The Dilemma of Food Security in a Revolutionary Context: Nicaragua, 1979-1986

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INTRODUCTION

In recent years, many Central American nations have experienced recurring food deficits and have become importers of food, rather than exporters, as they once were (see Murdoch, 1980: 98-166; Barry and Preusch, 1986: 144-162). Simultaneously, their economies have become increasingly dependent on exports of primary agricultural products. Such agro-export expansion not only increased the integration of these economies into the international market, but it also initially fueled high rates of growth and provided the necessary foreign exchange with which to import essential goods and pay off their debt. However, as a result of economic policies which have promoted the extension and elaboration of the commercial agricultural export sector, the land available for food production has decreased, and the food resources of Central America are being threatened (Super and Wright, 1985: xi).

In conjunction with deteriorating terms of trade for traditional exports, which aggravate the debt problem, the decline in food self-sufficiency has resulted in numerous economic problems: external dependence, vulnerability to volatile foreign staples markets, and increasing expenditures on food imports. The increase in food prices, caused by local scarcity and the higher cost of imported food, severely taxes the limited income of Central America's poor, who spend a major portion of the family's budget on food (Wright, 1985: 33). Thus, the more tragic consequences of a development process that has emphasized commercial agricultural production at the expense of food production -- increasing levels of hunger and malnutrition and massive poverty for the majority of the population -- are not solely economic, but human as well. These are inevitable results of a system whose political and economic structures concentrate the benefits of such development in a decreasing number of hands. In some instances, governments have attempted to alleviate the immediate food shortages by implementing agrarian reform laws; however, in the majority of cases, these reforms have focused solely on the limited redistribution of land and have left most of the political and economic decision-making structures intact. With decision making
and economic planning in the hands of a political elite that has protected, if not shared, the interests of those who have reaped the benefits of the traditional development model, more positive responses to the needs of the poor are not likely.

Thus, any adjustment away from the traditional model of agricultural development in order to improve the lives of the peasantry and achieve food self-sufficiency requires not only moderate reform, but profound changes in the political, economic, and social structures of society. The Nicaraguan Revolution of 1979, by radically transforming relations of production, income, and wealth, represents the first real effort in the Central American region to dismantle the traditionally exploitative social and economic structures that emerged from the growth of export agriculture.

By examining the evolution of Nicaraguan food production and agriculture between 1979 and 1986, particularly in relation to the historical pattern of economic development from which the Revolution emerged, this chapter attempts to contribute to a better understanding of the difficulty of transforming agricultural institutions in order to achieve food self-sufficiency in the context of a mixed economy that still relies on agro-exports as the major source of much-needed foreign exchange and as the center of capital accumulation. In order to maintain its political commitment to the peasantry who had supported it throughout the Revolution, one of the primary objectives of the Sandinista government was to redirect and redistribute the country's resources and productive assets, particularly in the agrarian sector. In this way, it hoped to address the needs of the poor majority, to eliminate the poverty, hunger, and malnutrition which traditionally had characterized Nicaraguan life, and to improve food security for the country as a whole. However, faced with the inherited debt of the Somoza period, the destruction of industrial and agricultural production as a result of the war, the social disruption caused by the war, and the total collapse of the fiscal system, the new government came to a difficult realization: for immediate economic recovery, it would be essential to reactivate and maintain agro-export production, the traditional generator of much-needed foreign exchange. This initial decision to maintain an external orientation in the economy appeared in the eyes of many to be in direct contradiction to, or at least limited by, the commitment of the Revolution to the rural poor and to the goals of redistribution of wealth and food self-sufficiency.

An evaluation of the Nicaraguan case also highlights the particular dilemmas of achieving food security in a political economy in the process of transition. Between 1979 and 1985 numerous obstacles, tensions, and contradictions emerged from the process of social, political, and economic transformation, not only as a result of the preservation of an agro-export development focus, but also because of the complexities
of the mixed economy and the disarticulation created by dismantling traditional structures. Since early 1985, many of the food and agricultural policies have changed significantly. These changes reflect the government's efforts to confront some of the inadequacies and contradictions of its original policies and an important reorientation in the economic strategy of the Revolution in an inward, propeasant direction, with more emphasis on the domestic market than on agro-exports. The policy changes also reflect the government's overall policy shift toward a "survival economy" and the prioritization of production and defense, in the face of tremendous economic hardships and the contra war. The new direction in food and agricultural policy in Nicaragua illustrates one effort to deal with the complex dilemma that many revolutionary transformations have had to confront, i.e., how to achieve economic viability through increased efficiency and productivity while simultaneously improving social and economic equity and food security through redistribution of productive resources.

**PREREVOLUTIONARY AGRICULTURAL DEVELOPMENT**

In analyzing Nicaraguan food policy, it is important first to examine the legacy of the prerevolutionary period, particularly the Somoza era, that the Sandinista government inherited, in order to understand what economic planners were confronted with following the Revolution. As a result of the expansion of commercial agriculture throughout the late nineteenth and early twentieth centuries, Nicaragua in 1979 displayed a duality in agriculture, between the large farms producing for export and the small farms producing primarily those commodities used for domestic consumption. However, the main focus of agricultural development in the century prior to the Revolution was on the export sector, rather than on food crops. This focus implied the development of large-scale agriculture at the expense of peasant production, since the two most important basic food crops, beans and corn, were almost exclusively peasant produced (Weeks, 1985: 103). This expansion and subsequent dependence on agro-exports led to other structural problems for the economy in general and for the food system in particular.

**The Expansion and Diversification of Commercial Agriculture**

During the 1870s Nicaragua, like its neighbors, began to develop an economy based on coffee production, initiating a process whereby peasants were progressively separated from their land. Coffee production increased during most of the first half of the twentieth century and coffee remained Nicaragua's most important crop during that period, representing between one-half and two-thirds of the country's exports during
the 1920s and 1930s (Vilas, 1986: 50). As Vilas argues, the formation of a new agrarian bourgeoisie in Nicaragua was tightly linked to coffee expansion, and that the latifundista patterns of extensive stockraising easily adapted to the new export crop (ibid.: 49). Although General Zelaya's liberal government (1893-1909) took initiatives to support indigenous coffee production by small-scale producers, his overthrow reversed any such efforts and greatly strengthened the conservative social forces by allying them with the traditional latifundista cattle ranchers (Barraclough, 1982: 18). The emerging coffee elite, with the consent and assistance of the new conservative government, brought pressure to bear on small farmers and forced them off of their lands in order to consolidate the land into larger holdings (Deere and Marchetti, 1981: 43).

During the twentieth century, due to its limited industrial base, Nicaragua continued to follow an agro-export development model and deepened its integration into the world market. Stagnant world demand for coffee during the Depression and World War II necessitated and encouraged the search for new export crops. In the 1950s, responding to increases in the world demand and market price for cotton, and as a result of the availability of pesticides after World War II, cotton cultivation expanded tremendously in Nicaragua, seemingly overnight, filling the vacuum created by the coffee decline. Between 1950 and 1965, production increased from 3,500 to 125,000 tons, and cotton's share of total exports went from 5 percent to 45 percent (Vilas, 1986: 50). When the price of cotton declined sharply in the mid-1960s, investments were diverted into cattle raising for the export of beef, since a market for processed meats and fast foods was developing in the United States (Brockett, 1984: 484; Warnken, 1975: 16-19). Between 1960 and 1970, the relative share of beef tripled so that by the middle of the 1970s, beef production represented 25 percent of the value of food production (Vilas, 1986: 51). Despite such rapid production increases, however, per capita domestic consumption of beef was declining because of the increasing amounts being exported. Between 1964 and 1974, per capita beef consumption dropped 12.5 percent, a painful drop for a country already suffering from protein deficiency (Brockett, 1984: 484).

Thus, throughout this period, the agricultural sector, geared toward production for export, assumed increasing importance to the economy. Despite some success at promoting industry and encouraging manufacturing, particularly through the formation of the Central American Common Market (CACM), agro-exports still provided the bulk of Nicaraguan's export earnings, with the five major agricultural products representing 66 percent of commodity exports between 1975 and 1979 (Weeks, 1985: 90).
When one notes that export earnings represented 33.7 percent of GNP in 1975, the importance of agro-exports to the economy as a whole becomes even more apparent (ibid.: 52). Proponents of the theory of comparative advantage have argued that the concentration and diversification of exports during the post-WWII period raised the levels of domestic output and income, increased the country's import capacity, and yielded many of the dynamic benefits of specialization (González-Vega, 1984: 353). High rates of growth of the gross domestic product (GDP) did indeed correspond to the burst in agro-export production. Between 1945 and 1949, GDP grew at an average rate of 3.6 percent, rising to 8.5 percent in the early 1950s, and reaching a Central American high of 11.1 percent between 1960 and 1965 (Vilas, 1986: 51; Weeks, 1985: 62). Per capita GDP rose from $451 in 1950 to $966 in 1977 (in constant 1978 US dollars; Vilas, 1986: 56).

Agro-exports were also indirectly linked to Nicaragua's manufacturing potential in that they provided the foreign exchange needed to import capital goods, spare parts, and raw materials for domestic industry. Such foreign exchange also enabled the country to import manufactured products and food for domestic consumption. In addition, the emerging domestic processing and textile industries relied directly on some of the export products as necessary raw materials and inputs (Reinhardt, 1987: 3). Thus, rather than diminishing the importance of agro-exports in the economy, limited growth of industry and manufacturing during the 1960s and 1970s increased the dependence of the economy on these commodities (Bulmer-Thomas, 1983: 271). And as Weeks has argued, agro-exports have been the dynamic factor in the economies of all of Central America (1985: 98). However, as Brockett (1984) has pointed out, the benefits of the expansion of export agriculture have not been distributed equally.

Consequences of the Agro-Export Model

While the diversification and expansion of cash crops in Nicaragua did provide new sources of income, they had negative consequences for the rural and urban poor, threatened the country's food security, and created difficulties for the economy as a whole. Landlessness increased and land tenure structures were dramatically altered, as tens of thousands of small peasant basic grains' producers were displaced. These peasants were forced to seek work in the cities, to continue migrating onto the rapidly-shrinking frontier, or to join the growing numbers of seasonal workers. In addition, since most of the labor force earned the bulk of its income from the land, it followed that skewed land distribution would have an effect on income level, which, not surprisingly, was dropping. During this period, export agriculture became increasingly
capital intensive and mechanized, with greater importation of foreign capital and technology, a process which exacerbated the problems of unemployment. The combination of these by-products of an increased emphasis on cash-crop production resulted in a situation in which Nicaragua produced decreasing amounts of basic grains and staple foods. This in turn led to the need to import increasing quantities of corn and beans. Combined with declining income and increasing unemployment, this drop in food self-sufficiency had dire effects on the nutritional status of the population.

Institutional Support and Overconcentration of Resources in Exports. It has been argued that the social and economic structure within which government policies are implemented substantially determines their direction and effect (Brockett, 1984). In prerevolutionary Nicaragua, with many of the larger export producers being either Somoza associates or family members, state economic policy interventions were designed to encourage export production:

The prerevolutionary economic situation, which was based on export cultivation, led to changes in the socioeconomic base of the country. The government implemented credit, services, and infrastructure policies for roads and transport, electricity, technical assistance and education, agro-industrial development, etc., with the goal of providing incentives to the large producer and of intensifying agro-export production. (Progama Alimentario Nicaragüense [PAN], 1985: 1; unless otherwise noted, all translations are mine).

