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**Tunisian agriculture: Are small farms doomed to disappear?**

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**ABSTRACT**

In Tunisia, small and medium-sized family farms dominate agriculture. From the early 80s, with the introduction of the Structural Adjustment Program (SAP), the conditions of production and reproduction of small farms have radically changed. In addition to the unfavorable trend of the prices, these farms are increasingly excluded from credit, land and support services. The ultimate consequence is a tendency in real incomes to decline, particularly sharp for small farms in the arid regions of the country.

Faced with this degradation, small farms have developed mechanisms of adaptation or regulation allowing them to survive and, even in certain cases, to ensure more than a simple reproduction. But, it seems that the limits of these mechanisms of resistance have already reached or almost.

All the indications suggest that the changes observed will lead the majority of these farmers to abandon their land and to undertake the path of proletarianization. However, other factors must be taken into account. The absence of any alternative of employment and stable income, in other activities, condemns small farms to remain in poverty and insecurity.

**Key words:** agriculture, agricultural policy, small farms, Tunisia

JEL code: Q10, Q12, Q18

## **1 INTRODUCTION**

Changes accompanying the process of globalization have revived the debate on small farmers' future in developing countries with controversial findings. For some, technological advances, the introduction of structural adjustment policies and the liberalization of world trade appear to destroy the livelihoods of small agricultural producers who are then condemned to disappearing and marginalization (Bryceson, 2000; Haubert, 1999; Swaminathan, 2005). For others, even if it is true that many peasants were already constrained to give up agriculture and migrate to downtown, great adaptability and flexibility available to the family farms enable them to persist and be competitive (Duffumier, 2004, 2006). These conclusions must be moderate by taking into consideration the various definitions which one can give to the term "small farm" (Moyo, 2005), but also by the diversity of the economic contexts of developing countries.

This paper addresses this debate from the case study of the Tunisian agriculture; which remains largely dominated by small and medium-sized farms.

In Tunisia, small and medium-sized family farms dominate agriculture. More than 89% of farms are smaller than 20 hectares and 54% of farms have less than 5 ha. In addition to the weakness of their land potential, these farms face a multitude of natural constraints (low and erratic rainfall, poor fertility of the majority of soils ...). These difficulties are reinforced by the option taken in the mid-1980s, for a complete subordination of agriculture to market and implementation of the "true price": removal of input subsidies and submission of access to resources and support services to the logic of sustainability and profitability.

Analyzing the impact of observed changes in the production and reproduction conditions of farms, this paper aims to answer the following questions: what are the resistance margins for small farms in Tunisia? Will the marginalization of small farms lead to their disappearance?

## **2 ALTERATION OF REPRODUCTION CONDITIONS OF FARMS**

From the early 80s, with the introduction of the Structural Adjustment Program (SAP), the conditions of production and reproduction of small farms have radically changed. In addition to the unfavorable trend of the prices, these farms are increasingly excluded from credit, land and support services. The ultimate consequence is a tendency in real incomes to decline, particularly sharp for small farms in the arid regions of the country.

### **2.1 Unfavorable evolution of prices**

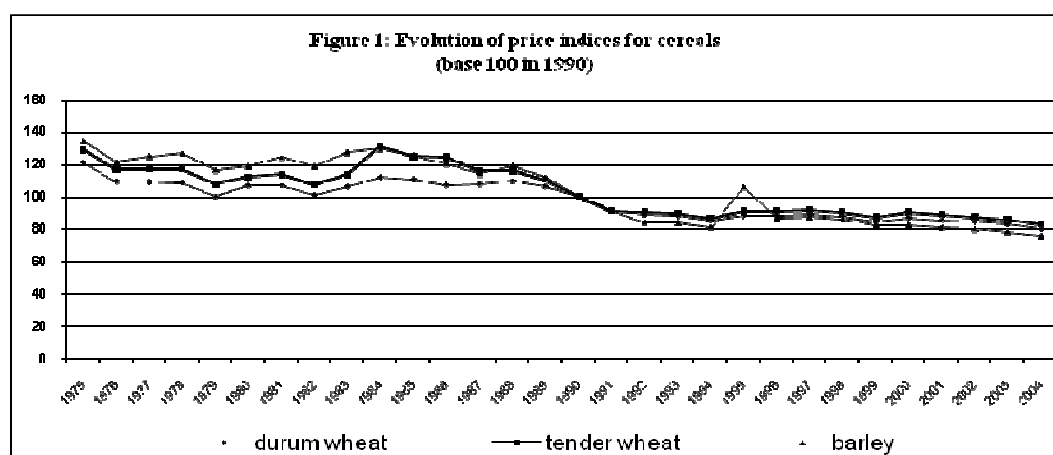
Since the implementation of SAP, the State has tended to freeze on the long time producer prices of major agricultural commodities. For example, the producer price of a quintal of durum wheat has remained stable at 26 dinars for 3 years (1992-1994), to 28.5 dinars for 4 years (1996-1999), and 29.5 dinars for 5 years (2000-2004). Worse, the producer price of a quintal of barley was remained steady at 15 dinars for 6 years (1990-1995) and 17 dinars for 9 years (1996-2004). This trend reflects the fact that the upward revision of producer prices of agricultural commodities carried by the state, no longer depends on the evolution of their production costs but rather on the evolution of their world prices. Note also that in the past two decades, most of the producer prices of agricultural crops, not regulated by the state but by the market, often known also small increases. Broadly speaking, for all

