and alternative of local development.

In this paper we will bring up the similarities between the mentioned cases study in a Mediterranean context in term of durability, focusing in there respective social welfare. The results will allow the assessment and the comparison of the local development strategies in each country.

Keywords: Depopulation, Dry lands, Durability, Local development, Mediterranean countries

1. Introduction

This paper presents a discussion treating the context of sustainable rural development in Mediterranean countries, with two examples of rural development policies in the regional and local levels. Some specific topics are discussed, such as natural resources, cultural patrimony and governance and institutions for sustainable rural development. We will try to verify: the enhancement of human and land resources, the involvement of local stakeholders, the grade of participative management, so on.

The land use of rural space and the management of natural resources in Mediterranean countries cannot be carried out by merely extrapolating options developed in other ecological systems. The proposals and solutions adopted in each situation ought to be based on an individualized analysis of the natural, economic and social components, following an integrating approach to reach this aim.

This study strives for analysing the changes occurred throughout the last decades in two Mediterranean regions: Monegros (Spain) and Béni khédèch (Tunisia) characterized not only by a notable aridity, but also by a great fragility of the edaphical and vegetable components. In both of these regions the farming system was marked by the co-existence of farming and pastoral system (rangeland). That's the reason why Tunisia and Spain had initiated in the beginning of the sixteenths, many modifications in their respective land use, with very important agrarian reforms: an intense privatization of old collective lands in Béni Khédèch, and transformations in irrigated lands in Monegros. As a consequence, an evolution towards a more intensified agro-pastoral system was happened in both of these areas.

2. Materials and Methods

The methodology (**Fig. 1**) consists in adopting a model of local and sustainable development based the importance of the agrarian reforms and its theoretical positive impact on terms of economy and demography. Thus, we will try to check if there is a socio-economical benefit through these reforms.

To verify this hypothesis a consultation of previous studies about land use policies in Tunisia and in Spain, and concretely about agrarian reforms in arid areas, was achieved, as well as agricultural and demographic censuses. Besides, we have completed this bibliographical work with many visits to the fields, to complete the quantitative information by a qualitative one through meetings, conversations and surveys with farmers and with the population of the study areas.

3. Results and discussions

Both of the zones are suffering a constant and gradual decrease (**Fig. 2**), in their respective population of 27% (1970-2003) in Monegros, and 7% (1994-2004) in Béni Khédèch, in spite of the improvement of

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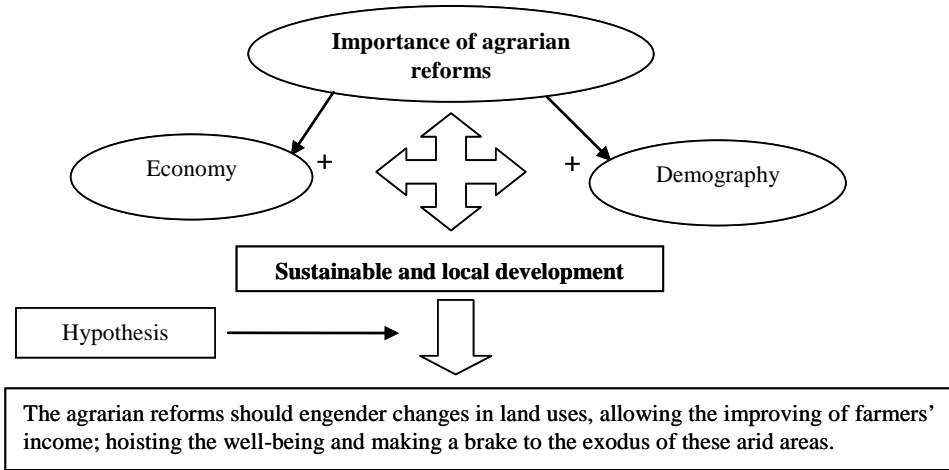


Fig. 1. Mythological scheme.

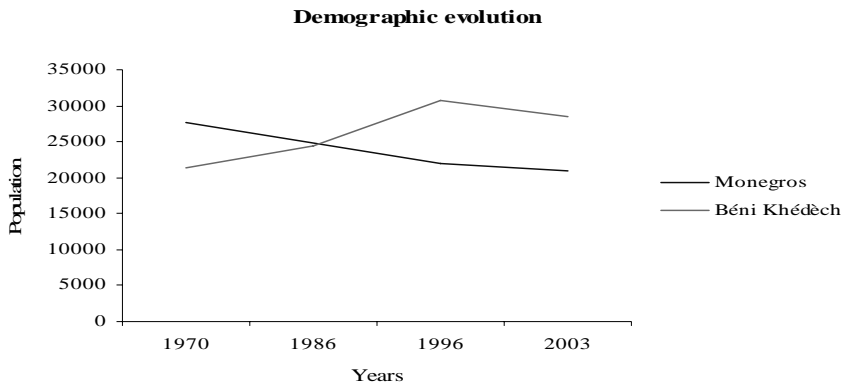


Fig. 2. Comparison of demographic evolution in Monegros and Béni Khédèch (1970-2004).

some demographic indicators. However, it is necessary to underline that this exodus is less significant than other neighbouring regions, as a result of agrarian reforms, dimming the exodus to other regions.

