The Brazilian Cotton Crisis

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ABSTRACT

In 1969 Brazil was considered the third largest cotton exporter in the world. At the end of 1973, the Brazilian Government intervened in the exports. After 1985 Brazil changed from a marginal net importer to one of the largest cotton importers in the world. Cotton production in Brazil was historically based on two scenarios. The most important involved predominantly small farmers, tenants and sharecroppers, who accounted for more than 80% of the total production. The second involved medium to large growers who in general, were landlords. The harvested area in the whole country for perennial and annual cottons was reduced from 3.55 million hectares in 1984/85 to 885 thousand hectares in 1995/96, representing 75.0% reduction. The reduction was 95.0% for perennial cotton alone. Annual cotton in the whole country dropped from 2.24 million to 824 thousand hectares, representing a drop of 63.2% during the same period. The explanation for this severe crisis in cotton production during the last fifteen years is both political and economic. Among the reasons, the introduction of the boll weevil, Anthonomus grandis Boheman, in 1983 was extremely important because at that time, the national and international cotton market was weak. In addition, the liberation of raw cotton imports with zero tariff since 1990 helped to aggravate the crisis. The national cotton crisis has had enormous social and economic consequences. This paper analyses part of the cotton situation in Brazil.

Introduction

Brazilian cotton production results from the cultivation of annual and perennial species. The diversity of the regions and the technological level of the production systems required by the cotton species make cotton production a complex and heterogeneous issue. In Northeast Brazil two types of cotton are cultivated commercially: a perennial type called “mocó” and the annual type called “herbáceo”. In the South, Southeast and Centerwest only the annual type is grown.

Cotton production in Brazil has been developed under two different systems. The first is predominated small growers who have less acreage, less financial and technical assistance and are subject to a high degree of dependency on the landlord. The second comprises medium and large growers who use much higher technology, irrigation systems, selected seed, and fertilizer and are better placed to seek better markets.

From 1981 to 1995 the national harvested area of annual and perennial cottons reduced 63.2% and 96.8%, respectively. The fiber production reduced 9.6%, the consumption increased 43% during the same period and the imports went up to 282 thousand tons of fiber in 1995. In 1969 Brazil was considered one of the largest cotton exporters in the world. The Brazilian Government alleging to protect the domestic production, intervened in cotton exports in 1973 (BM&F, 1996).

The Brazilian cotton crisis indeed started to aggravate in 1993 when international prices went down and the country fiber production reached a low performance of 420 thousand tons. In 1994 the fiber production reached 483 thousand tons which was 15% higher than it was in 1993. In 1995 there was a slight increase of 6.0% in the national cotton growing area. In 1993 Brazil imported 501 thousand tons of fiber. In 1994 there was a significant decrease of 27.0% in imports and in 1995, imports were only 282 thousand tons (BM&F, 1996).

Since 1985, Brazil has changed from a marginal cotton importer to one of the largest importers in the world. The highest importation of fiber was recorded in 1993.

Several structural, political and economic factors occurred in the last two decades that were aggravated by the introduction of the boll weevil, *Anthonomus grandis* Boheman (Braga Sobrinho and Lukefahr, 1983; Braga Sobrinho and Lukefahr, 1992). The immediate consequences were the decline and the disruption of the cotton production in the country, forcing it to be one of the largest importer of raw cotton in the world.

The objective of this paper is to briefly outline a framework of the Brazilian cotton crisis by analyzing the different and complex problems that contributed to the present status.

The 1980´s period

In the early eighties, cotton production in Brazil was considered one of the most important economic and social activities by involving million of people in all its production chain. In 1983 when the boll weevil was detected in Brazil (Barbosa *et al.*, 1983), the cotton harvested area was 3,113,830 hectares of which 1,673,150 hectares were annual types and 1,440,680 hectares were perennial. These two types presented national yield averages of 1,130Kg and 188Kg per hectare of seed cotton.

The national consumption in 1983 was 556,700 tons of fiber against a national production of 586,300 tons of fiber. During the next years, post boll weevil introduction, the fiber supply stock started to decrease and so did the exportation to other countries. From that period, the country changed the status of a world cotton exporter to a big cotton importer (Figure 1).

In the late eighties, the fast dispersal and infestation of the boll weevil in most of the cotton growing area, in conjunction with other structural problems in the country resulted in the falling of the cotton acreage and production. This picture brought about, as an immediate consequence, the increase of the economic and social crisis in the region, with the acceleration of the rural migration to cities, causing severe social problems to most cotton growing states. Other clear results were the lacking of raw cotton to move the ginning complex (over two hundred in the country) as well as the huge textile industrial centre installed in the country.

The interruption of exports (Figure 2) was the first step to the beginning of the changes. The industrial side thought that the growers would always produce sufficient cotton for its requirement and then, it forgot to support the production side. The immediate consequence was the falling of the enthusiasm of the producers and the drastic reduction of the national cotton production. The second phase occurred when the economic recession of the 1980´s deprived the national Government of funds to attend the loan demand by the cotton growers. The third problem was the liberating of imports of cotton from import duties, exposing the Brazilian cotton producers to international competition, in most cases, heavily subsidized by local government policies, and extensively mechanized (Cotton Outlook, 1994).

The Northeast Brazil, the traditional cotton producing area of the country, has been the most affected region by the national cotton crisis. Certainly the cost of production in the arid areas of this region and problems like the pest of the boll weevil have failed to compete with the international market over the past decade, and also the same lack of support from the federal and state governments.