agricultural products, nominal production prices are far to offset the rising cost of living. In real terms, and especially from the mid-1990s, these prices show a clear trend of degradation (Jouili 2008).

Meanwhile, the removal of subsidies has resulted, in particular from the mid-1990s, in, sometimes prohibitive, increase which affected the prices of all inputs (fertilizers, seeds, irrigation water, food livestock, farm equipment ...). Today, with rare exceptions, farmers are forced to purchase these inputs at market prices constantly raising, hence, a continuous increase of the production costs.

Broadly speaking, the situation is marked since the implementation of the SAP, by a trend towards strengthening the phenomenon of "price scissors" (Abaab and Elloumi 1995, Jouili 2008) which can be observed through the analysis of changes in relative prices of agricultural products compared to those of all inputs.

For example, based on the average structure of production costs of different cereals (Ministry of Agriculture in 1998), it is possible to construct an index specific to the grain. The evolution of this index over the period 1975-2005 (Figure 1) shows that the "scissor effect" is becoming increasingly clear from 1990-91, suggesting a worsening of financial difficulties for farms, particularly the most vulnerable.



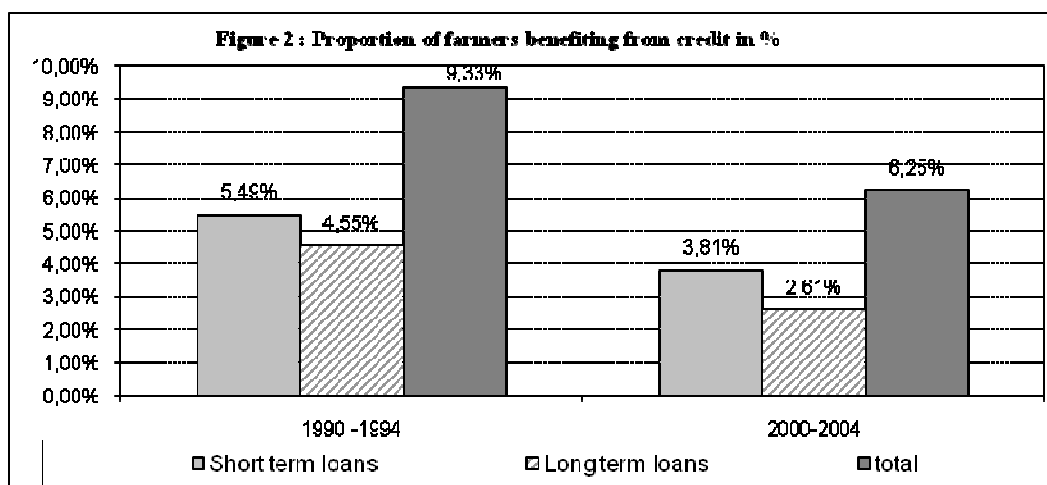
Source: *Yearbooks of Agricultural Statistics*

## 2.2 Limited access to resources

Small farms are also hampered by increasingly restricted access to different resources. New forms of regulation of agricultural activity have actually resulted in a modification of terms of access to finance, land and various support services, with marginalization of small and medium-sized farms.

### 2.2.1 Access to credit

The submission of financing agriculture to rules of profitability has resulted in limited and increasingly differentiated access of farms to sources of institutional funding. An analysis in terms of numbers of farms integrated in the system of institutional funding, shows that the scope of agricultural credit remains obviously limited. More than that, the proportion of farmers who received credit tends to decline, both in absolute and in relative, as the following graph shows:



Source: Survey on the structure of farms, 2004-2005

Moreover, by focusing on profitability and sustainability in the financing of farms, the new credit policy has only strengthened the process of differentiation between large farms whose activity is profitable and whose access to credit is easy and can therefore accumulate and invest more, on the one hand, and small and medium-sized farmers whose access to credit and, therefore, opportunities for investment and accumulation are limited, on the other.

During the period 2000-2004, the proportion of farmers who have invested reached 61% of farmers of farmers who have over than 100 ha, while that of small farmers, remained relatively low; only 23% of farmers with areas smaller than 10 ha have invested during the same period.

This is due to unequal farmers' access to finance, particularly institutional credit. Indeed, large farms benefit more from credit. In 2000-2004, the proportion of farmers who obtained credit amounts to 19% among 50 to 100 ha farms and 36% for those over 100 hectares while the same proportion does not exceed 4% in small farms; those under 5ha.

