



SUSTAINABLE COFFEE ECONOMY

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The current world agribusiness scenario displays the crisis in the coffee economy brought about by the historical decline of international coffee prices and resulting instability and distress of the economic agents in the pertinent production chains.

The diminished value of the product is mainly due to the existing imbalance between demand and supply in the international markets, caused by a gradual and continuous increase in coffee production throughout the world, particularly the new coffee exporting countries entering the international market.

The increasingly competitive coffee market demands that the economic agents implement new strategies aiming at meeting the demands of coffee consumers worldwide. In such an environment, competitiveness is not enhanced only by offering lower prices but, rather, by a combination of price and quality.

The Brazilian coffee agribusiness is necessarily immersed in this very competitive environment and, therefore, is undergoing deep structural changes. Firstly, it should be emphasized that the deregulation of the coffee market in Brazil increased the interaction between the national coffee industry and the dynamics of international markets as a result of the prevailing hands-off stance of the government, particularly regarding planning and commercialization.

Secondly, the development and implementation of new technologies have enabled a marked increase in the Brazilian coffee bean production, which explains the paradox between increased coffee production and diminishing coffee areas in the country.

Coffee bean yields per unit area can increase as a function of various factors, such as climate and soil conditions, among others. Coffee productivity in Brazil, on the other hand, has steadily and comprehensively risen as a result of changes in the technology base of the coffee bean production sector.

According to CECAFÉ statistics, for example, bean productivity increased by 76.1% from 1990 to 2000, or 5.1% per annum, despite the typical biannual nature of coffee.

In other words, the adoption of new technologies, such as new varieties, increased planting density and enhanced temporal spacing, have led to increased

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productivity and, consequently, to an expansion of the national coffee production even after the reduction in the cropped area.

Despite this increase in coffee productivity, Brazilian coffee quality has always been considered inferior to that of coffees produced in other countries, such as Colombia. The lower ranking resulted from the bean producers' strategy of large-scale, low-cost coffee plantations to ensure large harvests and access to international markets.

At this point, however, it is becoming increasingly necessary to substitute large scale sales for specialty sales in order to meet the specific needs of the main international coffee consumers. In this effort to increase its share of the international specialty coffee markets, Brazil's great advantage lies in the fact that coffee is produced under extremely varied climate and soil conditions in this country and, therefore, the characteristics of the beans also vary considerably and can meet different marketing requirements.

In addition to this qualitative approach, it is necessary to improve the image of Brazilian coffee, particularly through marketing efforts directed to the main coffee consumption centers of the world.

Another important fact to be noted is that coffee production in the country has been marked by numerous instances of environmental imbalance caused by ruinous replacement of natural ecosystems and soil degradation over vast farming areas.

From the social viewpoint, although coffee plantations have always generated a considerable number of jobs, it is also possible to speak of imbalances because of the low wages paid in those jobs and the resulting high income concentration.

The combination of extreme market competitiveness and the structural difficulties of the national coffee industry constitutes a very apposite challenge for the coffee industry: how to develop the coffee economy in a sustainable manner.

It should be emphasized that the concept of sustainability emerged only recently and in an environment where the various facets of development have been traditionally considered separately, as self-contained non-communicating entities sometimes.

In other words, the prevailing view has sometimes been that the development of a country, an industry, or a crop was synonymous of economic growth, or social development, or conservation of natural resources, or even strengthening of public policies, depending on the 'fashion' of the day.

A note-worthy characteristic of sustainable development is an integrated and interactive consideration of its four main aspects – the economic, social, environmental, and political dimensions of development. Only a holistic view can help maintain development along time without degradation of any of its four constituting elements.

Thus, in 1995, UNESCO defined sustainable development as that which "meets the needs of the present without compromising the ability of future generations to meet their own needs."

This capacity of maintaining development along time is intimately linked to the balance between the four elements of development mentioned previously. As regards the social aspects, sustainable development seeks to enhance the quality of life and reduce social exclusion.