Before the Revolution, the private agro-export sector controlled the provision of agri-production inputs, including credit, fertilizer, seed, and technological assistance. The concentration of credit in exports is illustrated by the statistics for 1976, which show that coffee, cotton, and sugarcane, all controlled by large landowners, received 90 percent of agricultural credit, leaving the meager remainder for basic grains production (Austin, Fox, and Kruger, 1985: 20). Staple crops produced for the internal market received less than 10 percent of agricultural credit in 1970, despite their being grown on over half the agricultural land. In addition, the willingness of the United States, Nicaragua's primary source of financing, to provide dollars was generally tied to an agreement to use such finances for agro-export production, rather than for social programs or domestic consumption. For the bulk of the small producers whose primary crops were corn and beans, credit remained virtually nonexistent before the Revolution (Enríquez and Spalding, 1985: 13).
Increasing Land Concentration and Changes in Land Tenure Structure. As Weeks (1985) notes, the commercial development of agriculture has tended to generate a differentiation among the peasantry between the landless and the landed and between holdings based on family labor and those based on hired labor. Such heterogeneity has been the result of a constant process of dispossession which creates the landless peasant who must work for the larger export producer who incorporates increasingly larger amounts of land into his or her possession. In prerevolutionary Nicaragua, the large commercial producers were able to make higher profits by producing export crops than the peasants were producing food for the restricted internal market. As a result, increasing numbers of peasants were bought off their lands. Many were simply forced off, since the political power of the large producers made it easy to incorporate peasant lands into their operations and to restrict peasant property rights.

During the 1870s, coffee expansion began displacing peasants and the creation of a new class of landless laborers. Many of the former smallholders lost only part of their land and became minifundistas, who, with insufficient land to meet subsistence requirements, were forced to supplement their income by working for wages on larger coffee farms. In addition, many of these displaced peasants moved onto marginal, frontier lands, where they combined staple food production with small-scale coffee cultivation and livestock activities (Reinhardt, 1987: 4). A series of "land laws" were passed during the late nineteenth century to regulate the acquisition of national and unused lands. Although supposedly designed to protect the communal land of the "indigenous communities," their coincidence with the beginnings of coffee production and with the increasing value of land reflects the true reason for their enactment: in the parts of the country suitable for growing coffee, the application of the laws resulted in the destruction of the indigenous communities and the displacement of peasants to distant or poorer-quality lands (Pensamiento Proprio (PP), no. 33).

The dispossession of basic grains' producers accelerated with the diversification of export production in the twentieth century, primarily with the expansion of cotton and beef, which even more dramatically changed the structure of rural land tenure and reduced the land available for basic grains' production. Growth in cotton production was achieved through expansion onto new lands, rather than through increasing yields; thus, increasingly large plantations displaced thousands of peasants from the fertile flatlands of the coastal region, particularly in the León and Chinandega departments (see Williams, 1986). The amount of land dedicated to pasture doubled between 1960 and 1975, and many peasants lost the land on which they could produce basic foods or were pushed off onto marginal, unproductive lands (Deere and
Marchetti, 1981: 44). Many of these peasants settled in the Central mountain frontier without title after having been originally expelled by cotton. A number of them continued to migrate farther north and east, where they were able to reestablish themselves as independent producers. This group comprised a significant number of middle-class and rich peasants; however, they lacked title and adequate infrastructural assistance, and thus their ability to produce and market food was limited (Reinhardt, 1987: 4).

The rapid process of land concentration is evident in the fact that in 1963, 5 percent of farms controlled 59 percent of farmland and 51 percent of farm families subsisted on 3.5 percent of farmland (Stanford Central America Action Network, 1983: 216). The gross inequalities resulting from this process of peasant expulsion and land concentration are also apparent in the 1971 census, which showed that 51 percent of the agricultural economically active population (EAP) received only 7.5 percent of agricultural income while 3.5 percent received 63 percent of the income (Deere, 1981: 196). Although the Gini index of land concentration was .74 in 1950, the lowest in Central America, by 1963, it had jumped to .81 (Vilas, 1986: 51).

**Proletarianization, Unemployment, and Poverty.** For the increasing numbers of landless peasants, economic survival was very uncertain. For this displaced population, options were limited to wage employment, migration to frontier regions, or migration to the mushrooming urban areas; however, the fate of the dispossessed peasant prior to the Revolution tended toward a life of unemployment and poverty. With plummeting incomes, the ability of the poor to subsist became increasingly threatened and hunger became a way of life.

The process of proletarianization began with the creation of seasonal laborers, primarily minifundistas, who moved into salary relations, since the size of their landholdings did not generate sufficient subsistence income. These minifundistas increasingly depended for their livelihood on part-time agricultural work on large commercial farms or associated agro-export activities (Barraclough, 1982: 26). Lacking sufficient or good land and with primitive production conditions, low yields, and lack of access to financing or technology, these minifundistas endured an accelerated process of expulsion from their original lands toward the frontier at varying rates and stages during the two decades prior to the Revolution, making accurate measurement of the size of this group, as opposed to totally landless wage laborers, difficult to obtain (Vilas, 1986: 79). However, despite the discrepancy among statistics on the number of "landless" as opposed to the number of minifundistas, most analysts would agree that
produce corn and sorghum to feed cattle destined for the U.S. hamburger market (Collins, 1985: 108). As a result, the government was forced to spend increasing amounts of scarce foreign exchange on food imports to meet domestic demand.

The relationship between export expansion and food imports can be seen by examining the expansion of cotton, which primarily took place in León and Chinandega on lands previously used to produce staple foods. Food imports increased five times between 1960 and 1977, the same rate as cotton exports (Barry and Preusch, 1986: 153). Nicaragua had once been a net exporter of grain, having exported almost 40,000 metric tons between 1953 and 1957. As a result of agro-export expansion, it had become a net importer of grain by the 1960s, importing over 70,000 metric tons between 1963 and 1967 (Dorner and Quirós, 1983: 229).

As a result of the shortages in domestically produced foods and the costly imports, the prices of basic foods continued to increase throughout the 1960s and 1970s. This inflation was severely felt by the poor who often were spending up to 50 percent of their earnings on food. Thus, uneven performance in staples production had important nutritional consequences. On a per capita basis, the average caloric intake in Nicaragua appears to have met minimal nutritional standards throughout the 1960s and 1970s. However, per capita averages mask the true nutritional status of the population at the time. A 1966 study by the Instituto de Nutrición de Centroamérica y Panamá (INCAP) showed that only 43 percent of Nicaraguan families consumed sufficient calories, and that 57 percent of children under the age of five were malnourished (PAN, 1986: 2). A study conducted in 1970 by the United Nations Food and Agriculture Organization (FAO) showed that the bottom 50 percent of the income strata consumed only about one-fourth of the animal protein that was consumed by the top 5 percent, reflecting the inequalities in the distribution not only of food, but of wealth (Spalding, 1985: 224, n. 12). A 1976 USAID study indicated that 42 percent of children under the age of four suffered from first-degree malnutrition (cited in Collins, 1985: 137) and that 57 percent of the rural population suffered from some degree of malnutrition (cited in Centro de Investigacion y Estudios de la Reforma Agraria [CIERA], 1983b: 37).

Adherence to an agro-export model resulted in a series of structural difficulties for the Nicaraguan economy. It defined Nicaragua's role in the world economy as a dependent one: it was vulnerable to international market fluctuations in the prices for its primary exports and dependent on external sources of financing for export production. These two conditions would prove difficult to alter following the Revolution. Furthermore, the expansion of export production had serious repercussions for the
poor. As stated by the National Food Program, "fluctuations in international market prices affected the amount of foreign exchange received for exports, which had serious repercussions for the workers' salaries and national income, while food production for domestic consumption showed alarming deficits and dependency on food imports was increasing" (PAN, 1985: 1).

Overall, the agro-export system represents a process of capital accumulation and economic development which is "socially disarticulated" in the sense described by deJanvry (1978). Due to the outward nature of the export model, development depends on the purchasing power and tastes of foreigners. This implies that domestic wages are not a source of effective demand in the economy. Thus, the logic of capitalist accumulation under the agro-export model encourages cheap labor, which leads to an increasingly regressive distribution of income (ibid.). This process is self-reinforcing in that the inequalities of land and income, which result from agro-export expansion, limit the purchasing power and the demand of the local market. As a result, there is no consumer sector or domestic market large enough to support the emergence of an industrial sector, which Nicaragua would need to break its total dependence on agroexports. Thus, it is apparent that an agrarian reform to redistribute land and income is not solely a matter of social justice, but one of economic necessity (Barry and Preusch. 1986: 136).

**Somoza's "Agrarian Reform."** The impact of agro-export expansion created such massive poverty, inequalities of income, landlessness, unemployment, migration, and hunger, that tension in the rural areas began to mount for change, putting pressure on the Somoza government to intervene. Combined with "encouragement" from the US Alliance for Progress, the growing number of peasant land invasions in the more densely populated Pacific region finally forced the dictatorship to launch a land reform program. In 1964, it established the Instituto Agrario de Nicaragua (IAN) to oversee the colonization of the agricultural frontier. Peasant production in the interior of the country was expanded when 16,500 peasants who had migrated to this region received legal title to their land (Spalding, 1985: 202). However, with little infrastructure, low investment, and poor-quality lands, the project did little to increase the productivity and standard of living of the peasantry. In addition, thousands of squatters on these public domain lands did not have their land titles legally recognized, and even those who did were not always fully protected from land takeovers. It has also been argued that the project, rather than assisting the impoverished peasants, was designed to shift many of
them to the interior, where they could be more easily tapped for seasonal labor by agro-export producers (ibid.: 223).

Despite the land reform program, from 1960 to 1976 in Nicaragua, coffee production increased by 148 percent, sugarcane by 249 percent, cotton by 282 percent, and beef by 268 percent. During this same period, the production of maize, beans, and sorghum increased by only 60 percent, and the average yields of these staple foods showed practically no increase at all during the 1960s and 1970s (Barraclough, 1982: 16). Evidently, export production continued to be the top economic priority.

Regardless of Somoza's nominal reform, it was becoming increasingly apparent that the peasantry would get little relief or assistance and that export production would continue to expand. With control over the economic and financial structures and decisions, Somoza had free reign to develop policies in a way which supported the system, contributed to the government's power, and protected his profits and those of his key supporters. Peasants and rural workers would be given no real role in the system other than providing labor as needed. Even the medium-sized landowners, who, ironically, controlled the bulk of export production, were increasingly marginalized by the larger export producers and commercial and financial elite associated with Somoza. Thus, although the agro-export development model may have resulted in rapid economic growth and increased integration in world markets, by having favored only a select few at the expense of the majority of Nicaragua's poor population, it had also created the conditions for a broad-based alliance against the regime. However, the tentative prerevolutionary alliance with these medium-sized export producers, based on a shared discontent with Somoza, would be shaken after the triumph by their differing opinions on how postrevolutionary Nicaragua should be structured. The private export producers would not respond enthusiastically to the new government's effort to live up to its promises to the peasantry and to improve food security, which would require their dismantling many of the historical institutions from which these producers had traditionally benefited.

