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AMAZON: LOW CARBON FARMING AND REGIONAL AGRICULTURAL ECONOMY

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The primary sector economy, in Amazon, arrives at the 21st century without consolidating as an important segment of the regional economic development. His career has had moments of leadership, has always been supported in the extractive economy. A chronological sequence you can establish it in four phases: the phase of the extractive economy; the initial phase of modernization (with the cultivation of pepper); the stage of extensive livestock farming; and the stage of establishment of low carbon farming in the 21st century.

Amazon, for its biodiversity had in collecting the interior-drugs – annatto, cloves, cinnamon, pepper, walnut, chestnut, pixurim, parsley, sesame, guarana, anil and cocoa – from the 17th century, its first economic products. Were coveted by Europeans for their utilities and did not exist in Europe.

In the colonial period among the various products extractives that Europeans found after his arrival to the new world, the most important source of drinks was the cacao (*Theobroma cacao* L.). In the early 1730, cocoa had become the main export product of the Amazon, a position he would occupy for more than a century. Exports of cocoa by the port of Belém, in 1730 the 1755 were beyond 35 million pounds, representing 75.8% of such exports from the State of Grão-Pará and Maranhão.

The extractive economy had its apex with the production of latex (*Hevea* sp) in the period from 1870 to 1912, also known as the *Belle Époque.* The rubber started to have weight in Brazilian exports from 1898, with 21%, reaching 40% in 1910, when feuded with coffee, this with 41%.

With the decline of the economy gomífera, the regional agricultural economy depended on peasant production until 1950, when the pepper became important export

product in the agenda. The production of this spice was introduced by Japanese colonization in the municipality of Tome Açu, in Pará, with the cultivation of pepper (*Piper nigrum* L.) from the years of 1930.

The pepper represented an important growth in regional agricultural economy, primarily for the State of Pará. It was in the context of this economic boom that their cultivation introduced modern farming practices in regional, such as the chemical fertilization, the use of agrochemicals, rural credit and technical assistance. In the Decade of 1970, the pepper was responsible for 33% of exports from Pará. However, the expansion of this modernization only established production niches without much expression in the regional economy. The production of pepper not provided significant expansion. The wilt, lethal fungal disease continues to cause damage to, your cultivation.

With a range of species – rubber, cocoa, cassava, palm oil, fruit bowls among other – environmentally adapted, with production technologies available, with elastic demand for its products, the region has not been able to establish a thriving agricultural economy. Recently, the agronomic research has provided technologies that enable the region to be producer of grains on a large scale. However, with these comparative advantages not form chains consolidated capable of driving is important regional economic development.

With the advent of the highways, captained by Belém-Brasília, and incentive programs such as the Programa de Redistribuição de Terras e Estímulo à Agroindústria do Norte e Nordeste – PROTERRA, the region began to replace the forest for pasture and practice a cattle land. This had its origin in the municipality of Paragominas, in State of Pará, in the early 1960, extending the deforestation through the new highways that were being built in the region.

Despite all the environmental and technological problems, the cattle by low cost, if expanded and tend to protrude as the first segment of the regional agricultural economy to consolidate. The 36 million head in the region attest this assertive. However, changes need to be implemented so that its viability becomes a thriving economy.

In December 29, 2009, the Brazilian Parliament approves the law 12,187 establishing the Government's commitment to reduce voluntarily in more than 36% of GHG emissions by 2020, and to reduce deforestation by 70%.

To meet the established in the law, the Ministério da Agricultura, da Pecuária e do Abastecimento (MAPA), have chosen the most appropriate available technological innovations involving CO^2 reduction practices and use of inputs polluters. In this way were listed the following methods/processes: “Direct Seeding”, “Crops, Livestock, Forest Integrating”, “Biological Nitrogen Fixation”, “Control of Pests and Diseases Integrated” and “Plant and Animal Waste Treatment”. These innovations, already fully tested, are efficient in recovering and exhausted soils reduce GHG release and therefore raise the productivity of crops. In June 2012, on the occasion of the United Nations Conference on Sustainable Development (Rio + 20), the MAP took the opportunity to launch the "Low Carbon Farming Program".

However, for low-carbon farming has been established and if featured in regional agricultural economy need to consider important aspects inherent in the production. As such are the uncertainties regarding the Forest Code, Law of 12 May 25, 2012, 12,651/reissued with vetoes of the Presidency of the Republic through the Provisional Measure/571 of 12 May 25, 2012, the absence of a judicial system of REDD (reducing emissions from deforestation and degradation), lack of technical assistance, lack of knowledge, by producers of opportunities of production systems involving integration and intensification, delay in implementation of certifications, difficulties of access to credit, low carbon, costs to comply with environmental legalization is prohibitive for small producers.

Regional business and political leaders need to do more in the sense that these obstacles are solved, so that agriculture can contribute to economic development in the Amazon, and this time without the depreciative of environmental degradation.