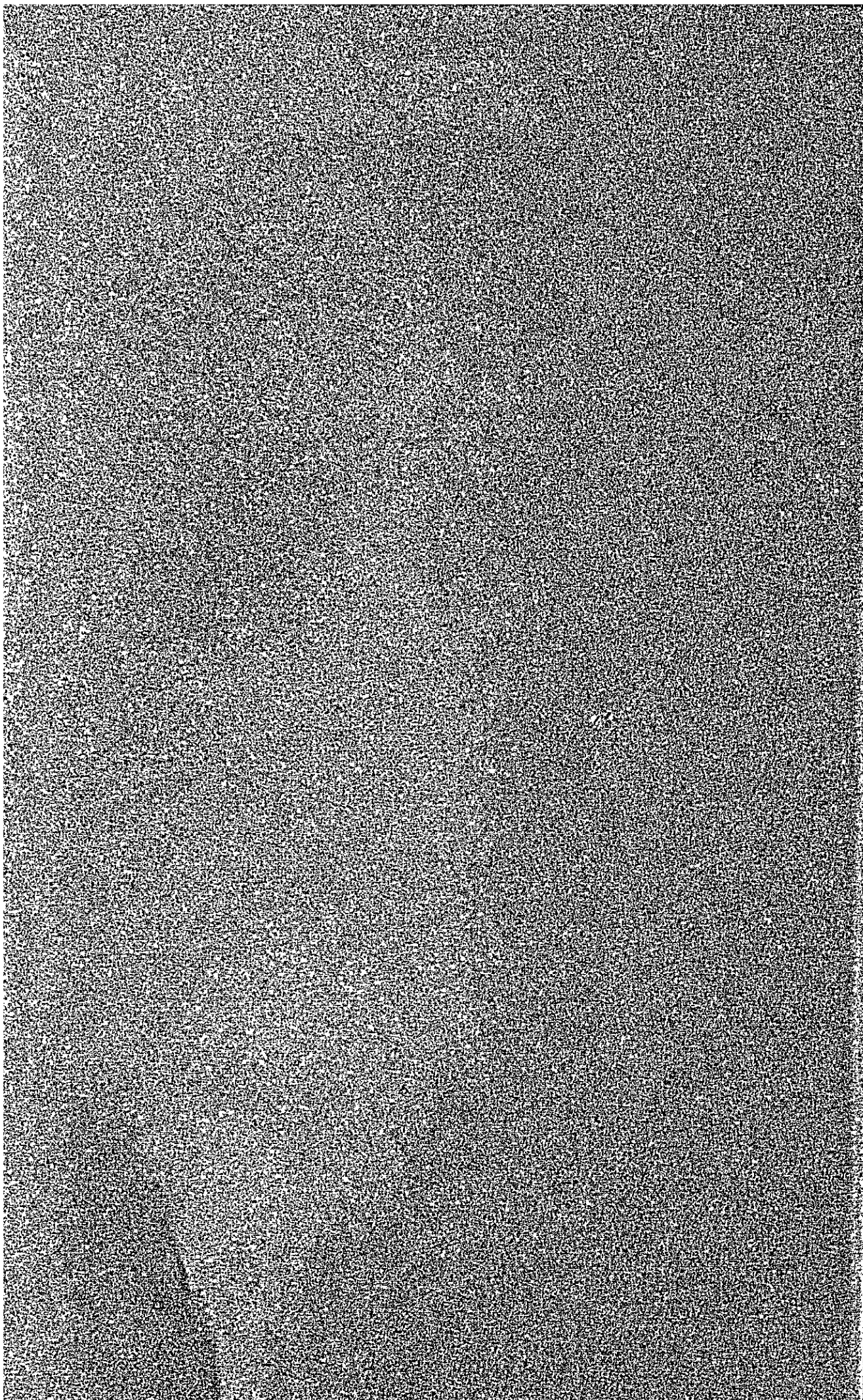


CHAPTER 1
INTRODUCTION



CHAPTER I

INTRODUCTION

1.1 Background of the Project

High priority has been placed on housing, education and agriculture in the national development policy of The Republic of Colombia (hereafter referred to as The Republic). In order to increase products and maintain sound rural economy efficient utilization of water and land resources has been of much importance.

