OFFICIAL INTERPRETATIONS OF RURAL UNDERDEVELOPMENT: MEXICO IN THE 1970s

by

Merilee S. Grindle

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OFFICIAL INTERPRETATIONS OF RURAL UNDERDEVELOPMENT:

MEXICO IN THE 1970s

by

MERILEE S. GRINDLE
Department of Political Science
Wellesley College
and
Harvard Institute for International Development
Harvard University

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OFFICIAL INTERPRETATIONS OF RURAL UNDERDEVELOPMENT:
MEXICO IN THE 1970s*

In the decade of the 1970s, the Mexican government became more concerned about its rural areas than it had been at any time since the 1930s. During these ten years, two presidential administrations sought to give higher priority to the nation's rural zones and to redirect government investment from an overriding concern with urban and industrial expansion. Government development planners and agricultural policy makers seriously analyzed the sources of Mexico's rural underdevelopment and devised policy responses to the problems they discovered. A central focus of their concern was the large and diverse peasant population of the country, totaling nearly 25 million rural poor people, who had been left behind in the impressive post-World War II development of the Mexican economy. Importantly, this period witnessed significant changes in how rural problems were defined and in the policy instruments pursued to achieve rural development.

In the following pages, the origins and consequences of the rural development efforts of the administrations of Luis Echeverría Álvarez (1970-1976) and José López Portillo (1976-1982) are explored. The first

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1 Between 1935 and 1940, the agrarian reform legislated in 1917 was extensively implemented and peasants were broadly incorporated into the political system. Under the presidency of Lázaro Cárdenas, 20 million hectares of land were distributed, benefiting over 11,000 ejidos, Mexico's communally based landholding system.

2 Throughout this paper, the term peasant is applied broadly to serve as an equivalent to the Spanish term, campesino. It includes ejidatarios, small proprietors, minifundistas, sharecroppers and tenants, rural wage laborers, and the unemployed -- in short, the rural poor.

*Research for this paper was supported by grants from the Tinker Foundation and the Social Science Research Council. The data are based on field research in Mexico in 1974-1975 and 1980.
part of the paper considers the impact of presidential administrations on official interpretations of agricultural and agrarian problems. After each of the presidents assumed office, major reevaluations of the role of Mexico's rural areas in the country's development were undertaken, conceptualizations of the causes of rural backwardness were devised, and policy responses were designed and pursued. In their analyses, planners and policy makers reflected the perspectives and concerns of the two presidents as well as their own increasing unease with the path toward economic development that Mexico had been following since the 1940s. Thus, under the presidency of Echeverría, rural underdevelopment was considered to result from the structural economic constraints on the peasant economy that made it possible for a wide variety of intermediaries to exploit the rural poor. Under his successor, some issues that had concerned Echeverría and his advisors were given new emphasis, while the explanation for rural problems stressed the inadequacy of technology and infrastructure rather than structural factors.

While new policy and program departures were a notable feature of both administrations, ten years of increased attention to Mexico's rural areas did not have a noticeable impact on levels of production or standards of rural welfare, as will become evident in the second part of this paper. A number of reasons can account for this disparity, including unfavorable climatic conditions, insufficient time for measurable results to be apparent, and still inadequate levels of government spending. In addition, however, the rural development efforts of the 1970s were limited in impact because of impediments encountered during the implementation process. There were, for instance, institutional constraints that emerged because
the new approaches required public institutions and administrators to re-orient their priorities and to learn new methods of organization and behavior. Other institutional and bureaucratic obstacles were related to the nature of the presidential succession in Mexico. In addition, the political context into which the new programs were introduced created a second set of constraints on the rural development activities. The vested interests, economic importance, and opposition of powerful political groups as well as the reluctance of the government to sponsor authentic rural participation and mobilization in its programs help explain the lack of congruence between effort and impact in rural development investments.

