

The development measures of the period from 1974 to 1976

The road building programme

Whereas an attempt was made at the beginning of the 1970s to construct a few very important roads to open up the territory in a short time, the road building programme after 1974 showed far fewer signs of being a forced effort. The lack of adequate resources and a less rapidly developing economy were the principal reasons for this.¹¹² The Perimetral Norte, which was due to be completed by the end of 1977, had only reached the stage of construction in mid-1976 where it was certain that the original deadline could no longer be achieved. The government also proceeded more easily in respect of the other roads. The Cuiabá-Santarém highway was not finally officially opened to traffic until October 1976, although it was originally planned to be opened in 1974 (*Boletim Informativo Embaixada do Brasil* 21, October 1976).

This lower rate of road-building activity did not mean that the government had gone back on its intention to integrate the Amazon region more into the national economy and society in a short time. In the second development plan, drawn up for the period 1975–1979, it was emphatically stated that the infrastructure provided during the preceding years and the results of all the research that had been undertaken had to be used to achieve as soon as possible a more intensive exploitation of the Amazon region in accordance with the basic objective of the development plan, which was the achievement of a rapid growth of the gross national product (Presidencia de la Republica/Ministerio do interior 1974, 65).

Development of a modern, large-scale agriculture and forest exploitation

As far as Amazônia was concerned, the increase in the gross national product would have to be achieved mainly through the development of the primary sector, with an orientation both on export and the home market. The area was planned through a considerable expansion of the area of grassland in the southern part of Amazônia Legal and a significant improvement in the quality of the livestock, to develop by the end of the 1970s into one of the major meat-producing regions, able to meet the growing

112 In 1975 the GNP grew by only 4 %.

needs of a rapidly growing world population. To this end, the realisation of the cattle ranching projects already in progress had to be accelerated and new ones initiated.¹¹³

No less ambitious were the plans to expand the plantations of tropical trees and shrubs. Among the important projects were the expansion of rubber and cocoa production. The aim of the national programme to encourage the growing of rubber was to make Brazil self-sufficient at an early date, both through the exploitation of the wild product and the planting of rubber trees. An important condition for this seems to have been realised. Goodyear had recently discovered on its Brazilian plantation that the dreaded disease of *mal das folhas* could be effectively prevented by the use of certain fungicides. Previously, various plantations, such as those of Ford in Fordlandia and Belterra, ended in failure mainly because of this disease (*Carta da Amazônia* 48, November 1976).

While the rubber crop was intended mainly for the home market, cocoa production was to be expanded because the foreign markets offered favourable prospects. The programme which it was hoped to realise during the period 1976–1985 aimed at an expansion of cocoa growing by 150 000 hectares and the renovation of 150 000 hectares of already existing cocoa orchards, so that Brazil would eventually be able to produce 700 000 tons of cocoa, as against 240 000 tons in the 1970s, and increase its share of world production from 15 to 28%. No less than 160 000 of the 300 000 hectares of new plantations were to be created in the Amazon region, 100 000 of them in Rondônia (CEPLAC 1976, 10).

Brazil was also aiming, in connection with its export trade, at a considerable expansion of its forest exploitation, which was rationally planned and organised on a conservation basis. There were also plans to make use of Japanese capital and know-how to process into cellulose the papyrus reed that grew in large quantities on the island of Marajó (*Amazônia Newsletter* 16, 1976). Similar projects existed in respect of a bamboo forest of about 85 000 square kilometres, which had been discovered in Acre. 70% of the forest consisted of a species of bamboo with long fibres (*Amazônia Newsletter* 14, 1976). The discovery of extensive kaolin deposits in São Domingos do Capim and the presence of rock salt in the region of the Tapajós (making possible the production of chlorine and soda) was very important in this connection (*Carta da Amazônia* 44, July 1976). These developments meant that the necessary raw materials and additives for the manufacture of paper were available within the Amazon region itself.

Development of mining

During the foregoing years the Brazilian government had invested much energy and resources in research into the possibilities for mining, with the aim of meeting a greater part of the country's needs from its own production, of becoming an exporter instead of an importer for certain minerals (such as copper, aluminium and kaolin) and of further expanding the existing export trade in certain other minerals. The most

113 The largest of these projects was that of the Companhia Agro-Pastoril do Rio Dourado, which covered an area of 170 000 hectares and was to be realised in the valley of the Rio Fresno, a tributary of the Tocantins (Pará) (*Boletim Informativo*, 10th September 1975).

spectacular developments in the short-term were to be expected in the area of iron ore and bauxite production.