The importance of the agricultural sector in the national economy is also emphasized in the present national economic plan (DNP, 1983 - 1986).

The agricultural development has been planned in the downstream catchment area of the Pamplonita River. Total area 35,000 ha is divided into four stages and efforts have been made by INCORA to immigrate farmers into these areas.

Among these areas, the land improvement was implemented in the first stage area (Zulia Project) and a part of the second and the third stage areas with financial assistant of the BIRD in the early 1970s. Since 1974, HIMAT, a new government institution responsible for land improvement project, planned to undertake a feasibility study of agricultural development in the second and part of the third stage area (the Pamplonita Project).

For this purpose, The Republic requested the Government of Japan to cooperate for the Pamplonita Project through international technical cooperation in March, 1983. In response to the request, the Government of Japan through the Japan International Cooperation Agency dispatched a mission to The Republic from 22 January to 10 February 1983.

Discussions were held between the Colombian Government officials concerned and the mission to determine the Scope of Work (S/W) of the feasibility study of the project.

According to the agreed S/W, a feasibility study team was dispatched to the Republic two times to determine feasibility of the project: first in the dry season in 1983 and second in the rainy season in 1983/1984.

1.2 Extent of the Study

The scope of the study is defined in the agreed S/W as follows:

1. To provide the basic project design,
2. To formulate an implementation program,
3. To estimate project costs and benefits, and
4. To evaluate the economic and financial aspects of the Project.

All the results of the study are to be compiled as the feasibility study report.

1.3 Contents of the Study

1.3.1 Objectives

In order to formulate an agricultural development plan, a study is to be made to determine ways to improve the drainage system and to provide irrigation facilities in the study area where it is profitable. It is also to be included in the study to outline possible measures to improve productivity on the land which is damaged by periodical floods. In addition to the improvement of existing agricultural lands, the possibility to expand agricultural lands is also to be analysed.

Finally, feasibility of the study conclusions and results are to be analysed.

1.3.2 Contents of the Study

(1) The First Stage Study

1) Field Survey (from 11 June to 31 July, 1983)

Major activities during this study are collection of existing data and information and their analysis including field investigation at various sites in the study area.

2) Home Office Work

During this period, all the data and information were processed and analysed to determine existing conditions and to identify problems in the study area.

All the results were compiled into the Interim Report including proposal of a provisional development plan.

