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"A DEVELOPMENT PROJECT IN COLOMBIA"
ITS ORGANISATION, PROGRESS AND FUTURE PROSPECTS

NATIONAL FEDERATION OF COFFEE GROWERS OF COLOMBIA

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SUMMARY

This is a project of agricultural development for the Colombian coffee-growing zone, designed for diversification.

The Colombian economy is highly dependent on coffee which represents 38% of exports and 20% of GDP. Five-year diversification plans are being implemented in order to decrease that dependence, increase the coffee growers' income, create stable employment, increase food production and generate exports.

The VI Five-Year Plan started in 1990, It is intended to generate agricultural and livestock production on 327.357 hectares. Its cost is estimated at US\$642.3 million.

Farm Management is an aid to the establishment and evaluation of the Plan. Its purpose is also to give training to technicians and growers in aspects of management, business administration and the profitability in agriculture.

THE GEOGRAPHY OF COLOMBIA

Colombia is a tropical country located in the Equatorial zone of South America. It is the fifth largest Latin American country in area after Brazil, Argentina, Mexico and Peru. The population in 1990 is estimated at 32,300,000, 35% of whom (about 11,300,000) live in rural areas.

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In relation to other countries, Colombia is an eighth the area of the U.S.A, a seventh of Australia or Brazil, twice the area of France and four times the area of Britain or New Zealand. Of its total of 114,174,800 hectares only 38%, however, is potentially suited to agriculture; 47% of the land is natural forest, and the remaining 15% is used for other purposes.

Colombia has coasts on the Pacific and Atlantic Oceans; it has also three mountain ranges going through the country from South to North, vast plains and virgin jungles. The tropical climates allow the growing of a wide variety of crops, since altitude and latitude define the thermal floors and the different products suited to each.

Up to 4,000ft, african palm, coconut, rice and sugar are typical crops. From 4,000 to 6,000ft, there is coffee, citrus, vegetables and fruit. Above 6,000ft. the crops are wheat, barley, potatoes, dairy products and cold-climate fruit such as apples, pears, peaches, tree-tomatoes, lulo, loganberries and strawberries. Colombia is the world's second largest grower of coffee after Brazil, and first in quality.

COLOMBIAN AGRICULTURE

Agriculture represents 20% of Colombia's GDP, accounts for about 50% of exports and provides employment to around 25% of the labour force. Coffee represents 12% of GDP and between 1985 and 1988 it accounted for 38.8% of all exports. The sector grew 3.5% between 1984 and 1988 and 5.5% in 1989.

Colombia's exports are broken down as follows:

	1979	1983	1989
Total Exports (US\$ millions)	3,515	3,081	3,708
Coffee Exports (US\$ millions)	2,005	1,506	1,218
Coffee Price (US\$/Pd)	1.76	1.34	1.13

Coffee is therefore of prime importance for the economy of the country. If exports fall, in quantity or value, as is currently happening because of the collapse of the International Coffee Agreement, the impact on the economy is immediate. Agricultural exports, including coffee, were US\$2,395.7m in 1989. Coffee represented 60% of this amount. Fruit and flowers are also important items. Agricultural imports were US\$246.2m in 1988, and US\$214.8m in 1989. Wheat accounted for 57% of the total, soybeans 9% and raw oils 8%. Colombia is approaching self-sufficiency with the reduction in agricultural imports.

ORGANISATION OF THE COFFEE INDUSTRY

THE NATIONAL FEDERATION OF COFFEE GROWERS OF COLOMBIA

Created in 1923, the Federation is a private organisation with 16 regional offices and 5,470 employees that represents 260,000 small, medium and large growers. The Federation exports 40% of the Colombian coffee directly and has permanent representation in the International Coffee Organisation in London. It has more than 50 agricultural cooperatives, it is part-owner of the *Flota Mercante Grancolombiana* shipping line, and has a marketing network. The Federation discovered the Colombia variety, a mildew-resistant development (*Hemilleya vastatrix*). In the field of information, the Federation has a TV programme called "El Profesor Yarumo", which has won awards from the UN and FAO as a positive educational programme for the agricultural sector.