The large farms have no difficulty to borrow. They offer the required guarantees of property and returns. In contrast, small farmers have an economic return which does not always reflect the standards of the banking system. They find themselves increasingly excluded from any system of regular and stable funding for their activities.

## 2.2.2 Access to land

Since the mid-1980s, the option has been taken to liberalize the land. Land policy initiated focuses on boosting land market, supposed to ensure an optimal allocation of land resources. The reforms focused in particular on the privatization of collective land and the restructuring of public land (owned by the state).

The choice made for the liberalization of land has exacerbated the existing contradictions: the fragmentation and the concentration of ownership are in fact the main features of land ownership patterns and apparently growing. In addition, the study of statistics published by the investigations on the structure of farms revealed the following facts:

Table1: Evolution of farm structures

| Size               | 1961-1962    |             |               |             | 1994-1995    |             |               |             | 2004-2005    |             |               |             |
|--------------------|--------------|-------------|---------------|-------------|--------------|-------------|---------------|-------------|--------------|-------------|---------------|-------------|
|                    | Number       |             | Area          |             | Number       |             | Area          |             | Number       |             | Area          |             |
|                    | 1000         | %           | 1000ha        | %           | 1000         | %           | 1000ha        | %           | 1000         | %           | 1000ha        | %           |
| Less than 5ha      | 133,0        | 41,0        | 318,0         | 6,0         | 251,0        | 53,0        | 471,0         | 9,0         | 281,0        | 54,0        | 556,0         | 11,0        |
| 5 to 10ha          | 73,0         | 22,0        | 531,0         | 10,0        | 92,0         | 20,0        | 643,0         | 12,0        | 109,0        | 21,0        | 757,0         | 14,0        |
| 10 to 20ha         | 64,0         | 19,6        | 887,0         | 17,0        | 71,0         | 15,0        | 986,0         | 18,0        | 71,4         | 13,8        | 964,0         | 18,3        |
| <b>0 to 20ha</b>   | <b>270,0</b> | <b>82,6</b> | <b>1736,0</b> | <b>33,0</b> | <b>414,0</b> | <b>88,0</b> | <b>2100,0</b> | <b>39,0</b> | <b>461,4</b> | <b>88,8</b> | <b>2277,0</b> | <b>43,3</b> |
| 20 to 50ha         | 42,0         | 12,9        | 1388,0        | 27,0        | 43,0         | 9,0         | 1249,0        | 23,4        | 40,7         | 7,9         | 1216,0        | 22,6        |
| 50 to 100ha        | 9,0          | 2,7         | 583,0         | 11,0        | 10,0         | 2,0         | 645,0         | 12,0        | 10,0         | 2,0         | 651,0         | 12,0        |
| <b>20 to 100ha</b> | <b>51,0</b>  | <b>15,6</b> | <b>1971,0</b> | <b>38,0</b> | <b>53,0</b>  | <b>11,0</b> | <b>1894,0</b> | <b>35,4</b> | <b>50,7</b>  | <b>9,9</b>  | <b>1867,0</b> | <b>34,6</b> |
| 100ha and more     | 5,0          | 1,5         | 1499,0        | 29,0        | 4,0          | 1,0         | 1301,0        | 25,0        | 4,0          | 1,0         | 1127,0        | 22,0        |
| <b>Total</b>       | <b>326</b>   | <b>100</b>  | <b>5206</b>   | <b>100</b>  | <b>471</b>   | <b>100</b>  | <b>5295</b>   | <b>100</b>  | <b>516</b>   | <b>100</b>  | <b>5271</b>   | <b>100</b>  |

Source: Survey on the structure of farms. 1961-62, 1994-95 and 2004-2005

The number of farms has remarkably increase from 326,000 farms in the early 60's to 471,000 in 1994-95 and 516,000 in 2004-05, representing a growth rate of 58%. During the same period the agricultural area increased by only 1.2% only. Therefore, the average area per farm has increased from 16 ha in 1961-62 to 11.2 ha in 1994-95 and 10.2 ha in 2004-05, then a decrease of 36%. This disproportionate development of agricultural land and the number of farms indicates the existence of a process of fragmentation of holdings. This process is most pronounced among small farms. Holdings below 5ha have experienced the largest increase. Their numbers rose from 133,000 units in 1961-62 to 251,000 units in 1994-95 and 281,000 units in 2004-05, an increase of 111%.

Meanwhile, there is a trend towards concentration of land ownership. Tunisian agriculture is characterized by a very high inequality in land distribution. In 1961-62 less than 1.5% of farmers use 29% of the area while 82% don't cultivate more than 33% of total areas. In 2004-05, 1% of farmers manage 22% of the land while 88% have to share 39% of the area.

