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LEMON AGRO INDUSTRIAL COMPLEX IN TUCUMAN (ARGENTINE). AN EXAMPLE OF NON-TRADITIONAL PRODUCTIONS AND SMALL FARMERS EXPULSION

Juan José Natera Rivas Ana Ester Batista Zamora

Universidad de Málaga

Tucumán is one of the main world areas of production and industrialization of lemon. In 2002, there was located 96% of the whole of Argentine lemon surface, rated Argentina in the campaign 2003/04 in third world place for production of fruit (with more than 900.000 tns., 20% of the world account) and in the first one in industrialization (with 615.000 tns., 35% of the world account), according to estimations of the Department of Agriculture of the United States. The importance of Tucuman's lemon is derived not only from the good natural conditions that several areas of the provincial space present for its development, but also from the degree of competitiveness that the lemon agro industrial complex has reached. In fact, in the province are produced big quantities of fruit and of industrial derivatives, which are placed in a big extent on the demanding international market.

This importance is the result of a process of appearance and consolidation of a powerful agro industrial complex, which origin must be placed around 1970 when, spurred by the possibility of placing fruit and industrial derivatives on the external market, the agro industrial establishments began to appear. The increase of the hectares dedicated to lemon, the increase of the installed capacity of fruit processing, and the obtaining, and maintenance, of high standards of quality (that allow the sale of the production on the demanding external market), label the development of the complex. But it is labelled too, on the one hand, by the arrival of external capital, and by the concentration of the land and the industrial capacity in a few companies perfectly vertically integrated (S.A. San Miguel and CITRUSVIL, for example); on the other hand, by the expulsion from the activity of small and medium producers (who, up to the decade of the eighties played a main role in it), a fact that is reflected by the drastic decrease of lemon orchards owned by this stratus or producers. A process, certainly, that is not exclusive of Tucuman, but extensive to the Argentinean production of fruits.

The gradual expansion of the number of both hectares (1.730 in 1960, 33.928 in 2002) and tons of lemon produced (in 2006 slightly more than 1.5000.000 of tons), has been accompanied by a parallel decrease of the number of EAPs with lemon, being registered

only 362. This process has involved the disappearance of the smallest ones; in 1988 there were 470 EAPs with up to 25 hectares (952 in 1969), in 1995 only 322 were remaining. This decrease has supposed nearly the expulsion of the activity of the smallest producers (with orchards up to 10 hectares), a fact that can be seen as the colophon of a process that had begun at the end of the eighties. It's worth to note that this expulsion begins to concern also to the producers whose EAPs have between 25 and 50 hectares of lemon, a group that, in despite of the positive dynamic it experienced until the middle of the nineties (reflected in the proportion of land they meant), in the last intercensus they have seen their presence limited.

At the far end of the scale it can be appreciated that only the EAPs with 500 or more hectares with lemon show a positive dynamic, since the end of the eighties, being a milestone the appearance, in 2002, of EAPs with more of 2.500 hectares of extension. These facts are the expression of the increase of the land and power of decision concentration in the complex, as is the circumstance that only four citricolas account for nearly half of the volume of the activity related with the lemon in Tucuman.

The main reason that underlies in the abandon of the activity on the part of the smallest producers is the lack of profitability, a lack which is related principally to two elements. A strong raise of the costs of production, combined with a few low prices obtained in the industry, the most common destination of the small producers, and the asymmetrical adoption of technology.

The price paid to the producers for their fresh fruit sold in the internal market was, in average, during the second half decade of the eighties of 208U\$S, during the nineties 367U\$S, and 214U\$S in the first half of the current decade. These values contrast with those obtained when the destination was the external market, 264U\$S, 435U\$S and 407U\$S, in the same periods. For their part, the average price obtained at the factories corresponding to the second half of the eighties was 60 dollars, and of 66U\$S during the nineties, whereas the values corresponding to the first seven years of this century are the lowest of the series, with an average of only 35U\$S paid for ton of lemon.

The figures mentioned above must be compared with those related with the cost of production. In 2005, 40 U\$S were needed to get a ton of lemon (U\$S 6.000 for an hectare), adding another 44 U\$S for harvesting; as can be seen, when the destination of the lemon is the agro industry (the main destination of the fruit produced at the smaller orchards), the profit is null.

But also the asymmetric adoption of technology is involved to a great degree in this lack of profitability, an adoption which needs an amount of capital that often is not available for the small and, increasingly, medium producers, a fact worsened by their very limited access to credit. In addition, the adoption of the technology is a key factor that determines to a great extent the quality of the fruit obtained, influencing this way it's destination. Certainly the obtaining of quality fruit is not a guarantee of it's sale on the profitable external market, but if the lemon does not fulfil the standards demanded by the above mentioned market it does not have any possibility of being exported, with the price difference we stated before. Several limitations for the adoption of technology have been described; lack of capital, difficulties to fulfil the requirements of the markets, and difficulties to commercialise bigger productions

are the mainstay, and the possibilities to prevail among them are very limited for the small and medium producers, hence their lower presence in the complex.

At present, lemon activity in Tucuman is crossing a moment of uncertainty, due to a drop of prices of the industrial products, an apparent disability to place more fresh fruit on the external market, and the appearance of important stocks of derivatives, which can be solved as a test of continuity that not all the present actors today in the complex will overcome. This probably will increase both the expulsion of producers from the activity, and the concentration or the business on a very reduced number of "megacitricolas" that, anyway, are in turn dependent on an external market in which they have to place necessarily their productions.