The Coffee Fund, administered by the Federation, handles tax charged on the sale of coffee. The Fund guarantees coffee purchases and provides infrastructure in growing areas. The internal price of coffee is regulated by a committee formed by the government and the growers. The surpluses built up in boom years are used to offset changes in external prices, with the result that, to date, producers have received relatively stable prices. The price of crops other than coffee is regulated by free market forces.

THE COFFEE-GROWING ZONE

The coffee-growing zone is located on the hillsides of the Eastern, Western and Central ranges of the Andes. The terrain is broken and undulating, 3,000 - 6,000ft. above sea level. A coffee census is taken every ten years. In 1980, the Coffee Census recorded 1,009,579 hectares of coffee (343,730 modernized) and the estimate for 1990 is 1,099,316 hectares (673,463 modernized). The coffee-growing area has remained stable over the years, and modernization is on the increase. The main harvest is 60% of the total annual crop, and the mid year harvest provides the remaining 40%. In the main harvest, there is a large migration of labour and wages are higher. In the mid-year harvest, labour is paid daily, by weight.

DIVERSIFICATION

The Federation's diversification programme is a response to the need to complement growers' income, to achieve more efficient land use in this zone, to rationalize coffee crops in the best possible soils and to make Colombian economy less dependent on coffee. This process has been in train for over 27 years.

OBJECTIVES AND METHODS

OBJECTIVE 1.- To protect the coffee growers' income and defend their economic position: The grower increases the output, income and profitability of his farm by using new technologies and rational sale prices. The value of the farm increases with the new infrastructure and crops.

OBJECTIVE 2.- To create stable and well-paid employment. This objective is achieved through better use of soil and more intensive activities by the labour force; moreover, there is a decrease in migratory flows, since diversification complements coffee, and demands labour at different times from the coffee harvests. Traditionally, salaries paid by the coffee growers have been higher than the minimum salary required by law.

OBJECTIVE 3.- To increase food production: increased production is due to: 1) More land being used for farming purposes, and 2) better technology resulting from research. By the end of the 1990s, for example, we will have a further 1,961,682 tons of plantain, 51,152 tons of corn, 22,560 tons of beans, 53,062 tons of milk, 2,115 tons of fish, 231,220 tons of pork, which are part of the regular Colombian diet.

OBJECTIVE 4.- To substitute imports and generate exports. In cocoa crops, for instance, imports are balanced with domestic demand, and further exports are expected from crops of pineapple (35,000 tons), pitahaya (9,000 tons) and asparagus (8,500 tons), to mention a few.

OBJECTIVE 5.- To promote proper use and protection of natural resources. All studies and campaigns conducted by the Federation to conserve water and river basins, and market-oriented reforestation are designed to meet this objective.

FIVE-YEAR PLANS

Five 5-Year Plans have been completed, and the VI 5-Year Plan has just commenced. (1990/91 to 1994/95). When comparing the V and the VI 5-Year Plans, there is an 128% increase in the areas under cultivation from 142,972 to 327,357 hectares. Fruit, basic foods and forestry account for most of this increase. In livestock activities, fishing, poultry and pig production have the highest growth. The VI 5-Year Plan has a cost of US\$642.3m, of which US\$403.3m or 63% will be financed with loans from different sources, and 37% with growers' contributions.

DESIGN, DEVELOPMENT AND IMPLEMENTATION OF THE PLAN

The Plan has been conceived by the National Federation of Coffee Growers of Colombia. The Headquarters coordinates, advises and guides while regional offices propose specific goals and carry out the Plan with the help of their technical staff and the growers in their operating zone.

Technical personnel are employed by the farmers, but there are also private consultants; they receive guidance from the Federation, and work with the farmers, who pay for their services.

The grower, based on information on the technology, market, yield and conditions of his own farm, consults with the Federation's technical adviser to establish the most profitable activity for his business.

SUPPORT FOR IMPLEMENTATION

1.- PLANNING

In order to decide on the best alternative, it is essential to obtain information about the market, before planting. Crop and livestock activities use the best available soils and climatic zones. For this purpose, there is a "zonification study" of the coffee-growing area that serves as a guide for each project.