The environmental component of sustainable development focuses on respecting the support capacity of the ecosystems, while the political component strengthens the democratic public policy design and implementation mechanisms.

Lastly, as regards the economic aspects, sustainable development addresses the rational and efficient use of resources and the generation of synergies between related businesses.

Economic sustainability also considers two possible outcomes of production systems. Firstly, production systems can have potential comparative advantages, such as thrifty and efficient use of available resources; risk management and reduced vulnerability to risks; improved product quality; and generation of wealth.

Secondly, in order to be economically sustainable, a production system should have potential positive externalities, such as valorization of natural resources; transparent management (market trust); and generation of social well-being.

Thus, the possible strategies to consolidate economic sustainability can be grouped along two dimensions: comparative advantages and positive externalities.

In the former case, the strategies would focus on increasing competitiveness in international markets through various initiatives, such as improving production chain coordination; diminishing costs; minimizing conflicts and using scarce resources rationally; quality enhancement; developing distinctive coffees; increasing the added value of Brazilian coffee; and seeking more stable earnings for the coffee industry.

In the latter case, maintaining positive externalities would require strategies such as compliance with national and international labor legislation; considering the environmental and social components of the public policies for the coffee sector; increasing the participation of society in designing strategies for the development of the coffee economy; developing and implementing new technologies that lessen the environmental impact; and valorizing human capital.

It should be emphasized that coffee cultivation could provide some additional indirect environmental benefits. For example, planting coffee could contribute to the reclamation of large degraded farming areas. Among other benefits, the carbon sequestering potential of coffee plantations could lead to the inclusion of this activity in the international carbon emission quota market because of the so-called Clean Development Mechanisms (CDM).

After these more general remarks about sustainability, particularly its economic dimension, it should be noted that producing in a sustainable manner requires defining and implementing a set of rules of conduct that reflect an appropriate posture vis-à-vis the environment, workers and product safety. There are several ways in which the principles of sustainable development can be used build a model for agriculture in general.

Along the same lines, a good example of farms seeking a niche in the expanding sustainable products market would be Sete Cachoeiras, Da Terra and Fazenda Ipanema in the State of Minas Gerais, which received the Utz Kapeh certificate in 2002.

Similarly, the Brazilian Coffee Research and Development Consortium coordinated by EMBRAPA is introducing an initiative proposing institutions, farmers, technicians, and other individuals interested in the coffee agribusiness norms and standards that foster the sustainable development of the coffee economy.



The initiative has been named Integrated Coffee Production (ICP) and its initial reference was the basic regulation of the *International Organization for Biological Control* (IOBC), the set of regulations for Integrated Fruit Production (IFP), the Utz Kapeh code of conduct, and other sources.

ICP has a hierarchical structure of principles, criteria and indicators whose function is to establish a monitoring process and enable an evaluation of the *status quo* or dynamics of a coffee agro-ecosystem and the associated social system.

An important tool to ensure a safe, high quality product dependent on a responsible management of the process is trackability. Café do Cerrado was the first to receive this type of certification, which shall soon be required throughout the world. This coffee is produced in the Cerrado ecosystem in the State of Minas Gerais and its bar code includes information about its origin and production characteristics. The initial intent was to consolidate the image of Café do Cerrado as a quality product at the consumer level.

The main advantage of the ICP is its flexibility in directing regional interests to the more critical aspects from the sustainability standpoint. Also, in order to have access to world markets and not be affected by non-tariff barriers, Brazil is trying, through this regulation, to adapt its coffee to the new international quality and competitiveness requirements.

Thus, ICP will be the new driving force for the national coffee industry, acknowledged not only for the quality of its products but, particularly, for respecting the support capacity of the ecosystems and guaranteeing adequate labor relations.

The main purpose is to increase the quality and competitiveness standards of Brazilian coffee to the levels of excellence required by the international market.

To conclude, any system selected should take into account the purpose of achieving the sustainable development of the coffee economy, considering occasional opposing stands between economic, environmental and social as interactive conditioning factors to be balanced, rather than conflicts.