



THE STORAGE OF BRAZILIAN SOYBEAN AS A CONDITIONER OF SPATIAL SUCCESS FOR A GRAIN COMPETITIVENESS

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Abstract

The increase and expansion of soybean production in Brazil is not accompanied by the expansion of the storage system. Such imbalance implies loss of grain due to deterioration due to lack of storage space, overloading of silos and warehouses and devaluation of soybean when it is sold at lower prices without the producers' strategy regarding storage. The proposal of this research refers to the spatial analysis of the disposal of warehouses and bulk carriers in the state of Mato Grosso, thus indicating the best scenarios for the construction of new silos and warehouses. With this evaluation, it will be possible to analyze how storage interferes with the logistic competitiveness of Brazilian soybean.

Key words:

Static storage capacity, storage system Mato Grosso, Brazilian soybean company.

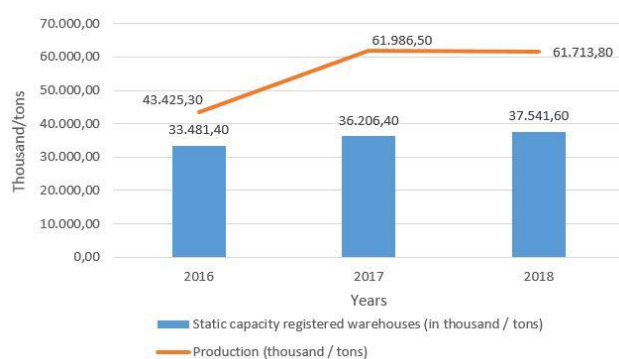
Introduction

Between 2000 and 2015, revenue from Brazilian soybean exports rose 860%, an average growth of 18% per year, with the highest value exported in 2014 (BRAGA, 2018)¹. In general, the storage deficit occurs at both the public and private levels, due to the overloading of some silos and warehouses and the lack of adequate storage space. The state of Mato Grosso is the largest soybean producer in Brazil reaching a production of 30.5 million tons in the 2016/2017 harvest (CONAB, 2018)². The 5 largest soybean producing cities are located in the center of Mato Grosso and together contribute 7% of the country's national soybean production (IBGE, 2016)³.

Results and Discussion

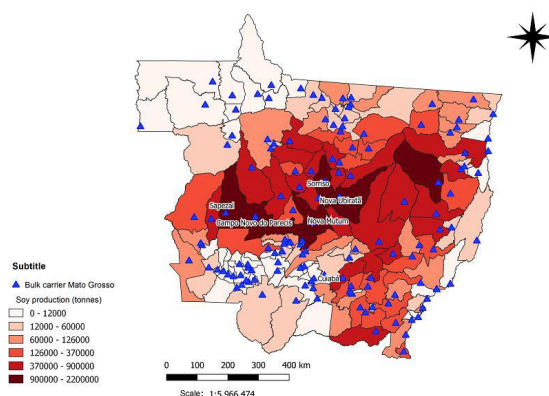
The investment in static capacity increase is increasing over the years and Mato Grosso is the state with the largest static storage capacity in the country. The production of grains in the 2016/2017 harvest of the State of Mato Grosso registered an increase of 42% in relation to the previous harvest and reached 61.9 thousand/tons. However, in 2017 the increase in the static capacity of the warehouses compared to the previous year was 8% and reached only 36.2 thousand /tons. This implies a shortfall of 42% in storage.

Image 1. Static capacity of Brazilian states with warehouses registered in CONAB in the triennium 2015-2017.



Source: Adapted from CONAB (2018).

Image 2. Agricultural production 2017 and bulk warehouses of Mato Grosso 2016.



Source: Adapted from SIDRA (2017) and IBGE (2016).

From Image 2, it can be seen that the concentration of the warehouses is located in the southwest of Mato Grosso where soybean production is low compared to the center of the state, but the warehouses are located in strategic areas for the outflow of production to highways like BR163 and railways like the Ferrovia Norte Brasil.

Conclusions

It is recommended that the expansion of the static capacity system takes place taking into account the terrestrial and waterway routes for ports and transshipment terminals. As well as regional aspects through municipalities with research and technological conditions for the maintenance of silos due to the high added value of soybean in the international market, thus increasing the competitiveness of Brazil in the export of grain.

Acknowledgement

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¹ BRAGA, F. L.P.; OLIVEIRA, A.C.S.A. Influência da Taxa de Câmbio e Renda Mundial Sobre as Exportações Brasileiras de Soja (2000-2015). Rev. Econ. Sociol.Rural, Brasília, v. 56, n. 4, p. 663-680, Oct. 2018

² CONAB. Companhia Nacional de Abastecimento. Rede Armazenadora da Conab. Available in: < <https://www.conab.gov.br/armazenagem/rede-armazenadora-da-conab>>. Access in 04 Mar. 2019.

³ IBGE, Instituto Brasileiro de Geografia e Estatística. Produção Agrícola Municipal. Vol. 43. 2017.