(2) The Second Stage Study

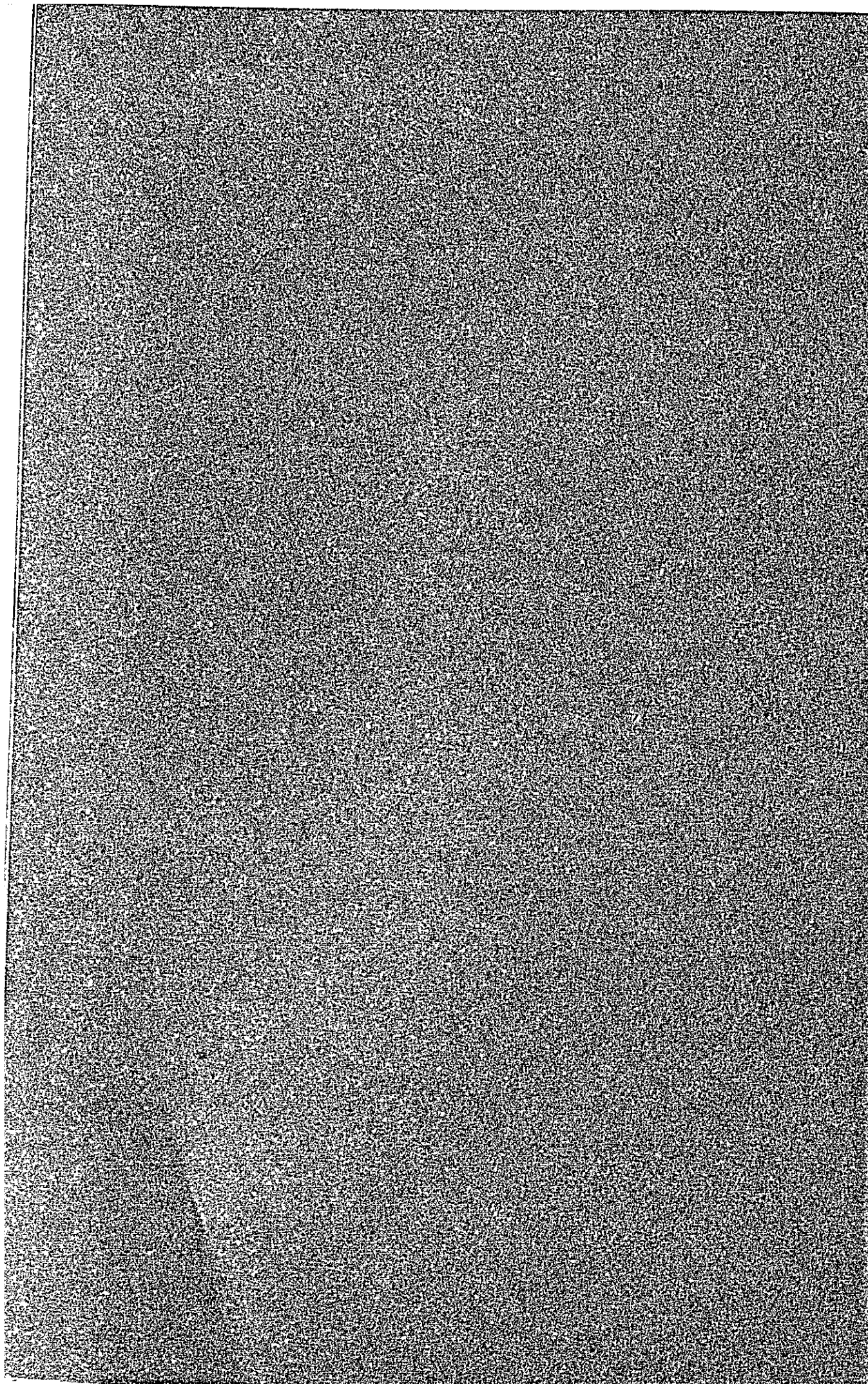
1) Field Survey (from 18 Oct., 1983 to 6 Jan., 1984)

Taking the proposed development plan into account, a supplemental field survey and data collection were undertaken. Project formulation discussions were held several times to obtain a mutual understanding with the persons concerned.

2) Home Office Work

Based on the analysis and examination of the data and information collected, the proposed development plan including proposed implementation programme was formulated. The economic and financial aspects of the proposed plan were also evaluated. Finally conclusions and recommendations are provided.

CHAPTER II
BACKGROUND OF THE PROJECT



CHAPTER II

BACKGROUND OF THE PROJECT

2.1 Brief Description of The Republic

Located in latitude 4°13' south to 13°13' north and from longitude 66°50' west to 81°50' west, The Republic extends over 1,139,000 km². Total population is estimated to be 27.50 million in 1983 (DANE, 1982). The capital city is Bogota. The Republic consists of 23 administrative departments (Departamento), 4 direct control regions (Intendencia) and 5 special regions (Comisario).

In The Republic, the Andes branches into three ranges. This results in a wide range of topographic variations. Accordingly, climate is most significantly related to the altitude. Seasonal change in climate is almost insignificant.

Average annual rainfall varies between 400 mm and 7,000 mm and there are two cycles of rainy and dry seasons in a year.

The political system of The Republic is a constitutional republican form. Parliamentary democracy has existed steadily.

Economy of The Republic largely depends on its coffee production, however recently, mineral resources such as coal and nickel have been exploited. It is observed that variety in agricultural products and agro-industry has been changing the Colombian structure of mono-crop agriculture.

2.2 National Economy and Agriculture

2.2.1 National Economy

(1) Gross Domestic Products (GDP)

GDP of The Republic was recorded COL\$2,004 billion in 1982 (US\$37.4 billion, Banco de la Republica, 1983), although the growth rate of economy has been declining in recent years (2.5% in 1981 and 1.1% in 1982, DANE, 1983).

The agricultural sector contributed almost 22% of the GDP in 1982, which is the largest among other productive sectors in The Republic.

(2) Foreign Trade

Total amount of export products was US\$3.1 billion (FOB) in 1982 of which 60% consisted of agricultural products. Almost 50% of total export amount is gained by coffee.

