

**INSTITUTE FOR APPLIED RESEARCH IN SUSTAINABLE ECONOMIC
DEVELOPMENT – IPADES**

A CENTURY OF PARADISE LOST

Emeleocípio Andrade

Technical Director – FUNAGRI

Exactly a hundred years ago, by a careless nonchalance of colonels regional rubber gatherers, and the cunning of a cunning and adventurous subject of her Majesty the Queen of England, the splendid and prosperous Amazon economy based on rubber trade, went into crisis.

With the apogee of the "Victorian era", England was concerned about the rubber supply to meet the needs of the burgeoning British and European industry and pulsing, but, above all, with the possibility of increasing profits with the implementation of a rational planting of *Hevea* to suit the avid North American market. There were also restrictions with the predatory way how latex extraction was practiced in the Amazon rubber plantations. Especially in the process of getting rubber latex (*Castilloa ulei*), where the tree was felled, a single collection of 45 kg of latex, against 1, 3 kg of normal bleeding tree, in rubber tree (*Hevea brasiliensis*) (EMMI, 1985).

In a few years, from 1850, rubber exports from the Amazon region was raising gradually. In 1910 the world rubber consumption reached a peak of 110,000 tones. The Amazon region represented an offer of 60%, the African continent 25%, the remainder was provided by Mexico. The Amazon rubber production reached 65,600 tons.

From 1870, the British Government has concentrated its efforts in obtaining seeds of rubber trees and tries its cultivation in their Asian colonies, as I had done with the cocoa, tea and cinchona. In 1876, the English citizen Henry Alexander Wickham transported, with some ease (and with the consent of Brazilian port authorities), a significant amount of 70 thousand seeds of rubber trees from rubber plantations located in the municipality of Santarém. The Brazilians disdain this effort because they believed that the rubber was unable to grow in another location other than the GOVERNMENT of PARÁ (GOVERNO DO PARÁ, 1909; WOLF, 1936 and DEAN, 1989).

The curator of the Royal Botanical Garden, Kew, on the outskirts of London, professor Joseph Hooker received with uncontainable joy seeds brought by Wickham and planted with special affection in the Kew Garden nurseries. After intensive and detailed scientific studies on the behavior of these rubber plants, seedlings were forwarded to its colonies in Selang, Western Malaysia, and two plantations were established (GRANDIN, 2010).

In 1896, came to London the first shipment of 3,140 tons of Malaysian rubber. Rubber blankets were clear and amber-colored appearance. In 1907 the British had more than 10 million feet planted in Ceylon and Malaysia, occupying an area of 120,000 hectares. This planting, with the technology of the time, was able to offer 70,000 tons of rubber, in six years. The Dutch immediately imitated the successful initiative and established their plantations on Java and Sumatra.

Around 1910, the falling prices worried the rulers and colonels who had enriched with elastic, gum and erected two opulent cities: Belém and Manaus that, during this period, vied in economic power with the major cities in the South of the country: Rio de Janeiro and São Paulo. At one time Manaus came to be distinguished as the city bought more diamonds in the world. In 1909, when the Asian plantations offered 35% of rubber traded in the world, Amazon traders insisted on disbelieving the success of extra-Amazon and were betting on a quick collapse of the plantations.

In 1913 was declared the bankruptcy of the Amazon rubber plantations, which could not compete with the rational of the Asian rubber plantations. In 1932, the rational plantations of Southeast Asia were responsible for 98% of the offer of nearly one million tons of rubber demanded by the industry. In 1941, only the Ford Motors Company demanded 20,000 tons of rubber.

The expansion of the rubber market benefited of vulcanization – process where the rubber, in reaction with sulfur under high temperature allows you a uniform and constant elasticity, in any temperature. With this quality rubber went on to have a commercial value and extraordinary industrial, going, its use, far beyond that of simply erase the mistakes of written in pencil (DEAN, 1989).

The usefulness of this artifact in the wheel guards of vehicles, which with its source and flourishing automobile industry and bicycles, allow for durability and comfort to users, made possible the emergence of the industry for the manufacture of tires, and other artifacts, which became an extremely demanding activity.

The concrete initiative for the rubber plantation in the Amazon did not start any regional businessman, but another Henry. This was, for commercial purposes, and was afraid of relying on imported rubber from now extremely vulnerable to military disaster of great proportions. This mega-businessman of the auto industry in Detroit (USA) was Henry Ford, the Almighty Ford Motors Company owner. In 1927, he, to acquire, by the Government of Pará, unorthodox and benevolent way, almost one and a half million hectares of land in the municipality of Santarém, intended to plant a million hectares of rubber trees. In two locations, today known as Fordlândia and Belterra, visionary and powerful American Tycoon wanted to reclaim the hegemony of rubber offer for Amazon, in a completely different process than the one used in the rubber plantations. The rubber plantations in Pará, would work as a Detroit factory (GRANDIN, 2010).