Most agricultural policies of many cotton country producers in the world have given considerable government support to agriculture, but in the case of Brazil, growers have been left mainly to the private sector that cannot always carry the loan alone. The results of these policies have been clearly demonstrated which is the poor performance of the cotton over the past 20 years and the fall in lint production that has coincided with the increased domestic consumption. This inversion of domestic supply and demand dramatically changed the market, and Brazil became one of the largest purchasers of raw cotton in the world.

The 1990´s period

During the 1960´s and 1980´s the overall national production had an average increase of 300% during which the average consumption increased to 500% and it maintained almost at the same level of the lint production until the end of 1980. In the beginning of 1990´s several structural problems and negative factors influenced the reduction of the amount of national lint production (Figure 3). During this period the demand and the tendency for consumption were favourable and Brazil at that time began to import from Common Market of the South - Mercosul countries (Cotton Outlook, 1994).

Brazil has traditionally been one of the world's greatest cotton exporters accounting for more than 10% of the world trade prior to the 1970´s. This situation changed during the seventies and fell to zero in 1979/80. During 1992/93 Brazil accounted for 7% of the total world cotton imports (501,000 tons of lint), becoming one of the largest cotton importers in the world.

The status of the country as on of he the largest raw cotton importers in the world has produced severe effects on the domestic economy. Among these effects the unemployment in rural and urban areas is a real factor which has increased dramatically the poverty and the social problems. The Brazilian textile industry imported in 1994 367,000 tons of lint (Figure 1) at a price of U$ 640 million which could theoretically represent the internal generation of more than 85,000 new jobs if the country had internally produced that amount.

The agronomic conditions found in the country fulfil the general requirements to produce the best fiber in the world, and the amount to attend the internal industry consumption. The country's highest production occurred in the agricultural year 1984/85 when it reached 969 thousand tons with a consumption of 631 thousand tons of lint, leaving an excess of 338 thousand tons of fiber for export as raw material or manufacture into textile products (Figures 3 and 4).

Other factors have been mentioned by Barbosa *et al.*, (1997) and Resende *et al.*, (1997) to explain the Brazilian cotton crisis. They strongly emphasize the exchange rate appreciation, the external financing facility and the liberation of imports with zero tariff.

The high appreciation of the exchange discourages exportation by increasing the price of the national products. This stimulates the importation of cotton at lower prices. The prices of lint increased 1.9% at international level from July to December 1994, while at national level the price decreased 28.9% during the same period (Silva and Carvalho, 1995).

For many years the Brazilian textile industry has been affected by cash flow problems which are minimized by purchasing on deferred payment terms at very low world interest rates. This commercial trading transition of foreign cotton comprises an elastic and long run payment dates of 60, 90, 180, 240, even 360 days through the opening of confirmed and irrevocable letters of credit to import cotton. In contrast, this type of financing is not available when buying Brazilian cotton locally.

The import tariffs for cotton changed from 55,0% in 1985 to 0.0% in 1990/93. In the context of the South Common Market - Mercosul, cotton fiber has been included in the exception list with the common external tariff with rates of 1.0% in 1995; 3.0% in 1996 and 1997; 4.0% in 1998; 5.0% in 1999; and 6.0% in 2000 and 2001 (Barbosa *et al.*, 1997).

The economic and social problems that could cause a Brazilian cotton crisis were mentioned by Braga (1984). She emphasized that the cotton sector was high labour dependent. At national level during that period, the sector presented an estimate of 1.2 million of workers in 1985, while in 1994 the data shows a contingent of only 385 thousand workers, resulting in a reduction of 67.5%. This high unemployment scenario in the country has the tendency to aggravate because of the low offer of new jobs. The immediate consequence is the dramatic increase of the poverty and social problems (Urban *et al.*, 1995).

Further considerations

Cotton is considered the main textile fiber in Brazil. The Brazilian textile industry is 63,0% cotton based (Beltrão, 1997). Considering the rapid technological advances in the industry of synthetic fiber, there are several comparative advantages by producing cotton as a natural fiber. Firstly, the cotton sector is a strong source of jobs in all steps of its productive chain. Secondly, the exploitation of the enormous potential that the country has such as 3,000 hours of sun per year, abundant water for irrigation and soil potential. Thirdly, the high demand for natural fibers due to geographic conditions in a tropical country.

A general analysis of the Brazilian cotton situation enforces having into considerations several structural factors at national and international levels. A more realistic analysis based on decisions at internal level among the Government, textile sector, producers and input suppliers enforces discuss and speculation about this complex issue, taking into consideration some much easier ways to reduce or even solve this problem by a combined agreement between the involved parts. In this sense, there are some breakthroughs in the cotton productive chain that discourage solution of the Brazilian cotton crisis, including:

- Discouragement of the grower to invest in cotton production because of lack of attractive loans;
- Low adoption of new available technologies;
- Low quality of harvested cotton to ginners;
- Lack of a premium on top of the regular price for high quality cotton;
- Lack of a stronger lobby for the cotton producing sector;
- High internal interest rates;
- High exchange rate compensation;
- Lack of long term financing for modernization of the cotton sector;
- High Brazilian cost in the whole cotton productive chain loosing competitiveness;
- Lack of harmony among the different steps of the cotton productive chain;
- Lack of guarantee of the minimum price to growers during the commercialization of the raw cotton;
- Weakness of the extension service at state level;
- Liberation of raw cotton imports;
- Lack of high quality cottonseed to satisfy all producing regions in the country;
- A real agricultural program to support the familiar agriculture.

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