Enormous iron ore reserves had already been proven in the Serra dos Carajás in south Pará. A reserve was discovered of 18 000 million tons, with an iron content of at least 66–69%. It had already been decided to build a railway to Itaqui (near São Luis) for the transport of this ore and, in mid-1976, Brazilian firms were invited to tender for the construction of the first section (from São Luis to Ponta da Madeira). It was planned to start production in 1980. Some of the ore would be exported and some processed in a blast furnace plant at Itaqui, which was eventually planned to produce 16 million tons of steel per annum. The ore would be mined by Amazônia Mineração S.A. in which 51% of the shares were held by the Brazilian Companhia Vale do Rio Doce and the remainder were in foreign hands (United States Steel). Many foreign firms had already promised to purchase ore.¹¹⁴

As soon as the railway was completed it would probably also stimulate other branches of mining, since bauxite had also been discovered in the Serra dos Carajás and important manganese reserves had been proved.¹¹⁵

Bauxite reserves had incidentally been proven, not only in the Serra dos Carajás (56 million tons with a mineral content of 40%), but also in Paragominas, Jarilândia (the concession of the multinational D. K. Ludwig concern) and the Trombetas area (municipality of Oriximina). Rio Tinto Zinc (a multinational with its headquarters in London) had shown an interest in the exploitation of bauxite from the 2000 million ton Paragominas reserves, but technical and organisational difficulties had so far delayed the realisation of the plans. The Brazilian government was concentrating its attention in any event on the Trombetas area, which had reserves of 500 million tons. The exploitation of the bauxite would be undertaken by Mineração Rio Norte S.A., which would be 51% Brazilian-owned (principally by the Companhia Vale do Rio Doce). Various infrastructure works would be needed for the transport of the ore, including a port which could accommodate seagoing ships of up to 60 000 tons. The building of this would begin in 1977. So much money had been set aside to make possible the exploitation of the bauxite reserves that the Trombetas project would become the largest in the whole of eastern Amazônia. A large part of the ore would be exported. Its removal had to begin in 1980 and the aim was to export initially 3.5 million tons. Some of the ore would also be processed in Brazil, at Murucupi (municipality of Barcarena, Pará). It would be processed to alumina by ALNORTE S.A. and, finally, to aluminium by ALBRAS S.A. The latter was planned to begin operation in 1981 and eventually to produce 320 000 tons of aluminium per annum. Japanese capital was being used for the realisation of both factories (*Amazônia Newsletter* 17, 1976; *Carta da Amazônia* 48, 1976).

To ensure that the mining and ore processing industries would have enough electrical power, the government had begun the construction of a large dam across the Tocantins river near Tucuruí. The first of the twelve turbines was planned to come into operation in 1982 and all twelve of them, each with a capacity of 330 MW, had to be

114 *Boletim Informativo*, 29 July 1975 and 9 April 1976. According to the Second Development Plan it was planned to mine 54 million tons of ore per annum initially.

115 These are estimated at about 30 million tons, which is comparable with the reserves at Amapá. The richest manganese reserves, however (250 million tons), occur in Rondônia (*Carta da Amazônia* 45 and 47, 1976).

installed by the end of 1984 (*Carta da Amazônia* 45, 1976). The creation of the lake behind the dam would result in the flooding of a 120 kilometre length of the Transamazônica, so that a replacement section of road would have to be constructed. This course of events was characteristic of the lack of integration of the development planning.

The energy supply was also being expanded by the increased exploitation of natural gas and petroleum. The search for these had resulted, for example, in the discovery of oil off the coast of Amapá and of a large gas field in the same area. A production of 2.5 million cubic metres of gas was possible. The total reserves were estimated at about 25 000 million cubic metres, which was as much as all the other known reserves together. Brazil hoped, therefore, to be able to cover all of its gas requirements itself in the near future (*Boletim Informativo*, 3 July 1976; *Carta da Amazônia* 47, 1976). Exploration was being made on Colombian territory for reserves of coking coal, which Brazil could obtain from Colombia in exchange for iron ore (*Boletim Informativo*, 22 June 1976).

The role of large enterprises in the development of the primary sector

The Brazilian government believed that livestock and arable farming and mining could be expanded on a large scale only if the private sector was given an important part to play and large capitalist enterprises (particularly from the Centro-Sul) were given an opportunity. In addition, an appeal would be made to foreign firms. During recent years, therefore, the government had been very active in finding large capitalist undertakings ready and able to begin exploiting the riches of Amazônia within the framework of joint ventures in which the Brazilian partner held a majority interest. As appears from what has already been stated, the choice as far as foreign countries were concerned had fallen mainly upon United States and Japanese enterprises.