On the other hand, major import items are petrol, vehicles, industrial products, soy beans and wheat. The items amount to 30% of total amount of imports equivalent to US\$5.47 billion in 1982 (DANE, 1983).

(3) Balance of International Account

International accounts has recorded annual deficits since the year of 1976. The extent of deficit in 1982 is almost the same as in 1981: US\$3.27 billion (FOB). The same deficit tendency is observed in capital balance. In the total balance, the deficit amounted to US\$12.5 billion at the end of 1982 (DANE, 1983).

(4) Capital Investment

The Growth rate of domestic investment has increased since 1980 at high rate. The average growth rate of domestic investment between 1980 and 1982 is 30.0% (Banco de la Republic, 1983).

Direct investment of foreign capital in 1970 was US\$39.2 million. This increased over 35 times to 1.39 billion in 1980.

In the national development plan, it is projected that domestic investment will increase at the annual rate of 7% totalling COL\$ 1,589 billion during the development plan period.

(5) Target of the Economic Growth Rate

In the national development plan annual economic growth rate is forecasted to be 5% during the plan period. The growth rate for the agricultural sector is set at 4%.

2.2.2 Agriculture and Livestock

In The Republic, about 31 million ha of the land is utilized for agricultural purpose which corresponds to 27% of total national lands. Of these agricultural lands, about 4.4 million ha is cultivated, 17.5 million ha is used as pasture and the balance of 9.1 million ha is fallow or miscellaneous uses.

Land improvement is provided for 0.61 million ha or 12% of total cultivated lands (HIMAT, 1982).

Total population in the rural areas is estimated to be 9.29 million (33.8% of national total population) which is equal to 25% of national economically active population (DANE, 1983).

The number of small scale farmers who own farms less than 50 ha corresponds to about 92% of total number of farm families (about 1.18 million families). However, these farmers hold only 22% of the nation's agricultural lands. On the other hand, the number of farmers who own farms larger than 50 ha is 8% of total number of farm families. The agricultural lands owned by these medium to large scale farms totals almost 78% of the nation's agricultural lands (Estructura Economica Colombiana, 1983).

Average economic growth rates of agriculture and livestock in the period between 1977 and 1982 are estimated to be 3.5% and 4.5%, respectively (DANE, 1983).

Major public institutions and organization in The Republic related to agricultural activities and agricultural credits are summarized in Table 2-1. In 1982, the total amount of COL\$23.56 billion was borrowed by farmers for various purposes. Out of the total credits, 57.8% was used for agricultural production, 29.5% was for livestock and the balance of 3.2% was used for other purposes.

Table 2-1 Agricultural Supporting Services

Acronyms of Public Institutes	Function	Major Activities
1. HIMAT	Data Collection and processing of hydrometeorology. Control and Maintenance of rivers. Planning, Implementation and Operation/Maintenance of land improvement projects.	Forecast and information services of meteorology. Investment for observation network and land improvement projects.
2. INCORA	Redistribution of farm lands. Extension services and agricultural credits for small-scale farmers.	Land acquisition and irrigation Land preparation of national lands for farmers. Agricultural credits and related services.
3. ICA	Research, education and extension services for agriculture and livestock	Plant breeding, improvement of Pasture. Improvement of agricultural machinery Technical extension services.
4. INDERENA	Conservation of environment. Control and protection of natural resources.	Environmental conservation for vegetation and animals. Establishment of efficient forest control.
5. IDEMA	Control of marketing of agricultural and livestock products.	Sale and purchase of agricultural products. Storage, export and import of agricultural products. Price control. Control of regional supply and demand balance.
6. OPSA	Preparation and provision of necessary data and information for planning of agricultural production.	Data collection, analysis and publication. Planning of agricultural production.

Credit Banks	Function	Major Activities
7. Banco Cafetero	Credits for production, transport and export of coffee and other products.	Credit banking
8. F.F.A.P.	Credits for agricultural sector.	Credit banking
9. Caja Agraria	Credits for agriculture and livestock.	Credit banking in general and for local land improvement.
10. Banco Ganadero	Credits through other institutions for agriculture and livestock.	Credit for finance of small-scale land improvement. Credit for weak livestock funds. Credit for small-scale agro-industry.
11. FEDECACAO	Support and protection of cacao producers.	Technical extension services of cacao. Assistance for cacao marketing. Supply of seeds and seeding of cacao.