**INITIAL DEBATES OVER AGRICULTURAL POLICY**

The fundamental goal of the revolutionary government was to reorient the economy to satisfy the basic needs of the majority. One member of the early Planning Ministry staff characterized the Nicaraguan "difference" as follows:

> Our strategy differs from other models of economic development whose first priority is to establish a model of accumulation. Our first objective is to satisfy the basic needs of the majority of the population. This
creates a new logic, which we call the "logic of the majority," i.e., the logic of the poor. Instead of organizing the economy from the perspective and interest of the top 5 percent, as was done during the Somoza dynasty, we are trying to organize the economy from the perspective of the majority. (Gorostiaga, 1982)

Before the Revolution, capital had free rein, but now the state intended to assume leadership in the new economy in order to change the political balance between landlord and peasant and between capital and labor. It was committed to redistributing resources and raising the standard of living of the poor (Weeks, 1985: 171). The state expanded rapidly after the Revolution with the intention of shifting the economy away from traditional agro-exports to a more dynamic, nationally integrated development program and of encouraging rapid and sustained economic growth (Spalding, 1984: 3). However, reactivation of agro-export production would be necessary for generating the foreign exchange needed for investment in the new social programs directed at poor peasants, landless workers, and urban unemployed in the form of land, credit, education, health care, and rent reductions. In addition, since a domestic capital-goods industry was for the most part nonexistent, foreign exchange generated by agro-exports would provide for essential intermediate and capital goods needed for agricultural, industrial, commercial, and infrastructural development (FitzGerald, 1985). Thus, the new government recognized that for immediate economic recovery, it would be crucial to reactivate and maintain this agro-export production, regardless of the ownership of this sector. As Laura Enríquez indicates,

Agro-export production was the economic foundation of the society in 1979. The Sandinistas sought to overcome this legacy of dependency on agro-export production by developing other strong sectors of the economy and a more equitable distribution of the society's productive resources. But they recognized that this dependency and extreme inequality could not be overcome overnight. (Enríquez, 1984: 276)

As a result, the government was forced to depend on the private sector, which had traditionally produced the needed export commodities. Within this context, it chose a "mixed economy" approach in which various forms of property would coexist and in which the new state sector and the cooperative sectors would work with the private producers. It would simultaneously maintain the "basic needs" approach; i.e., the state would regulate the allocation of resources in line with its political orientation toward satisfying the basic needs of the "popular sectors."

Many in the government argued that combining the two approaches would condition government policies toward addressing basic needs, including food policies, in such a way that, with limited resources to direct to both sectors of agriculture, the
government's options for alleviating the food problem and reorienting the economy toward production for the internal market would be constrained. Food policy options were also limited by the urgency of increasing the food supply. The liberation struggle itself had worsened an already desperate food situation. The Revolution's final offensive in 1979 happened to coincide with the period when fields should have been prepared for planting corn, beans, and other staple foods, and food production was forecast to plummet 40 percent following the victory (Collins, 1985: 108). In addition, government programs had increased the demand for food by increasing purchasing power through policies which resulted in more jobs, higher wages, easier access to credit for the campesinos, and lower rents for land and urban housing, as discussed below. The government's initial reaction was to import basic grains, but many argued that such a strategy could leave the country vulnerable to pressures from external agents, reflecting yet another constraint on economic policy in general and food policy specifically.

Thus, an "efficiency versus equity" debate began between those in the new government who advocated a "food first", i.e., self-sufficiency approach, and those concerned with maintaining the efficient production of agro-exports to generate much-needed foreign exchange. However, when, in 1981, the Reagan administration abruptly canceled a $9.8 million loan to import wheat from the United States, it was decided that achieving food self-sufficiency would be made a top national priority (Austin, Fox, and Kruger, 1985: 19).

Self-sufficiency in basic grains was the cornerstone of the new national food program, Programa Alimentario Nacional (PAN), which was inaugurated in 1981. As the initial PAN declaration maintained, the new strategy would be aimed at "achieving food security for the Nicaraguan people through self-sufficiency in basic grains and the creation of a distribution and commercialization system based on the interests and participation of the masses" (PAN, 1981).

Such a strategy was implemented to confront problems of hunger, malnutrition, and poverty and to assure everyone access to an adequate diet. It was designed to attack the causes of these problems in all aspects of the food system. In doing so, such a strategy implies profound structural changes, which would call for a new orientation in agriculture toward basic grains production for domestic consumption, a new marketing system to assure just distribution and redistribution of national income to increase consumption levels of the popular sectors. (PAN, 1985: 2)

However, the new government did not eliminate the goal of maintaining agro-export production, as it recognized that many export products (cotton, sugar, beef) were vital
not only for generating foreign exchange but also for providing basic raw materials or food products consumed internally (United Nations Research Institute for Social Development [UNRISD], 1986: 206).

An evaluation of Nicaragua's efforts to restructure the agrarian sector, i.e., the production side of the food system, allows for a more in-depth understanding of how the constraints of an export-dependent and mixed economy can limit the process of achieving food security. As we shall see below, the policies that the government tried to implement in order to provide incentives to both food and export producers would become increasingly conflictual, and by 1985, difficult trade-offs would have to be made between the two sectors.

INCREASING FOOD PRODUCTION: TRANSFORMATION OF AGRARIAN STRUCTURES

Many of the agrarian reforms previously attempted in Latin America have concentrated solely on land redistribution. However, a more appropriate, expanded concept of "distribution" would include the distribution of land, farming inputs, and credit, as well as improved access to marketing structures that provide a fair price for peasants' produce (Spalding, 1985: 199). Following this expanded definition, revolutionary Nicaragua's attempt to increase food production involved dramatic changes in production, marketing, and financial structures, through the redistribution of land, new pricing and market controls, and reforms in credit policy. As PAN's Five-Year Plan states, the government was attempting to "maximize the utilization of available land for basic grain production, using incentives such as credit and guaranteed producer prices for peasant producers as well as for state and private farms" (PAN, 1985: 2).

Land Redistribution: The Agrarian Reform Laws and Titling Programs

Expropriation of Somoza Properties. Since the historical pattern of land concentration centered on the growth of export crops and cattle, one of the new government's first major efforts to bring more land into food production would be to redistribute some of this land. Within twenty-four hours of the revolutionary takeover, Decree No. 3 confiscated all property belonging to Somoza and his closest associates and gave the government control of approximately 20 percent of the country's agricultural land (Spalding, 1985: 206) and 25 percent of economic production (Conroy, 1985a: 53). It is significant to note that much of this expropriated land was reorganized as state farms due to a reluctance to divide and turn
them over to individual farmers, which they feared would disrupt the essential agro-export production that had traditionally taken place on them (Deere, Marchetti, and Reinhardt, 1985: 78-81). Rather than redistribute land, the Sandinistas attempted to improve the conditions of the peasant producers through generous credit policies, as will be discussed below, and reduced rents (Reinhardt, 1987: 17). The state also helped strengthen the Asociación de Trabajadores del Campo (ATC), the rural workers' and peasants' association, which focused primarily on improving working conditions for the rural proletariat rather than on the concerns of independent peasant farmers producing basic grains.

Thus, although the first phase of the agrarian transformation may have altered social relations for a segment of the labor force by bringing a significant portion of the agro-export economy into state hands, the remainder of the landless work force and the peasants were unaffected by the policy. In addition, the consolidation of the state sector had no effect on food production for domestic consumption because the state farms were primarily export-oriented enterprises (Deere, Marchetti, and Reinhardt, 1985: 81-82). Pressure from peasants began to mount for jobs, state services, credit, legal titles, and access to land. In addition, many of the individual peasant farmers began to pull out of the ATC and to join private producer organizations, led by large growers.

This process forced the Sandinistas to reevaluate their original focus on the rural workers, a focus that had been based on their view of the peasantry as essentially a rural proletariat in formation. They began to recognize the complexity of Nicaragua's agrarian structure and the importance of the peasantry as producers as well as workers, as the source of the basic grains that were vital to the country's food security.4 This realization led the Sandinistas to agree to the separation of the small landholders from the ATC and to the formation of a separate union, UNAG, the National Union of Farmers and Ranchers (Reinhardt, 1987: 17). The recognition of the importance of the peasant producers inspired a debate, which began in 1980, over the question of a new agrarian reform law. In addition to the role of the peasantry, this discussion brought out disagreements over the role of the private sector and private property, over the "path" toward socialism in the mixed economy, and about the type of production units that would be created through the reform -- individual small farms or cooperatives (Deere, Marchetti, and Reinhardt, 1985: 89-90).

The Agrarian Reform Law of 1981. A series of land invasions and UNAG's growing impetus for an expanded agrarian reform program encouraged government officials to pass a New Agrarian Reform Law in August of 1981, a second, larger step...
in the land redistribution process. This new law allowed the government to confiscate
property in the event of prolonged abandonment, nonproduction, or decapitalization
and to expropriate land which was underused or idle. However, the law affected only
plots that were larger than 500 manzanas in the Pacific coastal region and 1000
manzanas in the interior region (Central American Historical Institute [CAHI], Update
5, no. 20). This law was consistent with the government commitment to economic
recovery through the mixed economy. However, it did constitute a structural change
by eliminating the option of private owners to withhold their property from productive
use (Austin, Fox, Kruger, 1985: 19). As of November 1983, over 436 farms had
been expropriated under the new law. Of those, over 63 percent had failed to exploit
the land efficiently (Thome and Kaimowitz, 1985: 304).

The redistribution during the first fifteen months of the reform was quite slow,
with the actual redistribution of only 30 percent of the expropriated land and the
remaining 70 percent being added to the state sector (CAHI, Update 5, no. 4: 5). One
possible reason for this initial hesitation on the part of the state was that the
revolutionary leaders lacked confidence in the peasants' "traditional" production
techniques and culture (CAHI, Envío, September 1985: 12c). As will be elaborated
below, the concern for maintaining efficient export production on many of the state
farms apparently took priority initially over achieving equity through more rapid land
redistribution.

The government recognized that a variety of land tenure patterns, from
production cooperatives to state farms, was inevitable because the historical process of
social differentiation, induced by agro-export development, had created a highly
heterogeneous rural social structure (Baumeister and Neira, 1984). Nevertheless, due
to the difficulties of incorporating the highly dispersed group of small producers of
basic grains into the agrarian reform process and of providing them technical and
financial assistance, the government encouraged the formation of production or service
cooperatives. Although some have argued that this bias toward cooperative formation
was not the dominant opinion within the Ministry of Agriculture (Reinhardt, 1987: 18),
the statistics indicate a preference: of the land redistributed by the end of 1983, 79
percent went to production cooperatives and the remaining 21 percent to individual titles
(Thome and Kaimowitz, 1985: 304). This emphasis on cooperatives ignored the
needs of many of the individual small basic grains' producers, led by UNAG, who
were arguing in favor of allowing more individual titles under the reform. Between
1979 and 1984, only 0.7 percent of peasant households received land as individuals
Titling Program. The government's initial method of meeting some of UNAG's demands was through a titling campaign begun in 1983. Many individual producers were squatters on public domain lands and were pushing for secure title to the land that they had worked for many years, some since the days of Somoza's reform. Insecure land tenure had prevented many of them from making longer-term investments in basic grains production, so they produced solely for subsistence rather than for the domestic market. In an effort to provide incentives for their production and participation in the food strategy, in 1983 the Ministerio de Desarrollo Agropecuario y Reforma Agraria (the Ministry of Agricultural Development and Agrarian Reform -- MIDINRA) began a program to distribute secure land titles to these settlers. During 1983, 300,000 manzanas were titled through this program benefiting 22 percent of peasant families (MIDINRA, 1985). Some have argued that the government's need to maintain the support of UNAG became particularly crucial during 1983-84, given the upcoming elections and increasing level of contra activity, and thus it was concerned with meeting at least some of UNAG's demands (Thome and Kaimowitz, 1985: 308). Nevertheless, it is important to note that the majority of the beneficiaries of the land titling program were in fact settlers with land in the frontier mountain region whose status was being legalized (Reinhardt, 1987: 20). In other words, the titling program did little to redistribute land to landless peasants; it simply increased the security of many who already had land, albeit illegally. Thus, although significant, the titling program did not constitute a major alteration in land tenure structures.