In order to provide more opportunity for large-scale initiatives by the private sector, the government had not only decided to continue selling parcels up to a maximum area of 3000 hectares, but had also created the possibility of buying areas of state land of more than 3000 hectares. These purchases had to be conducted by means of application, accompanied by the submission of a properly worked-out exploitation plan. The implementation of the plan had to begin within a few years. The land purchases required the approval of the Senate and the National Security Council. The maximum area that could be acquired for arable or livestock farming was 66 000 hectares and, for forestry, 72 000 hectares. In Roraima, Amapá and Amazonas the government had already set aside 5–6 million hectares for this purpose (*Instrução especial* 12, 1976; *Carta da Amazônia* 41, 1976, and 46, 1976).

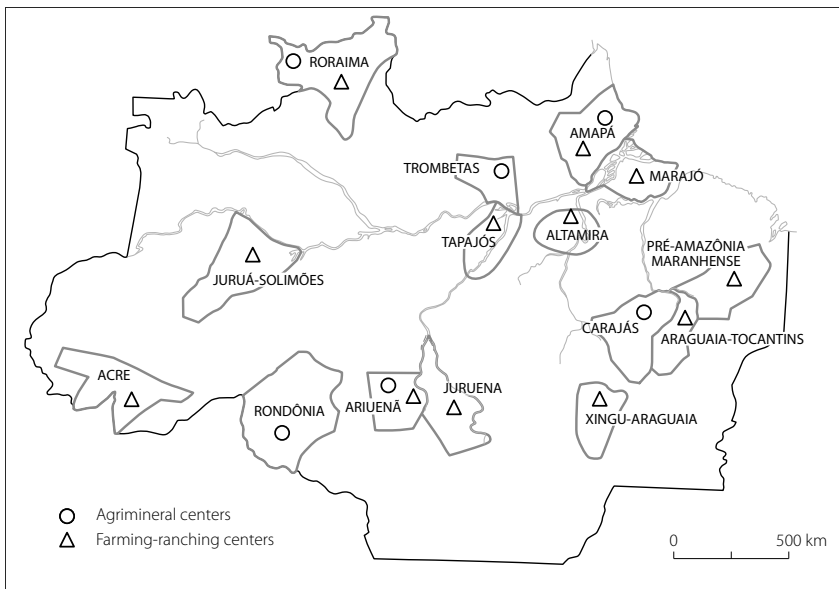
The government contribution to the development of the primary sector

The expansion and modernisation of arable and livestock farming, forestry and mining were to be carried out through the agency of private enterprise, with the state trying mainly to create a climate that would encourage action by the private sector. Within the framework of the second development plan the government proposed to create a favourable production climate in a limited number of areas. For this purpose it had defined a total of 15 regions (*polos*) within Amazônia Legal. These were areas which had

the most favourable conditions for a rapid expansion of the modern primary sector, because they possessed, for example, relatively good soils, rich timber reserves or large mineral deposits, were favourably located in relation to existing communications or offered possibilities for energy production.

The development programme for these selected areas, known as Programa de Polos Agropecuários e Agrominerais da Amazônia (Polamazônia), had as its main aim the improvement of service facilities in the broad sense of the term. The investment of 4000 million cruzeiros during the period 1975–1979 was directed, accordingly, at the construction of main and secondary roads, expansion of power supplies, improvement of water supplies, sewerage etc. in existing urban centres, development of new urban centres, expansion of educational and health facilities, training of labour and the building of stores and abattoirs. The programme also included the legalisation of titles to property and measures to ensure that land was occupied in an orderly manner. Various other measures were connected with the Polamazônia, such as an extensive credit programme of the Banco da Amazônia (within the framework of which 3700 million cruzeiros had been made available for the period 1976–1980 for the encouragement of cattle farming alone and a programme for further investigation into possibilities for the exploitation of Amazônia (*Carta da Amazônia* 41, 1976).

Figure 9. Program of Agricultural and Mineral Poles in the Amazon Region



Source: Polamazônia.

The government had developed a similar plan to encourage the large-scale utilisation of the (tree) savannas of western Brazil for modern livestock and arable farming (Programa de Desenvolvimento dos Cerrados, PoLoCENTRO).¹¹⁶

¹¹⁶ Several government publications contain detailed descriptions of both programmes (SUDAM 1976).

The revised policy relating to colonisation projects

So far we have not considered the question of what part the Brazilian government had reserved in its development programme for 1975–1979 for integrated colonisation projects involving small farmers. Some thought should be given to this question, however, because there had been a significant change of course since the arrival of President Geisel on the scene in 1974 and the announcement of the new development plan. The encouragement of the settlement of small farmers had been pushed into the background. The government considered that priority should be given to the encouragement of large-scale activities.