Even if these institutional and political obstacles could be overcome, implementation of programs and projects, however well carried out, will not solve Mexico's rural crisis if public policies are based on faulty or incomplete analyses of the problem area. In the conclusion to this paper, it will be argued that rural development in Mexico in the 1970s was limited in its impact by the nature of the interpretations developed to explain agricultural underproductivity and rural poverty. Both administrations relied on a dualistic model of agricultural development that ignored the limited nature of basic agricultural resources -- land and water -- and that failed to consider adequately the opposition of interests between large scale capital intensive agriculture and subsistence oriented production. In the future, rural development efforts should consider not only conflicts and dynamics within the peasant economy, but also address the issue of how the rural poor are affected by the expansion of large scale capitalist production.
TWO SEXENIOS, TWO INTERPRETATIONS

In Mexico, presidential administrations have a great impact on the definition and pursuit of public policies. Regularly, every six years, a new president assumes control of a vast bureaucratic household and the apparatus of the official party whose role it is to mobilize and maintain support for the regime. Accompanying the president into office is a major turnover of elective, party, and bureaucratic personnel. Especially within the bureaucracy, where planning and decision making occur, personnel changes are important, affecting everyone through the middle ranks of the public service. As all positions are filled by personal appointment, presidents are often able to put together teams of officials who are strongly loyal to them and committed to their priorities. A centralized government, a dominant machine-like party apparatus, and a mantle of "revolutionary" charisma and institutionalized legitimacy help assure the president's centrality to the decision making process. A change of political leadership generally involves a government-wide process of assessing past development efforts and often leads to new evaluations of a problem area and what priority it is to have in national development policies. Mobilization of high level support, crucial to programs whose beneficiaries are typically inarticulate politically, can occur at these points. Political changes can provide a multitude of opportunities for reorganizing sectoral

3 Presidents in Mexico, as well as all other elected officials, are constitutionally prohibited from succeeding themselves. For an overview of the Mexican political system, see Roger Hansen, The Politics of Mexican Development (Baltimore, Md.: Johns Hopkins University Press, 1971); and L. Vincent Padgett, The Mexican Political System (Boston: Houghton Mifflin, 197).
efforts at the ministry and agency level, as well as providing ambitious
advisors and administrations with the chance to influence high level de-
cision making and to experiment with a variety of new program approaches.
More than in many other countries, therefore, public policies in Mexico
tend to be identified with presidential administrations, or sexenios.

1970-1976: The "Rediscovery" of the Peasant

Thus, when Luis Echeverria assumed the presidency in December of
1970, it was to be expected that changes in perspective and policy would
occur. The extent of the ensuing critique of the country's path toward
economic development was unusual, however. This was particularly true of
concern for the agricultural sector, whose growth rate had been steadily
decreasing since the decade of the 1940s, while the economy itself grew
rapidly (see TABLE 1). Since the 1940s, Mexico, like a number of other
Latin American countries, had been pursuing a policy of import substitution
in order to industrialize the country as rapidly as possible. This model
of economic development relied on the agricultural sector to provide raw
materials and foreign exchange to further stimulate industrialization.
During this long period, agricultural development was defined as increased
production. This perspective implied encouraging the productivity of
export-oriented agriculture, especially in the country's northwestern
areas, through major irrigation and infrastructure projects and the liberal
provision of official credit, subsidies, and research and extension.

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4 Much of the following discussion is taken from Merilee S. Grindle,
Bureaucrats, Politicians, and Peasants in Mexico: A Case Study in Public
<table>
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<td></td>
<td>percent</td>
<td>percent</td>
<td>percent</td>
<td>percent</td>
<td>percent</td>
</tr>
<tr>
<td>Gross Domestic Product</td>
<td>6.7</td>
<td>5.8</td>
<td>7.1</td>
<td>7.1</td>
<td>5.4&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Population</td>
<td>2.8</td>
<td>3.1</td>
<td>3.5</td>
<td>3.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Per Capita Product</td>
<td>3.9</td>
<td>2.7</td>
<td>3.6</td>
<td>3.6</td>
<td>1.8</td>
</tr>
<tr>
<td>Agricultural Production</td>
<td>8.2</td>
<td>4.3</td>
<td>3.6</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Manufacturing Production</td>
<td>8.1</td>
<td>7.3</td>
<td>8.9</td>
<td>9.0</td>
<td>6.8&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> 1971-1979

Through the early 1970s, three quarters or more of government investment in agriculture was directed to the irrigated areas that produced export crops such as cotton, tomatoes, strawberries, and other fruits and vegetables. Production for domestic consumption, on the other hand, was ignored and discriminated against by government policies.

