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SUGARCANE IN EUROPE +20: COMPARING WORKPLACE CONDITIONS - SUGARCANE HARVEST IN 1992/93 AND 2012/13

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ABSTRACT

This work concerns an on-course research regarding sugarcane harvesting in the regions of the Spanish Mediterranean and the Island of Madeira, Portugal. The Brazilian sugarcane harvest working conditions are references.

Keywords: agriculture, sugarcane harvest, working conditions.

INTRODUCTION

Sugarcane culture played an important role during the colonization of both North and South America. It was always present and represented a relevant social and economic impact up to our days. Before arriving to the American continent, the sugarcane, brought by the Arabs from the Asian Far East to the Italian and Iberian Peninsula, went through a time period in the Portuguese and Spanish Atlantic islands. In the European continent, sugarcane remained mainly in the Granadina Coast of the Spanish Mediterranean up to beginning of the 21st century, as well as in the Madeira Island

Up to the 15th century, sugarcane harvesting was related to the Arabs. From then it became associated to the people of the Madeira Island, for they were responsible for the sugarcane harvest implantation in the other Atlantic islands (Canary, Azores, São Tomé and Príncipe), in both North and South America and the African continent. Thus, it can be stated that the people from the Madeira Island were the main responsible for the sugarcane expansion in the Occident, playing important roles such as, entrepreneurs, technical advisors and even expert manpower (Vieira, 1992). Besides the technological spreading, the Madeira Island had a relevant part in implementing the new social organization in the harvest and the use of slavery labour. Still today, traces of these two technological features can be identified in the western sugarcane harvests.

In 2012, sugarcane in Brazil occupied approximately 105.8 thousand km² of agriculture area, (it exceeds in 14% the total surface of Portugal), producing 34.0 million tons of sugar and 21.7 million m³ of ethanol (MAPA, 2013). Twenty years ago, Brazilian sugarcane harvest was more modest, since it only occupied 40% of today's area.

A different and backwards situation was experienced by the European sugarcane harvest. In the European case, retraction, already happening, accentuated. In 1992, in the Madeira Island sugarcane plantation represented barely 1.0 km, divided amongst 200 small plots "glebas" that supplied the three mills "engenhos" responsible for the annual production of 150 thousand liters of honey and 230 thousand litres of rum "aguardente". Whereas the Spanish Mediterranean had two main plantations "azucareras", accounting for the processing of 140 000 tons of cane, supplied by a large number of small producers that added an area of 15.5

km² to a production of 15 thousand tons of sugar and significant quantities of special alcohols for the industry of liquors and pharmacy (Adissi, 1994).

RESULTS AND CONCLUSIONS

The sugarcane harvest agriculture technical processes of the two scenarios studied are restrained to the small dimensions and to the topographic relief. In the Madeira Island, sugarcane planting occupy the inherited “*poios*” by the first farmers, as in Spain, the planting areas are flat and near the coast. In both cases mechanization is hard. Even so, the Spanish areas could experience with much success mechanization in boarding the canes for transportation and animal traction was frequent.

Table 1 - Synthesizes the main characteristics of the technical processes observed.

Process stage	Madeira Island	Spain	Brazil
Soil preparation	Poios maintenance Manual labour	Animal traction with implements	Mechanized work
Planting	Manual labour, pesticides	Manual labour, pesticides	Sequence work (manual and mechanized)
Culture works	Pesticides Rain ditches maintenance	Pesticides Rain ditches maintenance	pesticides
Harvest	Group and employees work Harsh conditions	Autonyms groups well paid	Manual and mechanized work Harsh conditions and fraud

Source: (Adissi, 1994)

The Madeira Island sugarcane production keeps a complementary relation to livestock production, taking a part in animal feeding and receiving organic manure. However, the heritage of livestock participation in the cane transport, gave place to one of the main problems registered in the working process: the harsh of the trucks loading replacing the carriages ox-driven. Such work undertaken by employees (cane carriers) contrasts with the happy setting of “*panhas de cana*”, done by the farmers’ families, in a group manner “*ajudamento*”.

In Spain, the sugarcane harvest industry closed in 2006. Previously it was managed by the sugarcane companies “*Azucareras*” that gathered the mountain cutting workers “*monderos*” that together with the families were, in a dignified manner, housed in the nearby cities outskirts. These groups of employees worked in an independent fashion. In a recent interview to a plant manager, the end of the activity in Spain was explained due to the labour cost and social demands of the workers, that in the latter harvest were mainly compose by immigrants in a risky social situation.

REFERENCES

- [1]-Ilha da Madeira. Relatório SI/94/1. SACS/FCT/Universidade Nova Lisboa, Lisboa, 1994.
- [2]- MAPA. In www.agricultura.gov.br, acesso em 2013.
- [3]- Vieira, A. A Madeira e o mercado de açúcar, séc. XV e XVI. CEHA, Funchal, 1992.