The reasons given for the revised policy can be stated briefly to be that, in spite of all the efforts, the planned colonisation projects had done little to increase the gross national and regional products, to further the occupation of Amazônia, to increase production and employment, or to relieve regional difficulties. It had also been acknowledged that the livelihood of the colonists already settled was problematical in several respects. It had even been suggested that the colonisation programmes led to undesirable voluntary migration and that the colonists who were settled on small holdings formed a threat to the ecological balance because of their traditional farming methods. The government had, in fact, concluded that its colonisation policy had failed.¹¹⁷

No new integrated programmes were therefore to be embarked upon by the INCRA (which had had to endure severe criticism). It would restrict itself to placing colonists in the already existing projects, without undertaking activities that would greatly encourage the arrival of prospective settlers. It would therefore amount mainly to the INCRA making land grants only to voluntary migrants or farmers who already found a livelihood as *posseiros* in or near the colonisation zones. Besides aiming at a rather more gradual growth of the colonist population, the INCRA was trying to improve the living conditions of the colonists already present.

Another notable change was that the government also wished to give more encouragement to private initiative in the realisation of colonisation projects. Private colonisation companies were being enabled to acquire large areas of land (up to 500 000 ha), provided they submitted a detailed plan showing how the land would be divided into *lotes* of between 100 and 500 hectares and granted out as family holdings, and undertook to give the colonists the necessary support. The role of the INCRA in this was only a supervisory one (*Instrução especial* No. 11, 1976). Up to 1976 the instruction regulating these matters had not led to many schemes being actually realised by private enterprise, although it was known that the Associação dos Impresarios da Amazônia wanted to attempt to colonise 500 000 hectares of land along the Cuiabá–Santarem highway, mainly with farmers from Rio Grande do Sul (*Carta da Amazônia* 48, November 1976). The Companhia Colonizadora Marabá S.A. (COMASA) and the Companhia de Desenvolvimento de Mato Grosso (COD331AT) also seemed to have ambitious colonisation plans for areas near Marabá and the northern Mato Grosso (*Carta da Amazônia* 49, December 1976).

117 The new course in relation to colonisation and the arguments supporting it can be found, *inter alia*, in the INCRA publication “Realizações e Metas” (Ministerio da Agricultura 1975), and in “II Plano de Desenvolvimento da Amazônia” (1975, 17–20). See also Müller *et al.* (1975, Vol. II, 56).

Large cooperatives from the Centro-Sul, with many minifundio owners among their members, were also being allowed to participate in the colonisation of Amazônia. The aim here was to encourage the enlargement of farms with the help of the land released by the emigration of members, thereby improving the agricultural structure in the South. Lastly, cooperatives wishing to carry out a colonisation project for their members had to submit a detailed plan to the INCM, which made land available to the cooperative at a low price after it had approved the plan. The cooperative had then to begin the implementation of the project within six months. The price of the land had to be paid off within 20 years, beginning three years after the initiation of the project. The cooperative was responsible for carrying out all the works required within the framework of an integrated colonisation project. It was also expected to create conditions favourable for commercial production. If necessary, credits to finance all this could be obtained from the banks.

The cooperative could obtain land grants of from 100 to 400 hectares, depending upon the kind of farming proposed, the nature of the terrain and the availability of labour in the family. Only half of the project area could be cleared, the rest had to remain *reserva florestal*. With these projects, too, the INCRA kept a watch on the timing and the manner in which they were carried out and intervened where necessary.¹¹⁸

The only project that had taken definite form up to 1976 within the framework of these measures was that of COTRIJUI, a cooperative from the district of Ijuí in the state of Rio Grande do Sul. This cooperative was planning initially to settle 1000 farmers on holdings of 100–400 hectares along the Transamazônica, 120 km west of Altamira. It was hoped to make a start in 1977 on the basis of the already approved project. The plans of a few other cooperatives were less advanced. The INCRA had reserved a total of no fewer than nine areas for such forms of colonisation, mainly in Rondônia (5) and along the Transamazônica near Altamira (2) (Ministerio da Agricultura 1975, 5–6; “Edição documento sobre o décimo aniversário do estatuto da terra” 1974, 16).

This new course may have meant for the INCRA that it would be able to devote more attention to its current colonisation projects, as well as to an effective and speedy allocation and registration of property titles.