2.3 National Development Plan for Agricultural Sector

2.3.1 Basic Considerations

In the national development plan, emphasis is placed on development of small-scale and medium-scale farmers in keeping with the development principle of equity.

For this purpose, much consideration is given to the following items:

1. Improvement in supply of major foods,
2. Increase in employment opportunity,
3. Promotion of agricultural products for export,
4. Promotion of agro-industries and
5. Conservation of land resources.

2.3.2 Financial Aspects of Agricultural Development

According to the national development plan, a total of COL\$165.2 billion is to be invested in the agricultural sector. This amount corresponds to 10.4% of the entire investment in the development plan.

The financial sources of the total investment are summarized below.

	<u>Amt. (Billion COL\$)</u>	<u>%</u>
Government finance	59.8	36.2
Internal credits	55.6	33.7
External credits	<u>49.8</u>	<u>30.1</u>
Total	165.2	100

Of this finance about 14% is appropriated for land improvement projects. It is planned to obtain foreign finance for more than 1% of GDP of agricultural sector during the development plan.

2.3.3 Development Plan for Agriculture and Livestock

The agricultural and livestock development plans in the national development plan are classified into three categories:

1. Plans for production increase,
2. Plans for land improvement, and
3. Plans for improvement of marketing system.

Among these plans, emphasis is placed on the DRI project. Objectives of this plan are to improve productivity of small scale farmers through technical extension services, credits, efficient marketing and improved social infrastructure such as education and housing. For this purpose 22 related public institutions are cooperating. DRI project does not include land improvement.

The responsibility for land improvement falls on HIMAT. HIMAT's development plan for land improvement is as follows:

1. to add 70,000 ha of irrigation area to the existing irrigated land of 680,000 ha of which 180,000 ha is under control of HIMAT,
2. to improve 115,000 ha of existing irrigated area from 1985, and
3. implementation of 5 projects covering 99,000 ha for which feasibility studies are already completed and 11 projects covering 142,000 ha for which preliminary feasibility studies are completed (DNP, 1983).

As a long term target, HIMAT intends to extend irrigated area to 1,500,000 ha by the year of 2,000. At that time total irrigated area under control of HIMAT will be 800,000 ha.

2.4 Brief Description of Norte de Santander Department

Norte de Santander Department (The Department) is located at the north eastern end of The Republic between latitude 6°57' north and 9°07' north and between longitude 72°02' west and 73°35' west. The eastern and northern end of The Department is defined by the national border with Venezuela. The western and the southern end of The Department border with the Departments of Cesar, Santander and Boyaca.

The Department occupies 21,658 km² and has a population of 987,000 (DANE, 1983). The departmental capital is Cucuta which has a population of about 400,000. The Department consists of 36 districts (Municipio) which is further divided into 83 divisions (Corregimiento).

Topography of The Department varies greatly. The western departmental border is located on the eastern branch of the Andes from which altitude decreases to the east. Due to wide variation of altitudes, the climate of The Department ranges from tropical in the low lying areas to mountainous high altitude cold climates. Annual rainfall varies between 700 mm and 3,000 mm. The eastern part of The Department includes three rivers (the Catatumbo, Diva and Margua) which flow into Venezuelan territory.

Gross production was COL\$4.5 billion in 1982. Major production by sector in The Department are agriculture (32%), services (20%) and commerce (19%) (URPA, 1983).

Almost 43% of The Department's labor force engages in agriculture. There are 770,000 ha of agricultural lands in The Department which consists of pasture (350,000 ha), cultivated lands (130,000 ha) and fallow and others (290,000 ha).

The total number of farming families in The Department is estimated to be 40,000. Of these, only 7% of families own farms more than 50 ha, however, these farms have 63% of the agricultural lands in The Department. The balance of 93% of small scale farming families own an average of 7.8 ha per family.

The departmental government offices, City Council and other branch offices of the major central government organization are located at Cucuta. These include HIMAT, INCORA, ICA, IGAC, IDEMA, INCOMEX, INDERENA and MOPT. There are also branch offices of the Republic Bank, other private commercial banks and agricultural credit banks such as Caja Agraria, Banco Ganadero and Banco Cafetero.