Although in 1983 and 1984 an acceleration of the agrarian reform increased quality and quantity of land available to basic grains' producers, the majority of expropriated land still remained in the state farm sector, 65 percent in the former year and 57 percent in the latter (CAHI, Update 5, no. 4: 5). In addition, while most of the new land titles were indeed in the fertile Pacific coastal region (Austin and Fox, 1985: 406), they came primarily from the redistribution of marginal state farmland rather than from more valuable export lands (Reinhardt, 1987: 19). In some cases, MIDINRA made an effort to shift state livestock production, which traditionally occupied the coastal lands, to more appropriate, traditionally unused lands in the central highlands and frontier regions, in order to bring these fertile areas back into basic grain cultivation (CAHI, Update 3, no. 2: 3). However, the contra war in frontier areas and the slaughtering of herds by the contras have stymied the government's attempts to move more cattle out of the Pacific lands. As a result, the pressures from the war have exacerbated the growing tensions between the export and food sectors. By 1985, many analysts began criticizing the limited impact of the 1981 reform on the poorest rural...
sectors and pointing to the rising discontent as proof of an inadequate policy (CAHI, Envío, September 1985). The escalation of the war only heightened the government's awareness that difficult decisions about priorities in agriculture, as well as adjustments in policy, would have to be made.

Price Support Policies and Intervention in Rural Markets

As Timmer (1986) has pointed out, Latin American governments have often depressed food prices for two reasons: 1) to placate urban consumers, usually considered the most politically important group; and 2) to maintain industrial profits, thus stimulating investment and growth, by keeping urban wages lower. Such price freezing often comes at the expense of the basic foods' producers and, thus, of long-term food productivity (ibid.: 20; see also DeJanvry, 1978: 152-157, and Murdoch, 1980: 156-159 for more discussion of "urban bias"). During the Somoza period, the government developed the Instituto Nacional de Comercio Exterior y Interior (the National Institute for Foreign and Domestic Commerce -- INCEI) for the specific purpose of holding down the prices of basic foods by releasing large quantities of stored grains as domestic prices began to rise. By restraining price increases in the staples sector, the state forced the economically disadvantaged peasant producers to subsidize the rest of the economy or to join the harvest labor force in the agro-export sector in order to supplement their incomes (Spalding, 1985: 212; Saulniers, 1987). Therefore, the historical inequalities of the marketing system had left the peasants receiving minimum return from their produce and the urban workers barely surviving on minimal wages while the middlemen prospered.

One of the major objectives of food pricing policy after the Revolution was to eliminate this historical disequilibrium, which had been a disincentive to food production. One of the government's crucial policy instruments was guaranteed producer prices, periodically increased, for a variety of basic food products, including basic grains, beans, milk, meat, and sugar. Producer prices would be controlled through the Empresa Nicaraguense de Alimentos Básicos (the National Foodstuffs Enterprise -- ENABAS), an arm of the Ministerio de Comercio Interior (the Ministry of Internal Commerce -- MICOIN). Official prices administered through ENABAS increased significantly for the 1981-82 crop year: maize up 66 percent and rice 77 percent (CIERA figures, cited in Austin and Fox, 1985: 407). Between 1981 and mid-1984 the government tripled its guaranteed price for corn and raised the price for beans, Nicaragua's most important staple food, by 78 percent. Producer prices for sorghum also doubled during this period (Collins, 1985: 195). Producers initially proved
responsive to these increases, thus temporarily validating the effectiveness of pricing policy as an incentive mechanism (Austin and Fox, 1985: 407).6

There were several difficulties associated with the new pricing policy. First, government guarantees to small farmers of higher prices for food initially contributed to labor shortages in that they provided incentives to individual small farmers to produce on their own land and not be forced to work for agro-exporters (Enríquez, 1985a: 280). Second, when inflation began to accelerate at unprecedented rates in 1984 and 1985, the incentive effect of the pricing policy became more limited. Although price guarantees protected the peasant producers from the traditional price fluctuations and exploitative exchange relations that had historically undermined their income, prices set for corn and other peasant products were unable to keep pace with rising rural consumer prices. While the producer price for corn and beans had increased sevenfold between 1978 and 1984, the price for a pair of rubber boots had increased 28 times and that of a pair of trousers 140 times (CIERA, cited in UNRISD, 1986: 198). The terms of trade between the countryside and the city were rapidly moving against the former, creating a disincentive to production, particularly of basic foods. In addition, many peasant farmers found it cheaper to buy their food at the government-subsidized consumer prices than to produce it, resulting in an even greater decline in food production (Mesoamerica [Meso], May, 1986: 10).

Schejtman has argued that one of the primary reasons for the contradictions in producer pricing policy has been that the Nicaraguan government often tended to treat diverse forms of production -- peasant, capitalist, cooperative and state -- as one and, in doing so, found it difficult to design policies specifically adapted to the logic of peasant production (1983, cited in UNRISD, 1986: 198). Pricing policy was generalized to suit a variety of agricultural sectors, despite each having a different production logic which would condition the potential effectiveness of the policy. A 1986 survey of one thousand peasants indicated that the main demand of the peasant producers was for access to basic consumer goods at affordable prices, rather than for higher producer prices. The study also indicated that these peasants calculated the increases in producer prices only in terms of relative changes in input and consumer prices, which provides a rational explanation for their unresponsiveness to the pricing policy (interview with Sonia Aburto, CIERA, August, 1986).

Another contradiction that resulted from the producer pricing policy and state intervention in rural markets was that rural marketing structures became increasingly disarticulated. Price controls and state regulation often displaced merchants from commercial activities in rural areas; however, the state was often unable to perform the
functions that these agents had performed immediately, thereby restricting access to the food that was being produced. Prior to the Revolution, in many cases, an individual merchant not only had bought the peasants' produce, but also had provided loans to the small producers and sold them production inputs and consumer goods, in many cases on credit. State attempts to replace these functions often decentralized them among numerous state institutions. This division of functions necessitated extra trips for the peasant producer and often a loss of time in having to deal with different bureaucratic agencies. As Peter Utting (1987) noted, the time lag between the disarticulation of old structures and the consolidation of new ones to replace them reflected a much broader problem associated with the transition process in general and one that the planning process needed to deal with more effectively.

In addition, due to the dispersion of the large number of small-scale basic grains' producers, the government lacked the personnel and technical capacity to control the basic grains' market completely. With an expanding black market, resulting from the widening gap between supply and demand, many producers found government prices less appealing than those of the parallel or black markets; thus, the amount of basic grains that ENABAS controlled was decreasing (Meso, May 1986: 2; Saulnier, 1987). This phenomenon reflected the difficulty of effectively administering price control policies and retaining a certain level of market control in the context of a transitional mixed economy where a free market, with potential speculators, influences policy implementation. The tensions resulting from pricing and marketing policies demonstrate that constant attention and flexibility are required of policy-makers in economies undergoing transformation in order to determine the appropriate balance of market forces and state control within the economy. Such a balance is of fundamental importance in maintaining the availability of sufficient food for the entire population.

Control over the Financial System and Credit Allocation

It is often argued that redistribution of land alone is insufficient for addressing the needs of the peasantry, without a simultaneous redirection of investment and other resources, particularly credit, to help the small producer. As James Austin points out, "Access to credit is the key to other inputs" (Austin, Fox, and Kruger, 1985: 21). In fact, it has been argued that the agrarian reforms of Bolivia, Peru, and Mexico all had little success because they were limited strictly to land redistribution and failed to redirect the crucial financial structures necessary for a complete agrarian transformation.
The revolutionary government of Nicaragua took its agrarian reform a step farther. Prior to the Revolution, the private agro-export sector in Nicaragua controlled the provision of agri-production inputs, including credit, fertilizer, seed, and technological assistance. As mentioned above, large export producers received over 85 percent of the loans made by the financial system to the agri-sector from 1968 to 1979, leaving the meager remainder for basic grains' producers (Enríquez and Spalding, 1985: 12). By consolidating the Sistema Financiero Nacional (The National Financial System -- SFN) in 1979, the revolutionary state broke the power of the traditional economic groups and gained control over some of the essential tools necessary to transform the economy. By controlling the allocation of finance, determining investment priorities, and restructuring credit, the government was able to rupture the bond between the agro-export elites and the financial infrastructure, allowing for a "democratization of credit" and a redirection of financial resources toward food production (ibid.,: 36).

Control of the SFN enabled the government to assume direct control over internal distribution of credit and the allocation of financial resources to both public and private sectors and to direct these resources in accordance with the new political orientation and the basic needs/mixed economy approach. Production loans were the principal instrument used initially to stimulate basic grains' production, 90 percent of which was in the hands of peasants (Spalding, 1984: 7). Small- and medium-sized individual producers, as well as cooperative members previously excluded from access to credit, were now incorporated into the financial system. Reflecting the government's new priority of foodstuff production, 313 percent more area planted in basic grains was financed during the 1980-81 cycle than in the 1977-78 cycle. Peasant producers with holdings under 36 manzanas or in production cooperatives accounted for 92 percent of that acreage (CIERA, from Deere, Marchetti, and Reinhardt, 1985: 83). Loans to small farmers multiplied sevenfold between 1979 and 1980 (Sims, 1981: 7), and by 1981, 51 percent of corn farmers received credit as compared to 27 percent in 1978-79 (Spalding, 1984: 7). The total amount of credit allocated to the countryside in 1980 was $70 million (Sims, 1981: 7). Not only was credit more available, but credit terms were more flexible. In an effort to benefit the basic grains sector, small farmers were charged 13 percent; to encourage collectivization, cooperatives received the most favorable interest rate, 8 percent, much lower than the 20 percent rate of inflation (Enríquez, 1985a: 275).

This "spilling of credit in the countryside" was criticized in its early stages for its lack of focus and its inefficiency, since, because of limited access to other inputs,
production did not increase proportionately (Spalding, 1985: 209). Low production levels, exacerbated by the 1982 floods and drought, led to problems with repayment, as small farmers' debts reached massive proportions in 1983 (Austin, Fox, and Kruger, 1985: 21). As a result, the government agreed to waive the debts of thirty-eight thousand small farmers totaling 350 million Córdobas in 1983 (CAHI, Update 2, no.13). Nonetheless, despite the subsequent leveling off of lending after 1983, in 1984, small and medium independent farmers and cooperative members obtained sufficient bank credit to plant 372,300 manzanas of corn, beans, and other staple crops, a figure that contrasts sharply with a peak of 20,000 manzanas before the Revolution (Collins, 1985: 195).