These trends are partly the consequence of a liberal land policy. Indeed, land is increasingly the object of transactions involving a restructuring of land in the direction of the capitalist logic to increase the concentration of land in the hands of a few large landowners.

Regional surveys show that the number of transactions and the average area presented for sale have experienced in recent years, an upward movement with a dramatic increase in the price of land. Similarly, it is mainly small farmers, lacking financial means to grow and to develop their activity, who present part or all of their holdings for sale. On the other hand, the

large farms are, at the same time, the major buyers and, then, they profit to expand more (Ben Saad, 2003)

Thus, if the policies of land privatization and restructuring of land led to the development of new access to land for some groups, there is also a trend towards restricting access of other groups in the resource land. (Elloumi and Jouve, 2005)

This trend deals mostly with small farmers in food production. It manifests in land fragmentation in particular related to population pressure, abandonment of rented land, the restricting access to grazing lands, diminishing opportunities to rent, sale of land ... etc.. Determinants of these dynamics are the increasing sale and rent prices of land, urbanization, the indebtedness of farmers and more generally, greater competition for access to land.

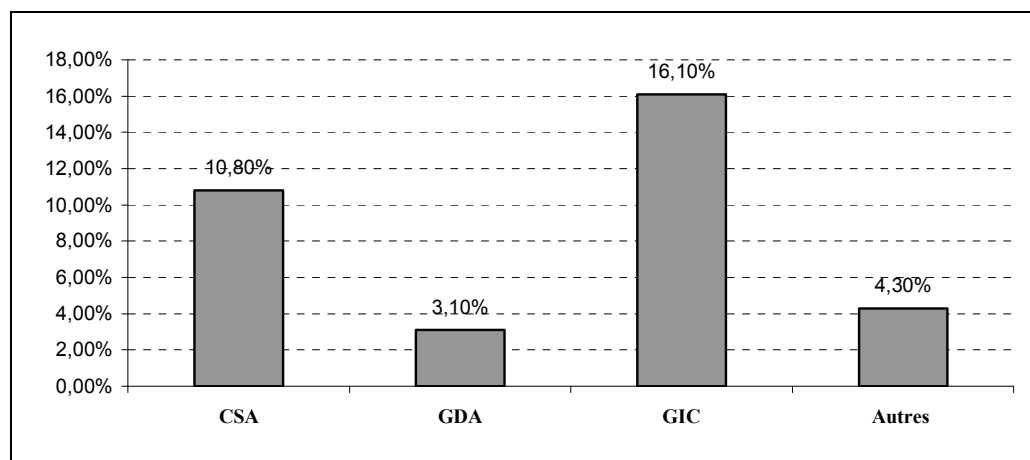
### 2.2.3. Access to agricultural services

The dismantling of state mechanisms to support rural producers is a fundamental component of ASAP. The disengagement, which resulted in a decline of public agricultural investment, has also expanded the services of guidance and support to producers.

To address this disengagement, the state has sought to create and promote organizations and takeover structures, for multiple services which were previously provided by the state. Mainly, Chambers of Agriculture (CA), Cooperative Agricultural Services (CFS), Collective Interest Groups (ICG) and Agricultural Development Group (GDA). The promotion of these organizations should provide support agricultural extension, the collection of certain products and distribution of inputs.

However, despite these efforts, it appears that the continuity of services previously offered by the state is hardly assured by professional organizations and private operators. The results of the Survey 2004-2005 showed that the proportion of farmers who benefited from the agricultural services (coaching, marketing, distribution of inputs ...), during the period 1999 - 2004, is relatively low. This proportion couldn't exceed the cap of 35%.

**Figure 3: Proportion of farms benefiting from agricultural services**



Source: Survey on the structure of farms 2004-2005

In terms of extension support and training, an agency of Extension and Agricultural Training (AVFA) was established in 1990. A policy of "targeting" should lead to the specialization of the private extension of the "advisors" to large farmers and agricultural companies, the specialization of professional outreach to small and medium farmers through development groups and agricultural cooperatives services and specialized state outreach to "social or family" farms.

At this level, concerning the use of new techniques and achievements of the research, the survey results indicate that the proportion of farmers who benefit from extension services and training could not exceed 34% during the period 1999 -2004. The data also show that access to new techniques and the use of research is almost exclusively reserved for larger operators.

Indeed, if the capital base of large farmers and agricultural companies enables them to engage private experts, it is not the case for small and medium-sized farms. It seems that neither the so-called "producer organization" nor public services are able to properly play this role. The action of public services is hampered by the lack of human and financial resources, concomitant with the dwindling resources of the State.

### 2.3 A marked deterioration in income

In the absence of direct data on farm incomes, the impact of new policy on the agricultural income is tested through a systematic analysis of the evolution of gross margins over the period 1985-2004. This analysis is based on a typology based on three successive decompositions: Bioclimatic floor, farm size and production system (Jouili, 2008).