In 1965, Mexico began to import substantial amounts of basic foods, especially corn, which it had formerly produced in surplus, at the same time that industrialization required ever larger imports of increasingly expensive capital and semi-processed goods. Balance of trade deficits grew steadily. By 1970, planners were increasingly critical of the "developmentalist" policies that had stimulated these conditions. The threat of an international grain shortage heightened their anxiety.

Echeverría himself was outspoken in linking domestic crises in agricultural production and economic stability to "an increasingly sharp class division between the highly industrialized and the poor countries".

Under Echeverría, a number of high level officials also became more concerned about the distribution of wealth in the country. In spite of strong government rhetoric to the contrary, there was increasing evidence that income distribution in the country was characterized by increasing in-

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equality. The poorest 50 percent of the population, the vast majority of whom lived in rural areas, was being left behind in the country's impressive economic growth. The potential for social unrest engendered by inequitable and worsening income distribution was of considerable concern to the president and his advisors in the early 1970s. Peasant organizations, independent of the octopus-like official party, had been active in the 1960s. In addition, Echeverría's extensive campaign had taken him to remote areas of the country where he was brought face to face with the disparity between the country's urban areas and its impoverished rural zones. Moreover, concern was growing about supplying major urban areas with basic foodstuffs, particularly with the corn and beans that are the staple of the Mexican diet. These conditions encouraged policy makers to take a new look at the agricultural sector.

Officials in the Ministry of the Presidency and elsewhere became convinced that stimulating the agricultural sector was essential to further economic development in the country as a whole. They built their analyses on critiques and studies that had been done in the 1960s but that had not influenced high level decision making in previous administrations. Particularly important was the work of scholars at the Centro de Investigaciones Agrarias which argued persuasively that giving priority to the

7 For analyses of income distribution, see Ifigenia M. de Navarrete, "La Distribución del Ingreso en México," in El Perfil de México in 1980 (México: Siglo XXI, 1970); Carlos Tello, "Un Intento de Analisis de la Distribución Personal del Ingreso," in Miguel Wionczek (ed.), Disyuntivas Sociales (Mexico: Sepsetentas, 1971). For more recent data on rural social and economic conditions, see the volumes entitled Mínimos de Bienestar published by COPLAMAR in 1979. In 1972, 42 percent of the population lived in rural zones and agriculture accounted for 40 percent of the economically active population. The Bando de México reported in 1971 that urban families earned approximately 2,731 pesos a month while rural families earned 1,136 pesos.
production of export crops had resulted in the distinct bifurcation of the agricultural sector. In some regions, areas of technically advanced and highly capitalized agriculture developed in response to lucrative export markets while other areas, devoted to the production of domestic crops, were characterized by extreme backwardness. Commercial agriculture responded to the market economy, used relatively advanced technologies, and received the lion's share of both public and private investment in agriculture. It also monopolized the irrigated land in the country. The traditional sector, largely ignored by government infrastructure, credit, and extension services, was subsistence oriented, often used primitive technology, and achieved low yields per unit of land. These two types of agriculture corresponded closely to geographic zones in the country. Rural unemployment and underemployment in poverty areas were clearly linked to the country's massive rural-to-urban migration that was causing major problems in Mexico City and elsewhere. The presidential advisors now clearly associated levels of production to the issues of poverty and national development policies.

8 See, for example, Centro de Investigaciones Agrarias, Estructura Agraria y Desarrollo Agrícola en México (Mexico: Fondo de la Cultura Económica, 1974), for a complete description and analysis of the condition of Mexican agriculture through the late 1960s. See also Cynthia Hewitt de Alcántara, Modernizing Mexican Agriculture: Socio-economic Implications of Technological Change, 1940-1970 (Geneva: UNRISD, 1976); Banco Nacional de Comercio Exterior, "Reflections..."; Luis Gomez Olivera, "Crisis Agrícola, crisis de los Campesinos, Comercio Exterior, Vol 28, no. 6 (June 1978).