With control of the financial system, the revolutionary government was also able to determine the direction of investments and of scarce foreign exchange. Immediately following the Revolution, the quality of most land devoted to basic grains was low, since the peasant producers had been pushed from the more fertile lands by export production and since there was little irrigation or fertilization. Although efforts would be made to transfer food production to more fertile lands, the government also decided to make significant investments in irrigation and fertilizers. It developed the Plan Contigente de Granos Básicos, the Emergency Grain Plan, a capital- and technology-intensive effort to raise basic grains production on large state farms. Although partially successful, the program's high susceptibility to technical failure and its high import needs made it somewhat inappropriate (interview with Richard Stahler-Sholk, Coordinación Regional de Investigación Económica y Social [CRIES], July, 1986). As a result, in 1986 efforts were being made to modernize peasant production on a smaller scale, with the hope that increased irrigation would lessen the small farmer's vulnerability to unfortunate weather conditions and allow for year-round production and more crop cycles (Meso, May, 1986: 10).

Furthermore, the historical development of agro-export production had pushed Nicaragua's peasants off the Pacific coastal plains into the interior highlands. This shifted much of the country's food cultivation to areas where roads were poor or nonexistent. Delivery of inputs for food production and transportation of the food to market was therefore difficult and costly. To alleviate this problem, the revolutionary government began diverting some of its investment into road construction to these areas. In addition, efforts were made to supply credit to the small staples producers in the form of inputs such as seeds, tools, and fertilizers. Furthermore, the government set up training programs for improved farming, storing, and transport techniques to increase yields and decrease losses from spoilage (Collins, 1985: 196). These and
staple crops began to decline in the 1983-84 harvest, bean production grew steadily (United States Department of Agriculture [USDA], 1984: 1).

However, basic grains production often failed to live up to expectations, for, as Minister of Agriculture Jaime Wheelock noted in 1983, Nicaragua was investing ten times as much in the production of basic grains as it did in the prerevolutionary period, but only attaining an overall 50 percent increase in staples output (Barricada [BAR], Feb. 28, 1983, cited in Spalding, 1985: 215). Corn production, in particular, was a disappointment because, although growth rates were positive during the 1980-81 harvest, it still lagged far behind other staples. The 1982 floods exacerbated these problems and in that year corn output fell below pre-1977 levels (CEPAL, 1983). Given the importance of corn in the Nicaraguan diet, this decline presented planners with a serious disappointment. The problems with corn production necessitated increased corn imports in 1982, thus keeping food self-sufficiency out of reach. Furthermore, despite the temporary self-sufficiency achieved in rice and beans in 1981 and the fact that production of these two crops was higher in 1984 than during the prerevolutionary period, the output for all food crops was declining by the beginning of 1985.

The previous examination highlights various factors that were potential contributors to the government's inability to improve food security by 1985. It illustrates the disequilibria that result from contradictions inherent in a revolutionary process that transforms productive and marketing structures within the context of a mixed economy. While the escalation of the contra war, inflation, the foreign exchange crisis, and unfortunate weather conditions indeed worsened Nicaragua's food problem, a significant amount of responsibility for the continuation of this problem can be attributed to the dependence of the economy on agro-exports and to the government's attempt to encourage and protect the export sector, both private and state. This dependency hampered government efforts to redistribute land to peasants for food production, strained the financial resources available for credit and price subsidies, and reduced the potential alternatives for achieving food security in the face of a growing economic crisis and war.

**THE CONSTRAINTS OF AGRO-EXPORT DEPENDENCY**

As noted earlier, the Sandinistas' primary goal was to redistribute the country's resources to the previously marginalized population, the peasants and rural workers, in order to improve the well-being of the population and the food security of the country as a whole. However, the government recognized the need to increase production,
especially of exports, to generate foreign exchange to be used for the new social programs and to meet their goals of redistributive development. Since state participation in the production of export crops was limited, as E. V. K. FitzGerald recognized, "meeting production targets [for export products] depended on the cooperation of the private sector. The objective was to reflate the economy without creating such enormous imbalances as would destabilize the economy" (1982: 215). As a result, the economic plan contained substantial risk and numerous potential problems in that future economic growth would depend on the continued production of export products, which would in turn require the continued allocation of scarce resources to the export sector, both state and private, creating competition with the peasantry and with production for the domestic market. By 1985, the government would find it increasingly difficult to balance these competing interests in the face of an economic crisis. The export focus would also require that the government maintain its political alliance with the export producers; however, the government's ability to do so and to maintain the cooperation of the private export producers would become more constrained, particularly as the need to improve the domestic sector and to maintain the alliance with the peasantry increased in importance and eventually became the government's top priority.

**Competition over Land**

**Phase I.** In order to build the confidence of the private sector, immediately following the Revolution the Junta promised that the state sector would be "of precise extent and clearly delimited characteristics" and that "properties and activities of the private sector would be fully guaranteed and respected" (Plan for National Reconstruction, as quoted in Gilbert, 1983: 10). Plan 80, their initial economic program, placed great importance on the concept of "national unity," an important element of which was the private sector:

The point is to unite salaried workers with small producers and artisans, with professionals and technicians, in a single powerful bloc of national unity. It is also a question of integrating patriotic businessmen, offering them the state support necessary to reactivate the private sector within the production targets in this programme. (As quoted in Black, 1981: 204)

Therefore, in an effort to respect private export property while implementing the first phase of land redistribution, the Junta maintained that there would be no upper limit on the size of landholdings. Large estates were largely unaffected by the reform unless they had been owned by Somoza and his associates (Weeks, 1985: 160). This
statement is supported by the fact that in 1981, the state controlled 15 percent of cattle and coffee, 16 percent of cotton, 43 percent of sugar, 55 percent of meat packing, and 91 percent of tobacco, with each case reflecting the ownership pattern of the Somocistas (Sims, 1981: 5). As a result, much of the large landholding remained intact and the government moved cautiously on demands for additional expropriations, focusing instead on improving rural wages and working conditions (ibid.: 5). In early 1981, a World Bank study found sufficient guarantees to conclude that the Nicaragua government had constructed a "framework wherein the private sector can satisfactorily operate" (Washington Letter on Latin America, December 9, 1981, as found in Austin, Fox, and Kruger, 1985: 17).

The initial decision by the government to retain the expropriated land as state farms, as well as its hesitation to expropriate more land, indicates that the state was willing to adjust its agrarian transformation to the reality of an agro-export economy. Concerned with protecting export production, it believed that breaking up these export farms for redistribution to peasants in order to increase food production would be to "take a historic step backward," by causing a dramatic decrease in export productivity (Reinhardt, 1987: 16). Thus, it could be argued that during the first stage of the agrarian transformation, productive efficiency took priority over equity.

**The Export Sector and the 1981 Agrarian Reform.** Despite an apparent respect for export property, government actions were insufficient to offset the uncertainty and lack of investor confidence resulting from limitations on the private sector's political influence. While it was generally realized that profits could be made, many in the private sector were fearful of the FSLN's definition of the "logic of the majority" leading them to challenge the regime openly. By 1981 decapitalization had become a serious problem (Austin, Fox, and Kruger, 1985: 17). Combined with growing pressure from the peasantry and the growing recognition of the need for food security, such private sector sabotage convinced the government that a stricter law was necessary in order to make more of the inefficiently used export lands available for food production by the peasantry and to discourage decapitalization.

Despite the implementation of a stricter Agrarian Reform Law in 1981, the majority of land and export production still remained in private hands, primarily because the majority of Nicaragua's export production had traditionally been in the hands of medium-sized producers, with landholdings between fifty and five hundred manzanas. The first phase of the reform had very little effect on these properties. The 1981 Law only affected the landholdings of over five hundred manzanas, reducing
them from 36 percent of farmland in 1978 to 11 percent by 1984 (CAHI, *Envío* 4, issue 51 [September, 1985]: 13c). The medium sized holdings were unaffected by the law unless they engaged in sharecropping or other debt service arrangements; as a result, their percentage of total farmland remained the same, 43 percent, between 1981 and 1984. In addition, as mentioned above, the majority of the land that was expropriated during this period remained in the hands of the state, reflecting little change in the position of the government toward export production and peasant food production.

Therefore, in 1984, private producers still accounted for about two-thirds of the production of cotton, coffee, and beef, and private farmers controlled 70 percent of all agricultural land (Thome, 1984: 13). As long as private owners continued to operate efficiently, maintain investment, and obey labor, health, and other laws, they could keep their businesses forever.

In spite of this, much of the private sector viewed the new laws as evidence of government hostility. The expropriation decrees were characterized as arbitrary, and the decapitalization and agrarian reform laws were seen as a threat to the future of private enterprise (Gilbert, 1983: 20). While many export producers recognized their continued economic power and importance, their diminished political influence created a negative investment climate and tensions began to rise.

Harvest Labor Shortages. One of the more critical problems facing the government concerning agro-exports was the shortage of labor for harvesting major export crops, which was a byproduct of the agrarian reform. Although the Sandinista agrarian reform benefited many peasants and small landholders in the countryside, a negative consequence of the policies was a vast decrease in the number of harvest laborers who were needed to work on the cotton, sugar, and coffee plantations to maintain the agro-export production. The effect of the agrarian reform was to disrupt the traditional rural power structures which had guaranteed a sufficient supply of cheap labor for the private export industries, a disruption which became more evident during the critical months of the harvest. Thus, a contradiction appeared between the harvest labor demands required to maintain agro-export production and the basic structural changes in the agrarian sector which grew out of demands for a more equitable distribution of resources (Enríquez, 1985a: 266).

Agrarian reform policies combined to produce "campesinización," the tendency among workers to stay and work on their own small plots of land as opposed to going to work on the agro-export estates as wage laborers. With the significant increase in the amount of land available to the rural poor and lowered rents, the campesinos had
access to a better standard of subsistence, which reduced their need to supplement their income through harvest labor. Credit policies diminished the number of campesinos who would leave their own plots to work on the agro-export estates:

We already know that in many areas, particularly in the western region [where most cotton production takes place] we've had productivity problems. . . . Now that the revolution has opened up credit possibilities for the small farmers, we've noticed that they want to stay on their own land and this has had sharp repercussions on the export economy (Jaime Wheelock, Minister of Agriculture, from Enríquez, 1985a: 272).

Furthermore, in their attempt to satisfy the agro-exporters by holding down wage demands, the government established a wage scale for harvest workers which was ironically too low to provide significant incentive to attract temporary workers, particularly where other traditional forms of economic or political coercion were reduced or eliminated. Finally, the government's guaranteed producer prices to small farmers growing food also provided incentives to them to produce on their own land and not for the agro-exporters (ibid.: 273). One government official concisely summarized the problem: "these and other measures and, more fundamentally, the rupture in the bases which sustained the Somocista model of development, [had] provoked a sudden consequence in the agricultural sector: a shortage of seasonal labor in the coffee and cotton harvests" (Vice-Minister of Agrarian Reform, Salvador Mayorga, cited in ibid.: 274).

In dealing with this dilemma, the government could not use economic coercion to force workers to help with the export harvest, since it was precisely this economic coercion and the extreme inequality produced by the pre-revolutionary agricultural structure which fueled the struggle against Somoza and maintained the support of the campesinos for the FSLN. While the government's reforms had eliminated much of the need to work in the export harvest, they were basic to the agrarian reform policies and were not likely to be done away with in order to generate a harvest labor supply (ibid.: 276). Therefore, the state was forced to implement other short-term methods to alleviate the harvest labor shortage, including a child care program to free parents for labor during harvest periods and volunteer labor, using university and high school children during January and February to pick cotton and coffee (Sims, 1981: 6).