The national territory is divided into six bioclimatic floors: Humid Sub humid (HSH), Superior Semi Arid (SSA), Lower Semi Arid (LSA), Superior Arid (SA), Lower Arid (LA) and Sahara (S). Within each floor, three operating systems are identified: Pluvial (PL), Irrigated (IR) and Mixed (MX). Finally, for each class of operators and to take into account the effect of size (economy of scale), four surface layers were considered: M1 (0 - 5 ha), M2 (5 to 10 ha), M3 (10 to 50 ha) and M4 (greater than 50 ha).

The evolution of real gross margins generated by the farms is synthesized by the following:

*Table 2: Variation of real gross margin according to exploitation type between 1985-89 and 2000-04 (rate of growth in %)*

| MIXED   |               |               | IRRIGATED |         | PLUVIAL       |               |         |         | Étages<br>bioclimatiques |
|---------|---------------|---------------|-----------|---------|---------------|---------------|---------|---------|--------------------------|
| M3      | M2            | M1            | M2        | M1      | M4            | M3            | M2      | M1      |                          |
| *       | <b>11,0 %</b> | <b>06,5 %</b> | -34,0 %   | -24,0 % | *             | <b>16,0 %</b> | -56,0 % | -62,0 % | <b>HSH</b>               |
| *       | -26,7 %       | -25,2 %       | -30,9 %   | -27,6 % | *             | <b>12,6 %</b> | -59,7 % | -41,4 % | <b>SSA</b>               |
| -39,7 % | -36,8 %       | -26,3 %       | *         | -26,4 % | *             | <b>10,3 %</b> | -41,2 % | -75,5 % | <b>LSA</b>               |
| -35,7 % | -30,0 %       | -16,1 %       | *         | -30,7 % | <b>08,4 %</b> | -20,4 %       | -63,6 % | -86,7 % | <b>SA</b>                |
| -50,3 % | -42,8 %       | -41,6 %       | *         | -31,0 % | <b>05,7 %</b> | -18,9 %       | -65,2 % | -89,2 % | <b>LA</b>                |
| *       | *             | *             | -59,3 %   | -34,0 % | *             | *             | *       | *       | <b>S</b>                 |

Source: our estimates

With the exception of a few models for which improvements were observed, the trend in real gross margins was rather to declining. Degradation reaches its climax for small farms



in rain fed especially in arid areas of the country. This evolution reflects a trend of more and more pronounced deterioration in the profitability of crops. This trend of declining farm income has a justification in the increase of production costs per hectare concomitant to the rise in impute prices. The elimination of subsidies resulted in an increase in prices of all inputs, which was only slightly offset by an improvement in producer prices. In addition, limited access to resources reduces the opportunities for improvement in yields that may offset the arising costs and therefore, improve the incomes of farmers.

Thus, particularly for small farms, the degradation reaches a level such as the income that they obtain from their activities, is so weak to wage their labor. Apart from the extra agricultural activities and opportunities offered to help the family, it is impossible for these farms to undertake operations to intensify their activity or even to satisfy their consumption needs.

### **3 THE MECHANISMS OF RESISTANCE**

Faced with this degradation, small farms have developed mechanisms of adaptation or regulation allowing them to survive and, even in certain cases, to ensure more than a simple reproduction. Those are, essentially, multi-activity, recourse to irrigation and livestock association. But, based on data from national and regional surveys, it seems that the limits of these mechanisms of resistance have already reached or almost.

#### **3.1 The multi-activity**

Multiple and diversified sources of income allow family farms to have extra income outside agriculture. Labor, petty trade, construction ... could be sources of external income for these farms, partly to compensate for the lack of farm income.

According to survey data on the structure of agricultural holdings the proportion of pluriactifs among the farmers stood at 43.3% in 1994-1995 and 48.6% in 2004-2005. In the various categories of farms, it is clear that in 2004-05, 93.4% of pluriactifs have holdings under 20 ha and 62% of farms under 5 ha. Therefore, multi-activity concerns mostly small farmers that the majority of recruits pluriactifs.

With low agricultural potential, small farmers are facing low income. Being forced out of the system of funding, these farmers are obliged to sell their labor and use their earned income to meet their consumption needs and / or take investment actions that they hope to make additional revenue. Thus, in particular for the smaller ones, the multi-activity is an urgent need and expresses their extreme poverty and their relative proletarianization.

This recovery by farmers of a fraction of their work outside their farm has been in large part, authorized by the relative prosperity experienced by the Tunisian labor market, especially during the decade 1994-2004. This success results from a remarkable regression of requests additional employment due, in particular, to the regulatory role provided by external migration.

According to a study by the UGTT, migration has absorbed, in average, 36% of additional job demands in 1994-2004. Thus, if migration has contributed, through revenue transfers it generates, in maintaining small family farms, this migration, through pressure on job demand, has undoubtedly increased the opportunities for many farmers, to find jobs outside their farms.