9 Analyses such as these have contributed to the convention of referring to two agricultural sectors, the commercial and traditional. This usage is followed in this paper. "Commercial" agriculture is a term that refers to large and medium scale capital intensive and technologically advanced agricultural enterprises. In Mexico, such businesses are associated with irrigated zones. "Traditional" or "peasant" agriculture is used to refer to small scale subsistence or semi-subsistence oriented farming; it is recognized that some production from this sector is commercially oriented.
The interpretation of rural underdevelopment that became accepted in official circles in the early 1970s focused on the structural relationships of the peasants, who produced the major portion of basic food items, to the national economy. Echeverría's planners were particularly concerned about the inability of the peasant to retain any surplus and invest it in improvements in production. Because of his poverty, crops had to be sold at low prices before they were harvested; informal credit had to be accepted on usurious terms; markets were distant and transporters exacted high prices; storage facilities were nonexistent; and a variety of middlemen and caciques siphoned off any marginal profit the peasant was anticipating. The peasants, analysts affirmed, were therefore retreating increasingly into subsistence production as participation in the market became more and more disadvantageous to them, in part as a result of frozen official support prices for basic commodities and rising costs of living. The low levels of peasant production were thus a response to exploitation by economic intermediaries and previous government policies. Under these conditions, the rational peasant would choose to grow only enough food for his family's consumption and spend the rest of his time in nearby urban labor markets or else he would abandon cultivation altogether and migrate to Mexico City, elsewhere in the country, or to the United States.  

This analysis, carried out within the Ministry of the Presidency, within a special Agricultural Sector Planning Committee, and within indi- 

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10 One message they derived from this was that official support prices for basic foods had to be increased. In 1973, they were raised for the first time in nine years. See Gustavo Esteva, "Agriculture in Mexico from 1950 to 1975: The Failure of a False Analogy," Comercio Exterior Vol. 22, no. 1 (January 1976).
individual government agencies, was stimulated in great part by presidential concern for the country's international and domestic economic situation and by political concern over the stability of rural areas. Through the process of study and analysis, the Echeverría administration can be credited with a significant "rediscovery" of Mexico's peasantry. Prior to this, of course, a number of ongoing programs had been directed toward the rural poor -- the Department of Colonization and Agrarian Affairs (later the Ministry of Agrarian Reform) and two of three rural credit banks were charged with many of these programs. Under Echeverría, however, poor rural areas ceased to be considered residual in terms of national development, to be attended by various welfare programs or marginal land redistribution efforts. In the 1970s, the traditional agricultural sector was rediscovered as a priority area, and the rural poor as a group crucial to the future development of the economy because of the role they played in the production of basic crops.

The interpretation implied that in order to increase production of basic foodstuffs and to deal with rural social conditions, government policy should be directed toward enabling the peasant to retain the profits of his labor and to invest it productively. This in turn implied altering the structural relationships that constrained peasant production and effective participation in the national economy. The approach urged that peasants be offered the goods and services that would liberate them from the exploitation of intermediaries. Thus, in 1974, the president stated, "Our farmers are bound to old commercial and credit practices that make them subject to many forms of fraud and exploitation. The eradication of these vices is a long, difficult task which we have under-
taken with all energy. Success lies in being more efficient than the people who exploit them." Higher government support prices; direct dealings between the government and the peasant in crop buying; extensive provision of consumer and production credit; expansion of government storage facilities, feeder roads, extension services and small irrigation works; and provision of subsidized goods such as clothes, food, fertilizer, improved seeds, tools, medicines, and medical and educational attention were among the programs thought essential. Early in the Echeverría administration, the ejido sector was singled out for special attention from government programs. The ejido was to serve as the organizational unit that would allow the rural poor to escape from exploitation by collectivizing the efforts of peasant producers in order to accumulate and invest greater amounts of capital. Blame was attached to previous development policies that stimulated capitalist farming while ignoring ejidos and Indian communities.  