However, as Enríquez accurately points out, reliance on a voluntary work force could not serve as a long term solution to labor shortage problems because the revolutionary enthusiasm which typically follows the initial period of a transformation could not be expected to continue indefinitely (Enríquez, 1985a: 277). Thus, the government
would have to find other alternatives to meet labor demands of the private export sector in order to encourage their continued cooperation in production of needed export goods, while maintaining and advancing the Sandinistas' commitment to agrarian reform and social equity.

**Competition over Credit and Foreign Exchange**

As discussed above, by consolidating the financial system after the Revolution, the government was able to determine credit and investment priorities and to direct scarce foreign exchange toward priority areas such as basic foods and exports. With a scarcity of financial resources and many potential peasant recipients, there was an initial concern that the new credit program would reduce the amount of credit available to the agro-export producers (Spalding, 1984: 7). Nevertheless, the government followed through on its credit program, distributing generous quantities of loans between 1980 and 1982. However, in 1982-83, as economic difficulties began to mount, officials became concerned with the slow rates of recuperation of loans from the small farmers and with the need for a sound financial policy. By 1983, it was clear that the country's limited internal resources would not be sufficient to finance national development. Therefore, renewed emphasis was placed on generating foreign exchange, and the government began to target more of the available credit toward the agro-export sectors (Enríquez and Spalding, 1985: 32).

In order to appease the private producers, the government subsidized export production, as it did basic grains, by keeping interest rates for loans below inflation rates (Spalding, 1985: 210). To reduce the private sector's need to risk substantial amounts of its own capital, the February 1985 stabilization plan gave credit advances covering 100 percent of cotton producers' production costs and 80 percent of the expenses for coffee and sugar cultivation (Enríquez and Spalding, 1985: 34). However, a problem arose as some producers began using these low-interest loans to buy dollars on the black market instead of purchasing the prescribed amount of agricultural inputs or using the loans for productive purposes (ibid.). These activities increased tensions between the private sector and the state, and the latter became increasingly fearful that these illegally bought dollars would end up in Miami bank accounts or, worse, in Honduras as funds for the counterrevolutionaries.

Despite the Central Bank's favoring the private export sector with respect to foreign exchange, the amount of foreign exchange available for distribution was constantly decreasing. As a result, private producers began to complain about insufficient funds to cover costs and about bureaucratic delays in dispersal of loans.
both of which, they argued, were impeding the production process (Spalding, 1984: 15). The private export producers also complained that concentration of credit and investment in basic grains production left little for export production and thus inhibited their ability to produce. Imports were limited by access to foreign exchange as well, and the power of the government to determine distribution of foreign exchange for national needs and development priorities increased while that of the private productive and commercial sectors decreased. Furthermore, until 1982 companies received Córdobas, not dollars, for exports, because the government feared that foreign exchange would be illegally channeled out of the country. The private sector considered this an infringement on their economic freedom (Weeks, 1985: 171).

In order to stimulate the private sector, the government had agreed to put up the working capital by providing plentiful credit, to guarantee minimum prices that would allow producers to make a profit, and to subsidize any sudden drops in international market prices, in order to leave producers free to use their money to make invest further in production (Collins, 1982: 41). However, concern that private producers were absorbing bank resources without proportionate increases in production began to heighten tensions between the state and the private export producers (Enríquez and Spalding, 1987: 119). For example, despite government credits covering 100 percent of production costs, many large cotton producers were unwilling to raise production levels because of what they considered the uncertainty of their status after the agrarian reform (ibid.: 40). As a result, land cultivated in cotton fell by 55 percent between 1977-1978 and 1980-1981 (Colburn and de Franco, 1985: 281).

The government initially tried to prevent credit increases to medium and small producers from eating into available credit for export production, a tactic which was highly criticized as contributing to the Rural Credit Program's inability to reach more peasant food producers. The growing economic crisis only heightened this competition for resources. By 1985 shortages in foreign exchange required that the government rely on monetary issues from the Central Bank to provide money for credit, investment, and subsidies. The fiscal deficit subsequently skyrocketed, and the disequilibria created by an expanding money supply with disproportionate increase in production resulted in an inflationary spiral. As a result, the government was forced to trim the fiscal deficit, limiting the amount of financial resources available to allocate to the two agricultural sectors. Combined with the unproductive, "unpatriotic" behavior of many of the private landowners, the crisis was encouraging many officials to rethink their priorities.
POLICY READJUSTMENT: 1985-1986

As we have seen, the government's "national unity" alliance with the private landowners and its concern for maintaining export production restricted its ability to implement the agricultural policies designed to encourage food self-sufficiency, evident in its hesitation to expropriate more land for redistribution and the continued direction of financial resources toward exports. Until 1985, Sandinista efforts to increase domestic food production focused on increasing the efficiency of land use, through liberal credit and technical assistance, and on minor redistribution of nonexport lands, primarily marginal state lands. Although the political power of the large landowners was limited, the government's concern for preserving their cooperation meant that their property would be highly protected, restricting further expropriation and redistribution to the food-producing peasantry.

Rising Peasant Discontent

The political pressures from the large commercial producers were not the only political considerations that the Sandinistas had to address with respect to agrarian policies. At the end of 1985, there were still 105,000 families with little or no land in Nicaragua. Half of these were concentrated in Region IV, the Pacific Masaya region. In 1985, this region also had 30,000 minifundistas, with plots too small to support them. Furthermore, the contra war and the Sandinistas' "empty border" policy were increasing the number of landless peasants and farmers. However, only 11 percent of landholdings in the country fell into the category of 500 to 1,000 manzanas -- the size subject to expropriation -- and most of it was being efficiently used. With a significant number of rural poor still untouched by the agrarian reform between after three years, pressure on the government continued to mount from both sides.

Conflict between the government and many of the independent peasant farmers, represented by UNAG, focused the government's emphasis on cooperatives as the form of production organization. Until 1985, with some exceptions, forming a cooperative was a condition for receiving land; however, many basic grain's producers were unaccustomed to this form of production, and thus were untouched by the reform (CAHI, Update 5, no.4: 4). In addition, the conservative opposition increasingly began using as anti-Sandinista propaganda the fact that during the first three years of the agrarian reform, well over two-thirds of the expropriated land was taken over by the state. The November, 1984 elections demonstrated that the conservatives were not the only ones concerned with the inadequacies of agrarian policy: Sandinista support fell significantly in many of the Pacific departments that traditionally had been important...
FSLN strongholds, including Masaya. A strong message indicating need for a policy adjustment was evident in the fact that support for opposition parties in the election was strongest in areas where less than 10 percent of peasantry had received land (CAHI, Envío 4, issue 51 [September 1985]: 13c). Another reflection of the growing discontent was that many of the politically active peasants who had once volunteered for the militia began to oppose the draft and engage in a "political strike," choosing not to participate in FSLN rallies and in UNAG (ibid.: 5c). The message became even clearer when, in May, 1985, land-poor peasants in Masaya began demonstrations demanding land and a private cotton farm was seized. These protests represented a crisis which would test the government's commitment to one of its strategic bases of support (CAHI, Update 4, no 23: 1). The government would have to respond.

**Adjustments in Land Distribution: The 1986 Agrarian Reform Law**

Because of increasing pressures from the contra war and the government's need to maintain support of the peasants, particularly in the war zones, beginning in 1985 the Sandinistas began to reevaluate and transform their agrarian reform policy significantly. An important event in this transformation occurred when the government took the side of the peasants in the Masaya case and opted to redistribute the disputed cotton lands held by Enrique Bolaños, which was protected under the 1981 law, to individual peasants. The government's response to the explosive situation in Masaya reflected its realization that it was no longer possible to protect some of the cotton farms in this region, at the expense of basic grains production and internal imperatives. The decision to invoke a "special agrarian reform" clause of the 1981 law in this case, the first such use of the clause, resulted from the convincing argument put forth by UNAG that food shortages were becoming as serious as foreign exchange shortages (CAHI, Update 4, no 23: 3). In addition to the important Masaya decision, in 1985, 323,196 manzanas of land were redistributed to 15,470 families as individuals or production cooperatives, 23 percent more than the amount redistributed in 1984 (Dirección General de la Reforma Agraria [DGRA], 1986: 4-6). The 1986 reform plan indicated that another 305,202 manzanas would be redistributed, benefiting 16,789 families (ibid.).

Although these figures are important, a more significant aspect of the 1985 redistribution is that it represented a distinct attitudinal shift on the part of the government in a more propeasant direction. In addition, it reflected an apparent recognition by policymakers of the contradictions and inadequacies inherent in the previous policies and of some of the reasons why they had failed to encourage the
participation of independent basic grains' producers in the food strategy. The 1985 Agrarian Reform Plan originally indicated that 60 percent of the land that would be redistributed would be given to cooperatives and that only 6 percent would go to individual families. However, in response to the carefully organized pressure from UNAG, the government actually distributed almost half the land to 5,636 individual farmers, three times as many as had received land in the period from 1981 to 1984 (CAHI, Update 5, no. 4: 4). In addition, 95 percent of the expropriated land went to cooperatives and to small and medium individual producers and only 5 percent to the state sector, indicating another shift in the distribution pattern (MCAR, March 21, 1986: 3). In another interesting trend, 60 percent of the land distributed in 1985 came from the state sector and 40 percent from negotiated sales and expropriations (CAHI, Update 5, No.4: 4). Apparently, in 1985 the state sector had decreased. Predictions from MIDINRA indicated that this trend would continue and that 39 percent of the land planned for redistribution would come from the state (CAHI, Update 5, no. 20: 1). According to the director of MIDINRA’s Department of Land Tenure, the state sector is expected to be reduced to 10 percent within the next few years (ibid. 5, no. 4: 4).

What appeared to be a new, third phase of the agrarian reform was formalized on January 11, 1986, when a third Agrarian Reform Law was announced. It lowered the 1981 ceilings on land subject to expropriation from 500 and 1,000 manzanas (depending on the region) to 50 and 100 manzanas and authorized the expropriation of land for "public use or social interest." As a result, many landholdings under 500 manzanas, which include many of the medium-sized private export producers, are no longer exempt from potential expropriation. In addition, MIDINRA will no longer consider solely whether the land is being used efficiently in cases of extreme public interest (ibid. 5, no. 20: 1). The new law makes it apparent that the government will no longer hesitate to take the type of action it took in the Masaya redistribution if such action is deemed necessary. In fact, as of May, 1986, there had been thirty cases where the "public interest" clause was invoked (ibid.).

Vilas has argued that the text of the 1986 law illustrates a decision on the part of the government to satisfy the land hunger of the peasantry, but without breaking the alliance with the large landowners, since, by removing the manzana limits on land subject to expropriation, it gives the government the option of expropriating medium-sized properties, not solely those of the larger landowners (1987: 243-244). However, it is important to reiterate that the most significant element in the alliance with the private sector was in fact the medium-sized producers, since they controlled the bulk of export production. By making them subject to expropriation, the 1986 law appeared to many
of these producers as a threat. In a CAHI interview, the president of the Conservative party articulated the views of some of the private landowners. He complained that the government had "responded politically," i.e., had expropriated the lands of "unfriendly" landowners; and, by doing so, it had disrupted production on some of the most efficient export farms. In addition, he argued that the threat of expropriation has led to further decapitalization and to a lack of confidence in the future (CAHI, Update 5, no. 20: 2). MIDINRA responded that the law has in fact encouraged investment, since producers believe their chances of survival are greater if they run their farms efficiently. The Ministry also argued that many landowners had decapitalized before the new law was passed, and that the failure to cooperate, particularly among cotton producers, was one of the factors that encouraged policymakers to change the policy (ibid.; Reinhardt, 1987: 32). Despite the government's having proceeded cautiously in some of the most important export-producing regions, including Masaya, in recognition of the politically delicate situation, many landowners have expressed considerable uncertainty about their future (Economist Intelligence Unit, Country Report [CR], no. 1, 1987: 14).