Consequently, we can affirm that the application of this kind of strategies did not encourage the total cessation of neither the exodus nor to the demographic regressive process, and this, because of many reasons:

3.1. The small size of the farms

After the application of the agrarian reforms, a process of absorption of the small farms by big farmers took place, to increase their incomes. As a logic result, there has been an increase in the medium size of farms. However, in spite of this increase, the major problem is stilling the undersized farms, being under 20Ha (88% of farms in Béni Khédèch and nearly 50% in Monegros), as it shown in the following figure (Fig. 3), causing not only real problems of profitability but also of viability.

3.2. The extensive character of the farming system

The most important crops existing in the study areas are basically herbaceous: cereals (wheat, rice, oat, barley and sorghum), forages (Lucerne), but also fruit tree (olive tree, almond tree). The extensive character of these crops has encouraged the fact to consider farming as a secondary activity. This uselessness to dedicate completely to the farming had provoked a substantial decrease in active population working in agriculture.

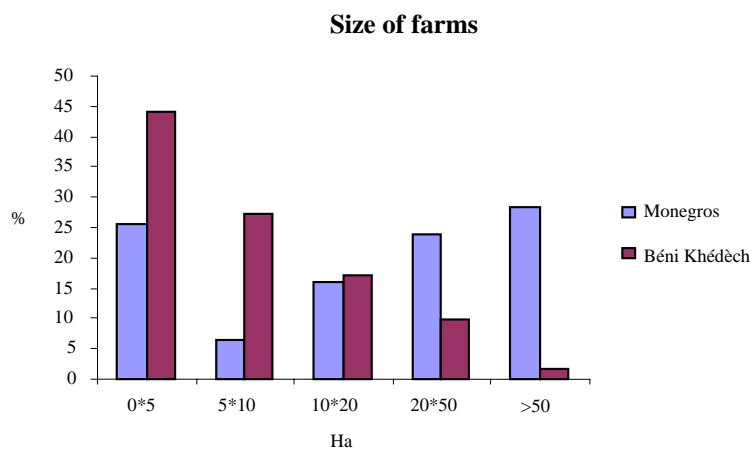


Fig. 3. Comparison of size of farms in Monegros and Béni Khédèch^{A)}, in 2004.

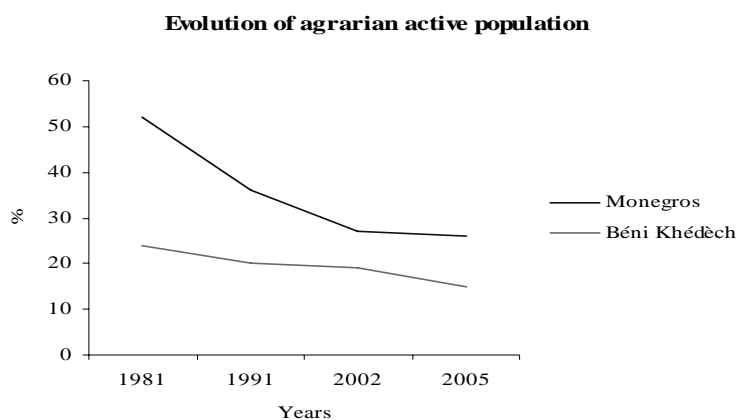


Fig. 4. The evolution of agrarian active population in Monegros and Béni Khédèch (1981-2004).

3.3. The decrease of the active agrarian population

The number of farmers decreased, passing from 24% to only 14% in Béni Khédèch (1984-2004) (**Fig. 4**). The same dynamics occurs in Monegros, passing from 52% to 28% (1981-2004). This regressive tendency is due to several factors as: the abandonment of marginal and small farms, the increase of the agriculture part-time, administrative and financial difficulties to acquire new exploitation, the ageing of the farmers and a total disinterest of new generations in farming activity.

3.4. Integration deficiency

There is a lack not only in the horizontal integration with breeding activity, but also in the vertical integration through the agribusiness, with a total absence of agro-alimentary industries connected to farming, preventing to improve the added value of agrarian production.

4. Conclusions

With the drought and the shortage water, agrarian reforms are a very important solution for farming expansion. It could be a driving force to reach a sustainable development in these arid areas. In deed, there has been an improvement in farmer's income, crops diversification and in the agrarian productivity.

Therefore, this kind of strategy, therefore, has contributed to getting better the economical revenue profitability of farmers, ensuring an economic and a social consolidation and a better articulation of these rural areas, slowing down, furthermore the regressive demographic process.

It is important to mention that the success of these development policies depends on the capacity to attract and to retain active population. To this effect, the economical specialization, through training, entrepreneurial capacity and the ability to associate are fundamental factors to achieve this aim.

Agrarian reform could be an interesting technique in rural and arid Mediterranean areas. Even so, it should be accompanied by a territorial specialization and an adequate planning with a vertical integration (agro-industries) and horizontal (a better connection between livestock and crops).

Annotation

A) Regional size farms of Médenine

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