Once again the contract was frustrating. Although the owner of the Ford Motor Company was a successful businessman, he was a world of industrial machines. Agriculture in an untamed region and completely unknown, need the same care in studies and research that England settled for its rubber plantations in Asia. After 18 years of effort and some millions of dollars squandered, prodigal plantings of Henry Ford were transferred to the Brazilian Government. The Director of the Instituto Agronômico do Norte, the agronomist Felisberto Camargo, who received the estate of the ill-fated Amazon prowess, established in his report to the United Nations: "The rubber plantations in Fordlândia was a great failure due to total ignorance and refusal to test the theories through scientific experiments". Although, later, recognized and praised "the importance of the 'double' graft as a lesson in applied science is a testament to the human ability in the face of a difficult task and the most misunderstood of all scales" (CAMARGO .1946).

From 1939, with the creation of the Instituto Agronômico do Norte (IAN), with the creation of the Escola de Agronomia da Amazônia (EAA) in 1945 and the Instituto Nacional de Pesquisa da Amazônia (INPA), in 1951, a great effort was concentrated to retrieve the prestige of the Amazon in the production of rubber. All in vain. In May 1951 arrived at the port of Santos the first shipment of rubber to meet the need of the Brazilian industry.

In 1961, the Governor of Amazonas, Gilberto Mestrinho, in partnership with IAN and project resources ETA-54, started, in the municipality of Itacoatiara, a planting of 500 hectares of rubber trees with all the technology available at the time. With the deposition of the Governor, em1964, the project was abandoned. In 1968 the SUDAM created a program called PROHEVEA, which was intended to show regional entrepreneurs in small modules to the edge of the main highways, the advantages of rubber production system with the use of the latest technological innovations.

Finally, in 1972 it launched the most ambitious and bold program of natural rubber production in the country. Named Incentive Program for the Production of Natural Rubber-PROBOR, Portuguese acronym – their implementation was assigned to the Supervision of the Development of Hevea-SUDHEVEA, established in 1967, and aimed to make the country self-sufficient in natural rubber, until the mid-80. Based on funding programs, loans, technical assistance, training, development and distribution of botanical material, the programme was submitted to the National Council of Rubber-CNB, normalizing his organ. Several reasons, such as large distances of consuming centers, lack of infrastructure for the implementation of projects and production and, especially, the occurrence of pests and diseases difficult to control, led to the end of the program in its phase III, in 1990. During the 18 years of his life were spent about a billion dollars of public resources and roughly the same amount of private resources, making a total of two billion dollars! In this period 216 thousand hectares were planted with only half is in production (IAPAR, 2000). This seems to have been the coup of mercy of rubber production in the Amazon

In 2011, the world production of natural rubber was 10.9 million tons. Consumption to outstrip supply tends to raise its price. The Brazil consumed, in 2011, a total of 370 thousand tons and produced 142 thousand tons, in 130 thousand hectares planted. Thus, imported 240 thousand tones, valued at \$.00 1,101,300,000. The largest producers are: São Paulo (58.2%); Bahia (14.2%); Mato Grosso (8.7%); Holy Spirit (4.4%); Goiás (4.1%). The balance of this story of 163 years of rubber production in the Amazon region, cradle of natural rubber, it is unfortunate: it contributes with a measly 3.3% of the total produced in the country (ROSSMAN .2012).

REFERENCES

CAMARGO, C. F. **Análise do acervo de Fordlândia e Belterra**. Relatório Técnico (apresentado ao Departamento de Agricultura das Nações Unidas). 1946

DEAN, W. **A luta pela borracha no Brasil**. São Paulo: Nobel, 1989. 296 p.

EMMI, M. F. **Estrutura fundiária e poder local: o caso de Marabá**. Belém: NAEA/UFPa. 1985 (Dissertação de Mestrado).

GOVERNO DO PARÁ. **Album do Estado do Pará: oito annos do governo (1901 a 1909)**. Paris: Imprimerie Chaponet. 1909. 350 p.

GRANDIN, GREG. **Fordlândia: ascensão e queda da cidade esquecida de Henry Ford na selva**. Rio de Janeiro:Rocco. 2010. 297 p.

IAPAR. **Cadeia produtiva da borracha natural: análise diagnóstica e demandas atuais no Paraná** / Jomar da Paes Pereira et ai. Londrina: Instituto Agrônômico do Paraná, 2000. 85p. ilustr. (IAPAR. Documento 23).

ROSSMANN, H. **Mercado da Borracha Natural**. São Paulo: APABOR. 2012.

WOLF, H. & RALF, W. **Ruber**: a story of glory and greed. New York: J. J. Little and Yves Company, 1936. 442 p.