Conclusion

A brief look at the principal developments during the period from 1974 to the present reveals that the interest in colonisation programmes aimed to help simple rural people to find a better living had been pushed into the background. There had been a reassessment, resulting in the abandonment of the ambitious plans of the early 1970s. The new objectives were more modest and private enterprise had been brought in alongside the official institutions in the effort to achieve them. Attention was no longer so much directed on colonisation as upon the rapid and large-scale development of the primary sector, particularly in those areas where success was most certain. The role of the government was mainly to create a favourable climate for enterprise, while the actual expansion of livestock and arable farming, forestry and mining was primarily a matter for the large private concerns.

¹¹⁸ Information derived mainly from *Instrução especial* 13, 1976.

This change of course was undoubtedly partly the result of pressure from the private sector, which, since the early 1960s, had always had mixed feelings about the Brazilian government's colonisation plans. Mention should be made in this connection of the Associação de Empresas Agropecuários da Amazônia. This association had its headquarters in São Paulo and comprised 130 large cattle ranching enterprises, mainly from the Centro-Sul. It had believed for a long time that there were good prospects in the west and north of Brazil for a large-scale expansion of livestock farming and that it was sensible to concentrate the development strategy upon this.

Pressure from the private sector, however, was not the only explanation. Another important reason was the government's desire for a rapid increase in the gross national product and its impression that this did not occur quickly enough through the medium of social colonisation programmes. The chances of achieving a rapid increase were much greater if opportunities are given to large-scale private enterprise.

The government had made the change of course acceptable by stressing the disadvantages and limitations of the colonisation policy pursued previously and pointing at the same time to the advantages of the new course, such as faster economic growth. It had also emphasised that, in a world with much hunger and increasingly scarce raw materials, Brazil could exploit its natural wealth to an increasing degree and had a duty to do so. It appears to us that the time was ripe in about 1974 for such a reorientation. There had been no further droughts in the North East and many people had forgotten the disaster of 1970. It was therefore possible without too much political risk to launch a new "development" policy, based less on social considerations.

The second development plan had still largely to be implemented in 1976 and there was little probability that its aims could be fully realised within the prescribed time, in view of the marked slowing down of economic growth in the past few years. Nevertheless critical comments about the possible consequences of the new policy were almost immediately made in the Brazilian press.

The fact that so much importance was attached to the large-scale development of the primary sector through the agency of large, capital-intensive enterprises gave rise to the fear that employment would again be inadequately expanded in the near future and that the tensions between *posseiros*, small colonists and Indians and the big land-owners would continue or even manifest themselves to an increased degree. The past gave little cause for optimism in this regard. It was also to be feared that, again in the future, the economically weak groups would come off worst and that their chances of existence would be further reduced. This would be even more the case if the FUNAI was not more successful in protecting the Indigenous both inside and outside the reserves and if the INCRA was unable to put a stop to the practices of the *grileiros*. Apart from an increasing threat to small farmers, there was a danger of an increase in the malpractices of the *gatos* in their efforts to recruit labour for the big enterprises.

A further fear was that there would be a serious disturbance of the ecological balance, since the increase in agricultural production would not be realised mainly through intensification on the existing area of cultivated land, but through further deforestation. Although the government wished to zone considerable areas as *ecological reserve* and obliged farmers to retain one half of their land under forest, it might be doubted whether it would be able to maintain sufficient control over this and prevent more land than was advisable being cleared. The Brazilian government was still too optimistic about the use potential of Amazônia and underestimated the fact that the

region consisted predominantly of poor soils that were rapidly exhausted after being cleared. It was incidentally not only the large enterprises, with their ability to undertake the clearance of vast areas, that were a threat to the Amazon region. The same was true of the small colonists who, for various reasons, had so far been unable to develop farming methods which guarantee the maintenance of the fertility of the soil.

Last, but not least, attention was drawn to the danger of an increasing domination by, and dependence upon, foreign countries, since, with many major projects, use was or would be made of foreign capital and know-how. This applied not only to mining projects (for example, the participation of U.S. Steel in iron ore exploitation and of various multinationals in bauxite mining), but also the livestock ranching, forestry and cash crop farming projects. In spite of restrictive regulations, a lot of land had already fallen into the hands of foreigners. It had already been noted in 1968 that a half of the Amazon region was surrounded by numerous foreign holdings, with a combined area of 20 million hectares. According to estimates, as much as 11 million hectares in Roraima, Pará and Amazonas was already in foreign hands (Martelli 1969, 136). A very important example in this connection was the D. K. Ludwig enterprise, which occupied about 1.5 million hectares along the Rio Jari and Rio Paru and was concerned with modern large-scale rice growing, timber and pulp production, livestock farming and mining (bauxite and kaolin).¹¹⁹ Would the government's policy lead to more such empire-building?

119 Further details about this multi-national are to be found in Arruda *et al.* (1975, 131 ff.).