These new programs meant extensive government commitment to rural areas and the need for more coherent policy making and coordination among government agencies concerned with agricultural development. And, indeed, a major new effort at rural development was undertaken, a strategy in accord with a general policy of greatly strengthening the public sector in


12 See, for example, the "Second State of the Nation Message," Comercio Exterior, Vol. 18, no. 10 (October '72); "Fourth State of the Nation Address;" "Fifth State of the Nation Message," Comercio Exterior, Vol 21, no. 10 (October '75); Banco Nacional de Comercio Exterior, "Reflections...."
the country under Echeverría. By the mid-1970s, Mexico was directing more than 15 percent of public sector investments to rural areas, a considerable increase over the 10 percent or less of previous administrations. By 1975, the actual money value of rural development investment had increased impressively, as is evident in Figure 1.

In terms of specific organizations and program innovations, the Echeverría administration created the Agricultural Sector Coordinating Committee in 1973, consolidated three rural credit banks into one in 1975, vastly increased the activities and budget of the government's agricultural marketing agency, CONASUPO, and sponsored the Ocampo Pact in 1975, an agreement among four peasant organizations to unify their activities and allow the government to keep a closer watch on peasant political activities.

A major new intersectoral and integrated program, PIDER (Program for Integrated Rural Development) was initiated in 1973. At its inception, it enjoyed considerable high level support and eighty-eight million dollars.

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13 Between 1970 and 1975 public investments increased in real terms by 16 percent annually and public investment surpassed private investment for the first time.

14 See Comercio Exterior, Vol 22, no. 2 (February 1976) for details of these developments.

15 Under the PIDER effort, rural underdevelopment was to be assessed and responded to on the basis of microregions that exhibited characteristics of rural poverty and potential for development; each microregion was to serve as a unit for planning an integrated set of projects for agriculture, physical infrastructure, health, sanitation, and education. The primary focus was to be on projects that would have a direct impact on food production, in accordance with national development priorities. PIDER was to be implemented through fourteen federal agencies, with a coordinating and control staff in the Ministry of the Presidency. After 1977, this became the Ministry of Planning and Budgeting. PIDER was unusual among government programs because funding for projects by the individual agencies was tightly controlled; funds were allocated to the agencies for use only on specific PIDER projects. For a description and analysis of the PIDER program, see Michael Cernea, "Measuring Project Impact: Monitoring and Evaluation of the PIDER Rural Development Project--Mexico" (World Bank Staff Working Paper No. 332, June 1979).
FIGURE 1

MEXICAN GOVERNMENT INVESTMENT IN RURAL DEVELOPMENT
(MEX$M OF 1960)

Source: Third State of the Nation Address, September 1979, reported in Banco Nacional de Mexico, Review of the Economic Situation of Mexico, Vol. 60, no. 649, December 1979, p.423
in funding. In addition, a new Agrarian Reform law, introduced in 1971, sought to facilitate the economic development of the ejidos. A 1972 law on irrigation and water resources made irrigated lands more available for the creation of ejidos. Finally, land distribution was speeded up under Echeverría. The greatest contribution of the Echeverría years, however, was undoubtedly the public acknowledgement given to the plight of the peasantry and to the rationale of a new development approach that considered the peasant to be an integral part of the national economy. The succeeding administration would build on this perspective, adding its own interpretations and programs.

1976-1982: Nationalism, Technology, and Infrastructure

We ourselves shall define our problems and resolve them with our own resources and institutions so as to maintain our political and economic independence.

José López Portillo, December 1, 1976

The analysis made of the problems of the country's rural areas by the administration of José López Portillo built upon many of the concerns identified by the Echeverría administration. As under the previous administration, the explanation for why Mexico's rural areas were underdeveloped and unproductive centered on the model of economic development pursued in the country since the 1940s and the role that this assigned to the agricultural sector. Surprisingly, this was presented as a pathbreaking understanding of the country's development even though many officials had been active in other positions under Echeverría. This is in great part a result of the rhythm of Mexico's political life; each administration must
differentiate itself from previous ones, within the context of legitimate revolutionary rhetoric, by announcing new interpretations and policy solutions, even when their newness is questionable. This was particularly true when López Portillo took over power in an unusually tense political and economic context in 1976.