However, this regulatory role of emigration is going to shrink during the coming years. Europe, which is traditionally the first destination for Tunisian immigrants, knows in recent years an economic recession hence, increased unemployment. Furthermore, European countries continue to implement more restrictive policies vis-à-vis emigration in order to avoid worsening unemployment. Thus, for Tunisia, it is expected to slow the rate of external migration as a consequence of the acute pressure on the labor market.

From the supply side, multi-active farmers are employed primarily in agriculture and construction. In between there is commerce, and a small part is in the industry and handicrafts. The future prospects of multi-activity of farmers depend largely on the ability of these sectors to provide jobs.

But in recent years, these sectors are experiencing deterioration in employment. During the decade 1994-2004, the number of jobs in agricultural sector recorded a decline estimated at 3770 annual average. This decline is particularly evident in major crops and fields, because of excessive fragmentation of holdings, greater spread of mechanization, booming prices for most inputs and stagnant output prices.

Meanwhile, the pace of job creation in the building starts to score certain breathlessness. Among the factors explaining this slowing was the mechanization of some tasks, the decrease in investments of the State in infrastructure and utilities, the decline in household investment in housing because of the excessive increase in prices and deterioration of the purchasing power of the majority of social categories

In sum, given the changes taking place which witnesses the job market, prospects for the future does not seem promising. The trend of more slowing external migration, the weakening of the regulatory role of the state, concomitant with the reduction of these resources, and the apparent inability of productive activities to create jobs because of competition and technological changes imposed by the globalization process, are elements that are bound to further aggravate the situation on the Tunisian labor market.

Opportunities for farmers to develop a fraction of their work outside their farms tend to be reduced significantly. Pushing to the extreme, this trend can not simply mandate that these farmers, especially small ones, to content with low income and so, remain in poverty and insecurity, or to abandon their land to join a reserve army already considerable.

### **3.2 Irrigation**

The extension of irrigation in Tunisia is in large part linked to the development of small peasant irrigation, particularly in central and southern regions. This state of affairs reflects the dynamism of small farms for which the introduction and extension of irrigation is a strategy for adaptation to climatic and, in general, resistance to all forms of economic and social marginalization.

However, if the irrigation so far to increase and diversify agricultural production and initiate a process of consolidation and promotion of family farms in a natural environment binding, a multitude of constraints makes the extension of irrigation increasingly problematic. The increase in irrigated areas has led to a rapid increase in consumption of water for irrigation, so that the prospects of development of the sector remain fundamentally linked to water availability. As such, it should be noted that, with a rate of mobilization that exceeds 95%, Tunisia approaching the physical limits of water it can mobilize. The limit is already

reached for ground water that is subject to over-exploitation in recent years. This constraint is reflected more by an increase in the price and the cost of water for irrigation which may endanger the development observed so far.

Note also that irrigated agriculture, which remains by far the largest consumer with about 83% of water resources in 2004, is having more and more competition from other sectors. The share of agriculture is projected to decrease to about 80% in 2010, 76.6% in 2020 and 73.5% in 2030. Water consumption average of irrigated agriculture should therefore increase from approximately 5800 m<sup>3</sup> / ha in 2004 to 5275 m<sup>3</sup> / ha in 2011, a reduction of about 10%.

Given this constraint, the government has opted, from the mid-80s, for a policy of "true price" to ensure a more rational and economic use of water. The result is a steady increase in the selling price of water for irrigation. Over the period 1991-2003, the average annual growth rate of the water price was about 8% to 12% depending on the region. It must be stressed that, in general, the price of irrigation water have increased much more than other factors of production and producer prices of most agricultural products. The tariffs payable by the farmers have reached a prohibitive level; especially for small farms with low incomes in central and Southern regions. Many of those farmers are forced to abandon the irrigation.

Furthermore, it appears that the extension of irrigation by increasing surface wells, reached its maximum due to overexploitation of groundwater. The farms are locked in a vicious cycle; making increasingly difficult their reproduction conditions. To continue to irrigate their land, farmers are forced to widen and deepen their wells. But at the same time, they increase their production costs and accelerate the degradation of their land as a result of increasing salt in irrigation water. Especially the long term over-exploitation of groundwater will lead to lowering it to its total depletion.

In total, if irrigation has so far played its full role as a mechanism of adaptation to climatic hazards, its extension and even continuity, is, for many farmers, increasingly problematic. The scarcity of water resources, results in an increase in the cost of mobilization of water. Coupled with the rising prices of various inputs, the heavier loads increase production cost in irrigated areas. At the same time, yields have stagnated and output prices are deteriorating. The consequence is a tendency to the deterioration of income which, combined with poor access to finance, can undermine the sustainability of a peasantry whose reproduction is largely linked to the pursuit of irrigation.

### **3.3 Livestock**

In Tunisia, livestock is characterized by a strong heterogeneity of production structures and practices from extensive, transhumant and nomadic, the intensive system integrated or semi integrated. But the fundamental characteristic of this activity is its concentration on farms with low land and the potential importance of small farms.