2.- PRODUCTION

Production needs to be supported by highly efficient and practical research. In addition, technicians and growers need to be trained in farming technology, costs and yields. For instance, there must be thorough research into: products admitted into the U.S.A., the EEC and other countries and health requirements; the importance of biotechnology and biological restrictions to diminish the use of pesticides; lower production costs, particularly in labour and fertilizers, and in the efficiency of these inputs.

3.- MARKETING

Before deciding on a crop, it is advisable to establish how it will be sold: up-to-date information on prices, market research in terms of quantity, quality and timing, and contact with grower associations are needed both for national and international markets.

The purpose, then, is to identify the markets that offer the best comparative advantages; lower intermediary costs to bring the grower higher prices and to give the final consumer a lower price; and to develop a strategy to increase domestic and international consumption.

The Federation has an export organisation, COMERCAFE, to penetrate the international market.

4.- AGROINDUSTRY

The intention is that production will be easy to process, in order to create efficient and competitive industries that meet market needs, to direct technology and investment towards high-efficiency projects, to create stable employment and to connect producers to agroindustrial projects.

THE FUNCTION OF FARM MANAGEMENT

BACKGROUND

This activity has been known of in Colombia since around 1970. It has been especially promoted by the producer associations, although there is no national policy on the subject.

The grower feels that he will be somehow at a disadvantage if his costs and income are known; he does not keep proper accounts; he has a poor knowledge about many aspects of his business, such as soil, area, infrastructure, costs, markets and potential. It seems that he prefers to improve the farm by obtaining higher prices rather than reducing costs. The technical adviser has gaps in skills acquired at the university, and often knows less than the producer. Colombia does not have models of its own.

FARM MANAGEMENT DEVELOPMENT

Farm managers are making progress in this area; access to information, computers and participation in seminars have helped them to develop the activity. Universities are offering better training programmes to students. A Foundation has been created to develop the concept among technicians and growers.

The Federation has promoted this activity in its headquarters and regional offices, although it has not yet succeeded in covering all its technicians and growers.

In order to promote these concepts, two international and three national Farm Management Congresses have been held. Schools give practical teaching programmes on Farm Management to the coffee growers' children. The Manuel Mejia Foundation, created by the Federation, gives training to adults. The regional offices offer Agricultural Management services. They use extension and teamwork methodologies to develop the concepts. Management groups are created for the regular discussion of progress, costs, income and the organisation of their farms.

TRAINING

Training is given to the technical advisers and through them to the growers in the following aspects:

Consideration of the farm as a whole in its different projects, the relationship between them, investment and profitability; knowledge of the profit margin for each project (similar to Gross Margin); planning, direction and control of production, marketing and finance; the stable management of production and income through the years; the drawing of a sketch or plan of the farm as an element of organisation and planning; the establishment of technical and economic indicators for the farm; and the implementation of comparative surveys.

MODEL FARMS

Based on existing farms in the coffee-growing zone, model farms are developed. The 5-Year Plan is implemented for a farm with: a) a production and credit project and b) no project. This involves the definition of needs such as labour force, inputs, capital, credit, funds flow and profitability.

BASIC INFORMATION

Every year, the information concerning the profitability of coffee and 43 diversification activities is updated for farm planning and as a support to the 5-Year Plan.

SPECIALIZED FARM MANAGEMENT SERVICES

These services are provided by specialist staff in the regional offices. They consist of training small growers through short courses, seminars and demonstrations, and the sale of services to medium and large producers.

COFFEE DIVERSIFICATION AND TECHNICAL AND ECONOMIC INDICATORS

Based on an annual survey of representative producers of coffee and diversified products, technologies, efficiency (labour and inputs), cost and profitability are all established. With this information, the field technician has information which he can use in advising the grower, suggesting changes, ways of controlling costs and increasing income. Through this activity, the 5-Year Plan is evaluated for the following: investment and credit, efficiency, use of fertilizers, income, costs and profit margins by homogeneous zones, that is, by areas which have similar ecological conditions.

Bogota, Colombia. November 1990