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BRAZILIAN AGRICULTURE: TRAM TO THE BULLET TRAIN

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In the last century Brazilian agriculture, on a holistic, had two distinct phases. In the first half of the century took primarily by the use of natural resources, knowledge and intuition of farmers. In the second half, has a growing generation and incorporation of tropical technology that turned into a world leader in tropical agriculture at the beginning of the 21st century. With regard to funding, had institutionalized in the years 1960 rural credit and subsidized until the early 1980; later new financing mechanisms have emerged with the availability of inputs by private companies. The official technical assistance, also institutionalized from the years 1960, followed similar path to that of inputs, from the years 1980.

The fall of the importance of selected seeds of genetic material produced by public institutions in Brazilian agricultural research has advanced since the early 1980. In the years 1970, except hybrid maize in private-1960-, the seeds were selected from public genetics. Today, on sugar cane plantations for industry, soybeans, corn and cotton, almost all material comes from private genetics.

With the change in the pattern of financing the Brazilian agribusiness costing was getting an insignificant participation of seed of varieties not only of Empresa Brasileira de Pesquisa Agropecuária (Embrapa), but also of all public structures.

Gene's leadership is being assumed by public private research in relevant fields than just soybeans. The same occurred in São Paulo State research, which created the Brazilian tropical farming with IAC new world coffee (1952), which released this product of purple land, allowing its cultivation in sandy soils and in the Cerrado. In 1972 the same survey released the IAC to 12 low latitude (the tropical soybeans). Cotton, until 1989, came from public genetic paulista, Instituto Agronômico (IAC). In the Cerrado, in pós1995, rather than the mechanization of the harvest and the huge scale, there was an exchange of genetic material (IAC) of the southern cotton (SP and PR) by imported

varieties. Remember that the construction of the Brazilian cotton grow in São Paulo State lands and then from Paraná was a result of genetics paulista, who won public recognition worldwide. Today in the Midwest cotton grow advances with the participation of private research.

This change has not occurred by transgenic using varieties of traditional genetics, which shows to be the case of soybeans only one step in a longer process, just don't go back to back to the story. This quickened with the logic of farmers' decision-making in the face of new standard costing financing agriculture. In 1970 the farmer went to the bank to take subsidized rural credit, and with money in the account, chose the genetic material with the assistance of the extensive network of rural extension public genetics.

The subsidized credit was dismantled with the debt crisis in the early 1980. And enterprises of inputs with plants built in the II National Development Plan (II NDP) created private mechanisms to finance the cost of the crops, whose pioneers was the green soybean contract. In 1995 was established the Rural Product Banknote, published with financial settlement in 2000. And in the same quinquennium new laws arose about seeds and intellectual property rights.

In the years following agrochemical firms bought private seed companies and the public sector reform reduced the local capacity of rural extension. As an example, the former São Paulo State network of Houses of the Farm Work today practically entered into. The rural extension in the States, when there are acts so precarious with farmers settled. Maranhão for more than a decade, this activity became extinct. Who now provides technical assistance is the powerful networks of private businesses of seeds, which multiply demonstration tests in the whole space of the main crops. But in this context the leadership is with agribusiness.

Differences in productivity and quality between the seeds available for the major crops are not relevant (around 5% to 7%). Without the technical assistance and rural extension public radiate your results-genetic material, to maintain high standard in response to annual crops, requires exchange almost every year-and without access to new financing pattern was public, genetics, hands tied and private instruments were elaborated, in 2004, with the new financial securities of the agribusiness (DSRC, CRCA, LCA and WA). Harvest plans of major crops, by its rules, cover about one third of the cost of the crop. And seed is costing. This is a new standard for funding on the

basis of the presale. The farmers who grew to sell now sell to plant, in a reversal of the decision making logic to produce.

Private seed companies (mostly of agrochemicals) used these mechanisms to deal with the seed market. And public structures, even the Embrapa, do not have mechanisms for issuing financial securities. Hence the public seeds have had moved of the market. New developments are coming in other crops. A large multinational company bought of tip of sugarcane genetics and recently launched new genetic material into a market that was already totally dominated for decades by national capital private genetics.

The participation of private enterprise, research, technical assistance and financing of national agriculture is welcome. However, the balance between private and public participation in these three sectors of agro and should be sought and maintained by two important aspects. Agribusiness is today a thriving brand of Brazilian agriculture, which should be kept and expanded. Agriculture, their standard of atomized economy is the thread that with more ease and lower cost can make social inclusion that the country both need and the green economy is recommended. The issue is not be tram or bullet train, but be a modern agriculture and efficient in which various actors are important and are peaceful and productive coexistence space.