By increasing the land pool, the 1986 Agrarian Reform law made it much easier to redistribute land where it was most needed, and the number of small private producers, who are important producers of basic grains, increased dramatically. The minister of agriculture, Jaime Wheelock, estimates that twenty thousand farmers benefited from the new policy in 1986. Many policymakers predicted that the change would have a positive effect on domestic food production and would alleviate food shortages. Despite these optimistic predictions, however, other policymakers remained uncertain as to what the actual effect would be. While the inclination of these farmers may be to cultivate basic grains for domestic consumption, which would ease the food shortages, some officials voiced concern that this would lead to a decline in production of export crops, which would hurt foreign exchange earnings. In addition, there was concern that the new land distribution would increase the process of "campesinización," leaving the large state and private export farms without seasonal laborers. Still others argued that peasants might abandon basic grain production in favor of export crops once they recognized that the latter were more profitable, thereby lessening the reform's ability to eliminate food shortages. Apparently, the debate over the agrarian reform will be as lively in 1987 as during the initial years of the Revolution.
Adjustments in Pricing and Marketing Controls

As Vilas has argued, the policy of fixing prices for food production combined with the imbalance in supply mechanisms discriminated against the peasantry. This reduced the impact of the other policies aimed at improving the lives of the peasantry and encouraging their participation in the food strategy; in addition, it provided political ammunition for the counterrevolutionaries (Vilas, 1987: 235). In order to address the contradictions in pricing policy, in mid-1984, in the face of worrisome drops in basic grains production, primarily of corn and beans, significant producer price increases were announced for agricultural and livestock producers. In February, 1985, even more dramatic increases in producer prices took effect in an effort to boost food production further (Utting, 1987), and dollar incentives to producers were introduced. However, even the higher state prices were unable to compete with those in the black market, where inflation was creating massive increases. As a result, despite increases in staples production in 1986, the state had difficulty in capturing a significant portion of the food crop for distribution to the urban areas through "secure" state channels (CR, no. 1, 1987: 13). Furthermore, the impact of price incentives was considered minimal in comparison to the skyrocketing cost of farming inputs and consumer goods (interview with Peter Utting, research associate, CIERA, August 1986).

Another significant policy change occurred in the rural marketing sector when an action was taken to address the peasants' demands by supplying rural areas through expendios rurales and centros de abastecimiento rural (CARs), rural supply centers. This policy was a sincere effort on the part of the government to provide the peasant producer more immediate access to consumer goods at controlled prices, apparently their main concern (ibid.). In addition, during the summer of 1986, the government began creating empresas territoriales, territorial enterprises, in an attempt to centralize the various bureaucratic functions of buying and selling, which would fulfill the functions essential to the peasant producers in a more simplified manner (Bar, August 12, 1986). Furthermore, recognizing the difficulty of controlling the entire market for corn and beans and capturing the produce of thousands of dispersed small producers, in 1985 the government deregulated the commercialization of basic grains. By allowing "honest" private merchants to buy the producers' goods, the efficiency of the marketing system improved and provided an important incentive to basic grains producers. Although this policy reduced the government's expanding bureaucracy, it also raised concern that peasants would sell more of their produce to the parallel market. In an attempt to deal with this problem, during 1986 the government began designing agreements with peasant producers under which they would sell a certain
portion of their crop to ENABAS at official prices in return for guaranteed production inputs and supplies (El Nuevo Diario [ND], July 28, 1986; Meso, May 1986: 10). Thus, it was apparent that in 1986 the state was adjusting its rural marketing and pricing policies in an attempt to resolve some of the initial contradictions. However, problems with bottlenecks, bureaucratic inefficiency and delays, and increasing sales by the peasants to the parallel and black markets were still creating difficulties, demonstrating that much remained to be done in this area.

With respect to credit, recognizing the destabilizing effects of an expansionist money supply policy and responding to increasing domestic and international economic problems, the government instituted several adjustments affecting credit policy in 1985. Faced with increasingly narrow and difficult choices about which sectors of the economy to protect and which to alter while trimming the fiscal deficit, the government elected to tighten the policy of financing 100 percent of the costs of cotton production and the state farms (Enríquez and Spalding, 1987: 124). It also decided to raise interest rates for both borrowers and depositors, designating distinct rates for the borrowers in various agricultural sectors according to its priorities. It is significant that interest rates for independent producers in the Rural Credit Program increased by only one point, while rates for other borrowers increased by greater amounts (ibid.). Concerned with maintaining investment and production, as well as with controlling the inflationary spiral, the government decided to maintain all interest rates far below the rate of inflation. Despite the low recuperation rates among the peasantry, the government had chosen not to abandon its political commitment to this sector in an effort to encourage its continued investments in food production. However, the economic costs of such a generous credit policy will continue to mount and will require further adjustments. In addition, the withdrawal from production and investment by many elements of the private export sector has caused economic planners to question the wisdom of providing them plentiful credit and subsidizing their production, particularly when an economic crisis requires that trade-offs be made.

**FOOD VERSUS EXPORTS: AN INEVITABLE DICHOTOMY?**

As mentioned earlier, there was an initial debate over the agricultural development strategy the government would take following the Revolution. Some advocated a "food first" approach, and others emphasized the need to increase agro-export production to keep the economy afloat. Proponents of the former approach believed that funneling additional resources to producers of staples would promote a
more equitable distribution of food; cut spending on food imports, which would save scarce foreign exchange; and reduce dependency on foreign powers and vulnerability to a food cutoff or boycott. The government was committed to making an adequate diet available to the whole population and to maintaining nutrition levels. With consumer demand rising, putting pressure on the state to increase production of staples, a "food first" model seemed appropriate. Under the export approach, directing resources to export production would allow the country to maintain its foreign exchange earnings, so necessary to sustain petroleum imports and to enable the country to pay its debt. The national economy was already organized around these exports, grown by private owners with experience in their production and marketing; thus, any shift away from this approach would come at great risk and cost.

Faced with the "food crisis" in 1981, the government chose to incorporate the two approaches into a single economic strategy of "agro-exporting plus food," to use Vilas's term (1987: 234). The government would transform property relations and the means of production, increase strategic state investments in export agriculture, cattle raising, and needed infrastructural improvements expand and diversify export agriculture with the objective of obtaining the funds necessary to finance agro-industrialization, that is, the processing of local agricultural products to increase the value added to exports, and expand cultivation of basic grains to allow the country to improve its food self-sufficiency. Apparently, the goal of food security and improving production for the internal market would be priorities within an economic strategy which places agro-exports at the center of the process of capital accumulation.

Until 1985, the Nicaraguan government tried to implement its policies under the assumption that food and exports were not mutually exclusive and to demonstrate that a flexible approach, through a "mixed economy," could balance the traditionally competing interests of state, peasant, private, and cooperative producers. For the Nicaraguan policymakers, the supposed dichotomy between agro-exports and internal consumption was not clear-cut because of the important links between the two. In a country where there are few possibilities for the industrial development that could generate the foreign exchange required by the national food system, agro-exports become an important and necessary element in providing the inputs on which the production and marketing of food for internal consumption depend. Furthermore, what are generally categorized as agro-export products -- cotton, beef, and sugar -- are vital not only for generating foreign exchange, but also for providing basic raw materials for some of the food products consumed internally (UNRISD, 1986: 206). In addition, the government was making efforts at improving the efficiency of land on which basic
grains are grown, rather than relying solely on expanding production. In this way, it hoped to lessen the possibility of land competition between export producers and producers for the internal market. Furthermore, as of 1986, investments in agriculture were divided equally between export and domestic consumption, which the government hoped would allow the country to increase exports while developing self-sufficiency in food production (CAHI, Update 3, no. 8: 2). Producers of beans and corn were using few imported farming inputs so this did not compete with export producers for scarce foreign exchange. However, increasing technification of and growing pressures on food production in 1985 forced a reevaluation of many of these assumptions.

As we have seen, a number of political and economic factors intervened to constrain the feasibility of the food/export strategy and to limit the government's room for maneuvering between the two agricultural sectors. These factors provide important examples of the kinds of constraints which can limit a government's ability to enhance food security and can determine the evolution of food and agricultural policies, within the context of a revolutionary transformation of political, social, and economic structures in a previously underdeveloped economy. I have grouped these constraints into six categories, most of which are interrelated.

(1) The primary focus of this chapter has been that the success of the economic strategy and of food policy formulation was conditioned and constrained by an economy based on agro-exports. As Vilas has argued, the crux of a strategy centered on agro-exports obviously is its capacity to export and to generate sufficient foreign exchange from those exports to finance investments in food production and other programs (1987: 236). That capacity has been threatened by negative trends in international prices, declining productivity in exports, the war, and deteriorating terms of trade. The economic withdrawal of the export bourgeoisie, despite government incentives and stimulants, exacerbates productivity problems and causes further decreases in foreign exchange. These shortages only aggravate the competition for resources between the two agricultural sectors. The outlook for improved prices and increased access to international markets is not encouraging; thus, the vicious cycle resulting from the dependency on agro-exports will not be broken easily.

(2) Food policy has been conditioned by the political alliances the government has been forced to maintain in order to implement its economic strategy successfully. The importance of private sector cooperation in the Revolution required that the government move cautiously on its agrarian reform. Despite government attempts at maintaining a good relationship, many of the private exporters held out because of their discontent and discomfort with the political-economic system the Revolution was
promoting. The presence of a strong external ally, the United States, only encouraged their uncooperative stance. In addition, the government's alliance with the small peasant sector began to increase in importance due to growing contra activity and anti-Sandinista propaganda, as well as a recognition of the need to increase production for the internal market. The ability of UNAG to mobilize and voice the demands of the peasantry was a major factor in causing the government to refocus its attention on that alliance. As Nola Reinhardt points out, the growing economic efficiency of UNAG also meant that the government's concern for maintaining this alliance was not based solely on concerns for equity, but on a desire for efficiency as well (1987: 32).

(3) Historical structural factors limited initial attempts at effective food policy. For example, the country was characterized by a heterogeneous and widely dispersed rural population, which created difficulties in formulating appropriate policies to provide incentives to production. One of the reasons for early policy problems was that the government tended to treat the diverse forms of production organization as one, when each form has its own logic. In addition, the preexisting marketing mechanisms, while perhaps exploitative, were able to reach much of the dispersed basic grains-producing peasants and proved difficult to replace.

(4) Contradictions in the mixed economy have affected policy implementation. In a mixed economy, there will be agents in the free market or in production who will be uncooperative and will undermine price or marketing control policies, particularly during disequilibrium between supply and demand. The attractiveness of the black market in Nicaragua has detracted from government efforts to implement producer price increases and to distribute food to the areas of the country which had previously been without. In addition, the state has often been unable to fill the gaps created by the displacement of essential agents in the economy, reflecting the contradictory effects of state intervention in certain areas of the mixed economy.