For these small farmers, livestock plays a regulatory mechanism, and cattle are a mobilized saving. In years of drought, herd size is reduced. This decapitalization is imposed by the need to support the farmer and his family but also for the purchase of food needed to safeguard the rest of the herd. When economic and climate conditions become favorable, the herd is rebuilt again. Thus, through this process of capitalization / decapitalization, keeping a small flock helps to ensure the continuity of the exploitation.

Today, the livestock sector is in crisis and the climate constraint that farmers / ranchers, faced, is twice forced, due to their increased reliance on market. The margins of resistance and adaptation of farmers, particularly smaller ones, are significantly reduced.

Traditional cattle's ranching is increasingly compromised by the restriction of space and of course the reduction of fallow. This process is linked to the movement of privatization of communal land which was strengthened under the PAS, to extend to lands considered pastoral. Between 1960 and 2005, the lands have lost nearly 50% of their area and for the benefit of cereal and tree crops. During the same period, the fallow areas have experienced a reduction of almost 60%

Faced with the reduction and degradation pathways, retention, and growth remain subject to the extension of the areas and the intensification of fodder crops. However, after a period of sustained evolution until the mid-1980s, the expansion of forage crops seems to reach its limits and the area they have since stagnated almost do not exceed the cap of 10% of total areas under cultivation. Moreover, the forage area is held by a few large farmers who cultivate to speculate. Fodders, whose prices are determined by the market, are subject to speculation increasingly excessive, especially in dry years.

The government has yielded to easy solutions by opting for an intensive artificial breeding (said "outside soil") and a large-scale importation of concentrates feeds. However, a subsidy policy of the essential components of these foods could keep their prices at artificially low levels and make them accessible to small and medium farmers. However, this policy was soon cause serious problems in both external payments and public finances. The option was therefore taken in the context of the SAP, for a total elimination of subsidies for animal feed.

With the elimination of subsidies, feed prices have risen steadily challenging artificial profitability on which based was this activity. It is noted that the share of feed in the total cost ranges from 55 to 70% and the concentrate alone accounts for 36 to 46% and that between 1986 and 2007, feed prices have unregistered recorded increases, ranging from 260 to 380%.

Thus, the vulnerability of pastoralists to climatic hazards is compounded by their reliance on the market that is causing a new form of regulation depending on the availability of funds to farmers. The precarious financial situation is crucial in times of drought, as these farmers can not afford fodder whose prices are prohibitive. Exposed to all the speculative maneuvers, these farmers are forced to the sharp reduction in their herds whose recovery, when the economy is relatively favorable, is increasingly difficult. Because smallholder's farmers are doubly penalized: for sale (decapitalization), by selling their animals at low prices and purchasing (capitalization) by purchasing animals at high prices. Thus, situations of constraint, due to drought and the strong dependence of the market, lead to the impoverishment of small farmers-breeders whose margins of resistance are becoming smaller

#### **4 SMALL FARMERS: DISAPPEARANCE OR MAINTENANCE?**

The analysis so far leaves no doubt about the devastation caused by the adoption, since the implementation of the SAP, a neoliberal agricultural policy: A structural alteration of conditions of production and reproduction of family farms and is already at work. Moreover, the mechanisms that have previously allowed the maintenance, and sometimes the development of peasant and family farm seem to reach their limits. The possibilities of multi-activity are increasingly reduced with the contracting of the capacity of the economy as a whole to create additional jobs. The extension of the irrigation is handicapped by the scarcity

of the water resources and the increase in production costs. Lastly, the regulatory function of livestock is hardly assured because of its heavy dependence on market exposing small farmers to speculative maneuvers.

All the indications suggest that the changes observed will lead the majority of these farmers to abandon their business to sell their land and to undertake the path of displacement and proletarianization. Three indicators seem to confirm this trend:

First, the massive rural exodus experienced by the country in recent years. Census data from 2004 show that after a slowdown since the mid-1970s, emigration between governorates has been intensified on the period 1999-2004 (NIS, 2005). Thus, the number of emigrants between governorates reached 444,600 in 2004, representing almost a doubling compared to 1975. In relative terms, after assets fell by 0.98% in 1975 to 0.66% in 1994, the proportion of emigrants in the total population recorded a substantial increase, reaching 0.9% in 2004. During the 1999-2004, seven governorates of the country have suffered an absolute decline in population, a phenomenon never observed before in independent Tunisia. These governorates, which remained predominantly agricultural, such Béja, Jendouba, Kef, Siliana, Kairouan, Tataouine and Gafsa. Obviously, this exodus is due to the growing impoverishment of a large portion of the peasants.