(5) Macro-economic constraints also have affected food policy. An increasing fiscal deficit, inflation resulting from declining production and increasing demand, and a worsening trade deficit and debt crisis are the major factors limiting government efforts at restructuring the food system. Since most of the redistributive programs like credit, subsidies, and investment had been financed by monetary emission, which had contributed to increasing inflation, the Sandinista government was forced to cut back on many of these policies in the face of fiscal crisis. Difficult decisions between the two foci of the economic strategy had to be made within the new "survival economy." Under this new survival strategy, long-term investments in large-scale, capital intensive production and agri-business, as well as the prioritization of exports, were forced to
take a secondary position to short-term, smaller-scale production for internal consumption, a reorientation which appears to have benefited the peasantry, but may have negative consequences on foreign exchange earnings.

(6) Finally, it is important to recognize that the Nicaraguan government's efforts to design and implement necessary food policies, as well as to succeed in its overall development strategy, have been made increasingly difficult by the actions of hostile external forces, particularly the United States. It has imposed an economic blockade, attempted to close European markets, tried to impede the Contadora process, and continued military aggression and support of the contra war. In addition, the U.S. financial war has aggravated the foreign exchange crisis, reducing the amount of funds available for allocation to the various sectors. The availability of foreign aid immediately following the Revolution enabled the government to distribute funds to "priority areas," including both the food and the private export sectors. However, aid from the bilateral and multilateral lending institutions decreased as a credit blockade was set in motion by the United States. The IDB and the World Bank provided $238.1 million in loans between July 1979 and December 1981; this amount dropped to $92.1 million between 1981 and 1982, and continued to decline in subsequent years (Enríquez and Spalding, 1985: 49). Therefore, despite attempts by the Nicaraguan government to create a viable mixed economy, the difficulties in implementing this novel approach to development, and the decision to make adjustments in the strategy were in part the result of actions taken by international opposition forces and were beyond the control of the revolutionary government.

CONCLUSION

To summarize food policy changes between 1979 and 1986, the revolutionary government of Nicaragua implemented major programs and restructured the production sector in order to stimulate production of basic grains, not only through land redistribution, but also through a restructuring of the country's pricing, investment, and credit policies. Various factors influenced the development of food and agricultural policies in Nicaragua between 1979 and 1986, including electoral politics, the counterrevolutionary threat, structural contradictions resulting from the new policies, and the balance of payments crisis. As Thome argues, the ability of the government to rethink and adjust its policies during the first seven years provides an illustration of its ability to subsume ideological goals in favor of "political pragmatism, economic reality
and result-oriented policies" (1984: 16-17). The evolution of land redistribution during this period exemplifies the difficulties associated with designing and implementing policies to encourage production among such a heterogeneous and dispersed rural population as exists in Nicaragua (Baumeister and Neira, 1984: 1). The emphasis on cooperative formation and state acquisition of expropriated lands during the first three years of the agrarian reform had to be reconsidered in the face of resulting contradictions and conflicts with these various sectors. In addition, the exigencies of an export-based economy forced policymakers to be sensitive to the needs of the private agro-export sector while designing and implementing policies to benefit the peasant producers. Their willingness to allow the free market to play a larger role in the economy and to increase the amount of property in private, rather than state, hands demonstrates an ongoing commitment to a mixed economy and pragmatism in the face of economic pressure, in contrast to the arguments often made that the Nicaraguan economy is becoming completely state-run. These new directions often created tensions within the government between those who favor centralized planning and control and those who supported a more decentralized and participatory process. It became increasingly evident, however, that the latter group, responding to pressure from the mass organizations, particularly UNAG, were prevailing during the period under study.

In 1986, as we have seen, even sharper modifications in the economic strategy were made in an attempt to reorient policies toward increasing production of food for the internal market and to develop the economy on a more self-centered basis. Although the new focus did not in and of itself require that agro-exports be ignored or abandoned, it implied a parallel redirection of the benefits and surpluses of production, away from the medium-sized export sector, which had traditionally benefited. As Vilas has pointed out, until the government is more confident as to what extent production for the internal market can replace agro-exports as the new center for accumulation, the importance of agro-exports, although reduced, will remain high (1987: 244). As a result, the government will be forced to continue demonstrating flexibility and ingenuity in dealing not only with the previous tensions, but with additional contradictions, and will have to continue to experiment with the most appropriate means of balancing the needs of the two agricultural sectors.

ENDNOTES

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1 The breakdown of the different commodities as a percentage of total exports is coffee, 25 percent; cotton, 24 percent; beef 10 percent; sugar, 6 percent; and bananas, 1 percent (Weeks, 1985: 50, table 9).
2 one manzana = 1.7 hectares or 2.5 acres.
3 An examination of the policies that the revolutionary government has undertaken to restructure the distribution side of the food system, while important, is beyond the scope of the current discussion. For an in-depth analysis of those distributional policies, see Austin, Fox, and Kruger, 1985; Utting, 1987; and Frenkel, 1987.
4 For an elaboration of this argument and a more in-depth discussion of the Sandinistas' changing conception of the peasantry, see Reinhardt, 1987.
5 *Idle* land was defined as being uncultivated for at least two consecutive years. Land was defined as "underused" when less than 75 percent was sown. Ranchlands were considered underused when there was less than one head of cattle for each thirty-five acres in the Pacific coastal region or five acres in the highlands (see Collins, 1982: 87-96). "Decapitalization" referred to disinvestment through such devices as allowing plant and machinery to run down while profits were pocketed or taking out low-interest investment loans and converting the money into dollars to be banked abroad (Gilbert, 1983: 44). This economic sabotage was often practiced by cutting back on land in cultivation, laying off workers, selling machinery and livestock, overinvoicing for imported goods, or paying inflated salaries to family members (Collins, 1982: 44).
6 The government went to great lengths to avoid placing the burden of these producer price increases on the consumer by implementing a consumer subsidy policy. However, these consumer subsidies were dramatically reduced in 1985 and again in 1986 due to the heavy burden on the fiscal deficit. For a discussion of consumer subsidy policy, see UNRISD, 1986; Utting, 1987; and Frenkel, 1987.
7 Although a discussion is beyond the scope of the current chapter, it is important to point out that the government delivered concrete benefits to much of the population by undertaking extensive programs to increase the literacy rate, by providing health care services in rural areas, and by initiating vaccination and sanitation campaigns.
8 Reinhardt is more critical of the FSLN's decision and argues that, by being *pro-export,* the initial hesitation to redistribute reflected an "anti-peasant" bias on the
part of the FSLN leadership, inherited from the dualistic capitalist agro-export model that historically had prevailed (1987: 15).
BIBLIOGRAPHY

Austin, James; Jonathan Fox; and Walter Krugel

Austin, James, and Jonathan Fox

Barraclough, Solón

Barry, Tom, and Deb Preusch

Baumeister, Eduardo, and Oscar Neira

Black, George

Brockett, Charles

Bulmer-Thomas, Victor

Central American Historical Institute (CAHI)
1983 "UNAG Calls on Nicaraguan Government to Cancel Debt." Update 3, no.13 (June 24).

1984 "Nicaragua's Agrarian Reform." Update 3, no. 2 (January 13).

1985 "Masaya Peasants Prompt Land Expropriations." Update 4, no. 23 (July 12).

1985 "The Nicaraguan Peasantry Gives New Direction to the Agrarian Reform." Envio 4, issue 51 (September).

1986 "Agrarian Reform Undergoes a Change in Nicaragua." Update 5, no. 4 (February 7).
1986 "Reactions to Agrarian Reform Modifications in Nicaragua." Update 5, no. 20 (May 21).

Centro de Investigación y Estudios de la Reforma Agraria (CIERA)
1982 Producción y organización en el agro nicaragüense. Managua: CIERA.
1983a Distribución y consumo popular de alimentos en Managua. Managua: CIERA.
1983b El hambre en los países del Tercer Mundo. Managua: CIERA.

CIERA, PAN, CIDA
1983 Informe del Primer Seminario sobre Estrategia Alimentaria. Managua: CIERA.

Colburn, Forrest D., and Silvio de Franco

Collins, Joseph

Comisión Económica Para América Latina (CEPAL)

CEPAL/FAO/OT/SIECA/OCT/OEA
1973 Tenencia de la tierra y desarrollo rural en Centroamérica. San José, Costa Rica: EDUCA.

Conroy, Michael E.

Deere, Carmen Diana

Deere, Carmen Diana, and Peter Marchetti
1981 "The Worker-Peasant Alliance in the First Year of the Nicaraguan Agrarian Reform." Latin American Perspectives 8, no. 2 (Spring): 40-73.

Deere, Carmen Diana; Peter Marchetti; and Nola Reinhardt
DeJanvry, Alain

Dirección General de la Reforma Agraria (DGRA)
1986 *Avance y perspectivas de la reforma agraria.* Managua: MIDINRA.

Dorner, Peter, and Rodolfo Quirós

Durham, William H.

Enríquez, Laura J.

1985b "Social Transformation in Latin America: Tensions between Agro-export Production and Agrarian Reform in Revolutionary Nicaragua." PhD. dissertation, University of California at Santa Cruz.

Enríquez, Laura J., and Rose J. Spalding


FitzGerald, E. V. K.


Food and Agriculture Organization of the United Nations (FAO)

1977-84 *Production Yearbooks.*

Frenkel, María Verónica
Frenkel, María Verónica, and Gregg L. Vunderink  

Gilbert, Dennis  

González-Vega, Claudio  

Gorostiaga, Xavier  
1982 Dilemas de la revolución popular sandinista a tres años del triunfo. Managua: INIES/CRIES.

Harris, Richard L.  

Instituto de Nutrición de Centroamérica y Panamá (INCAP)  
1969 "Evaluación nutricional de la población de Centroamérica y Panamá: Nicaragua." Guatemala: INCAP.

Interamerican Development Bank (IDB)  
1984-86 Economic and Social Progress in Latin America.

Kaimowitz, David, and David Stanfield  

Lappé, Frances Moore, and Joseph Collins  

Ministerio de Desarrollo Agropecuario y Reforma Agraria (MIDINRA)  
1983 Informe de Nicaragua a la FAO. Managua: MIDINRA.


MIDINRA/PAN  

Murdoch, William W.  

National Reconstruction Government of Nicaragua

Pérez Brignoli, Héctor, and Yolando Baires Martínez

Programa Alimentario Nicaragüense (PAN)


Reinhardt, Nola

Saulniers, Alfred H.

Sims, Harold

Spalding, Rose J.
1984 "State Economic Expansion in Revolutionary Nicaragua." Unpublished manuscript from the Central American Writers Clearinghouse. Available from the Central America Resource Center, Austin, Texas.


Stanford Central America Action Network, ed.

Super, John C., and Thomas C. Wright, eds.

Thome, Joseph R.

Thome, Joseph R., and David Kaimowitz

Timmer, C. Peter


Utting, Peter 1986 "Limits to Change in a Post-revolutionary Society: The Rise and Fall of Cheap Food Policy in Nicaragua." Unpublished.


PERIODICALS AND OTHER STATISTICAL SOURCES

Barricada (BAR), various issues.

Central America Report (CAR), various issues.

Central American Historical Institute (CAHI), Updates.
The Economist Intelligence Unit, Country Report: Nicaragua, Costa Rica, Panama (CR) various issues.

INEC biweekly statistical reports.

Mesoamerica (Meso), various issues.

Mexico and Central American Reports (MCAR), various issues.

El Nuevo Diario (ND), various issues.

Pensamiento Proprio, Various issues.