The second indicator is the accumulation of unpaid bank loans, despite the many amnesties which benefited farmers. In 2006, the unpaid amount of the meadows of the National Agricultural Banc is nearly 359 MD. For the same year, among the 110 000 farmers who have outstanding with the bank, 98,900, (88% ) have unpaid loans. Many more farmers honoring their debt, not because they do not want to repay but, because they can not.

The third indicator is reflected in the abandonment or liquidation of assets used. Examples of tiny fields not working, much of the irrigated perimeters not used, or cattle breeding dedicated to mass slaughter.

However, other factors must be taken into account. In particular, this process is subject to a growth more or less accelerated in industrial jobs and, in general non-farm employment. Indeed, the small farmer actually and permanently abandons his land in the hope of finding more stable and profitable employment elsewhere. In the absence of such perspective, he tends to remain in place, left to breed in poverty and insecurity.

Should we still remember that in western economies, the structural changes experienced in agriculture are the expression of an ever-enlarged reproduction of capital in agriculture as part of its movement. These transformations have been conditioned by two factors:

The first is the development of an industrial sector with significant potential for research and development, partly turned to design innovations that affect all agricultural production activities. Advances in science and in the fields of engineering, the chemical industry and genetic engineering have facilitated the dissemination within the agricultural innovations designed to stimulate a development of productive forces to repel beyond the limits of productivity growth in agriculture as a whole.

This productivity requires, among other things, a progressive remodeling of the scales of production so that the minimum size of farms is constantly revised upwards. Reinforced by

the restructuring policies of land, a selection process then took place, and allowed the survival of farmers able to integrate the various components of technical progress.

The second is the fact that expansion which is particularly supported by industrial growth was likely to exacerbate the capital requirement to have a workforce constantly abundant and therefore require a transfer of labor to the urban-industrial activities. As a result, industrial expansion and the increased demand in workforce made an important source of job for farmers who have to leave their land.

In the current context of Tunisia, as in other LDCs, migration and urbanization are far from being accompanied by industrialization and the creation of additional jobs likely to absorb the flow of labor additional work. Indeed, as mentioned, the apparent prosperity of the job market in Tunisia, is largely the result of an artificial regression of the increasing job demand, whose mechanisms are of also called out. Job creation stagnated, in spite of a predominant role of the state; this reflects the low capacity of the economy to create new jobs.

This is the consequence of the globalization process itself and its destructive effects on the Tunisian economy. The process of opening the economy and competition which becomes more and more pronounced confined local capital in speculative activities, the least exposed to foreign competition, thereby reducing the opportunities for investment and creation of jobs. Even more, especially in industrial activities, the requirements of international competitiveness inherent in the process of globalization, technological changes involve limiting the use of labor.

As a result, rather than a complete proletarianization of peasants and real urbanization, migration should be interpreted as a spread of rural poverty in more and more uncertain and difficult circumstances. Of course, speculative activities, notably petty trade, still continue to create jobs and can exert a certain attraction. But these activities can not be guaranteed of a better and stable urban life, and they constitute a source of temporary and precarious work. However, it is important to note that the migration does not occur in one direction. At the same time as the rural abandoned their farms and migrate to large urban areas, a reverse movement takes place, where urban workers who lost their jobs and / or face deterioration of living conditions in urban areas, return to land and seek to become farmers. The increasing migration, which is two-way matches, that C. Kay, as opposed to "secular urbanization, defined as a process of" ruralization urban areas "and" urbanization of rural areas ", which means that in both urban and rural areas, urban rural and workers compete for two types of agricultural and non agricultural jobs (Kay, 2000)

Thus, if neo-liberal globalization, with its destructive impact on the farmers seems to favor the objective conditions of their disposal and their proletarianization, this process is in some way, "blocked" by the same destructive effect of globalization on other activities and the economy as a whole. As a result, for many farmers, especially small ones, even if they still maintain their land, this can not be attributed to their own capacity for resistance and adaptation or to an improvement in their conditions of production. The absence of any alternative of employment and stable income, in other activities, largely justifies the commitment of farmers to their farms. They are condemned to remain in poverty and insecurity.

## 5 CONCLUSION

Structured around the goals of profitability and competitiveness, which largely illusory, the agricultural policy, followed since the mid eighties, have only increased socio-economic disparities in rural areas. The peasants seem not only to be forgotten but also deprived of any future. Increasing poverty among rural and agricultural populations, and the importance, in recent years, of rural migration illustrate the crisis facing the peasantry.

Yet, you can not deny the significant resilience of family farms, or that some of them, even in the present circumstances, can still maintain and even grow and become competitive. But for the majority of small farmers, trade liberalization can exacerbate their marginalization. However, taking into account the diversity of the peasantry and especially the current context that characterizes much of the South, namely Tunisia, this exclusion does not necessarily imply disappearance and proletarianization of peasants.

Small farmers are condemned to leave their land, without insured jobs in the cities. Those who seek to maintain their plots are in the extreme insecurity. Thus, without necessarily causing their real and effective disappearance globalization ruins small farms.

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