The analysis itself stressed many of the same factors -- the stimulation of export production, skewed distribution of government resources toward zones of high potential for export production, the urban bias in pricing policies for basic commodities, the lack of official support and resources available to peasants. However, López Portillo's planners gave greater emphasis to some of the ideas that came to light under the Echeverría administration. For instance, perhaps the most notable feature of their analysis was the emphasis placed on Mexico's food dependency, its need to import large and increasing amounts of basic foods each year, especially from the United States. Growth in basic agricultural imports had dropped off in the mid-1970s, but began to climb rapidly again after 1976 (see TABLE 2). Planners under López Portillo were visibly alarmed by this trend and it became a primary rationale for directing government attention toward agriculture and the fishing industry.¹⁶ They were particularly explicit about not wanting to see vast new petroleum revenues eaten up by imports of food that they felt Mexico could produce itself.

¹⁶ This is described forcefully in Oficina de Asesores del C. President, SAM, Primer planteamiento de metas de consumo y estrategia de producción de alimentos básicos para 1980-1982 (Mexico, mimeo, March 1980), pp. 3-7. See also "First State of the Nation Report," Comercio Exterior, Vol 23, no. 9 (September 1977).
### TABLE 2

**IMPORTS OF BASIC FOOD ITEMS, 1970-1979**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Corn (thousands of tons)</th>
<th>Beans</th>
<th>Wheat</th>
<th>Others</th>
<th>Total Value of all Food &amp; Agri. Imports U.S.$m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>1,015</td>
<td>761</td>
<td>9</td>
<td>1</td>
<td>244</td>
<td>216.3</td>
</tr>
<tr>
<td>1971</td>
<td>312</td>
<td>17</td>
<td>0</td>
<td>176</td>
<td>119</td>
<td>192.9</td>
</tr>
<tr>
<td>1972</td>
<td>1,128</td>
<td>204</td>
<td>13</td>
<td>641</td>
<td>270</td>
<td>269.3</td>
</tr>
<tr>
<td>1973</td>
<td>2,016</td>
<td>1,145</td>
<td>2</td>
<td>718</td>
<td>151</td>
<td>543.7</td>
</tr>
<tr>
<td>1974</td>
<td>3,384</td>
<td>1,277</td>
<td>39</td>
<td>977</td>
<td>1,091</td>
<td>1,091.2</td>
</tr>
<tr>
<td>1975</td>
<td>3,907</td>
<td>2,633</td>
<td>103</td>
<td>87</td>
<td>1,084</td>
<td>925.6</td>
</tr>
<tr>
<td>1976</td>
<td>1,460</td>
<td>916</td>
<td>0</td>
<td>2</td>
<td>542</td>
<td>563.3</td>
</tr>
<tr>
<td>1977</td>
<td>3,691</td>
<td>1,926</td>
<td>29</td>
<td>456</td>
<td>1,280</td>
<td>827.9</td>
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<tr>
<td>1978</td>
<td>3,557</td>
<td>1,348</td>
<td>1</td>
<td>459</td>
<td>1,749</td>
<td>1,121.9</td>
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<td>1979</td>
<td>3,812</td>
<td>744</td>
<td>1</td>
<td>1,148</td>
<td>1,919</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

*years for quantities of imports refer to agricultural cycles; thus, 1970 refers to imports for the 1969/1970 agricultural cycle, etc.*

*rice, soybean, cotton seed, sorghum, barley*  
*preliminary*  

"Food self-sufficiency" became a rallying cry for López Portillo and his advisors; from the outset of his administration, the president stressed repeatedly that food, energy, and employment were the problem areas that would serve as the benchmark of his administration and whose solution would reinforce Mexico's international independence.¹⁷

The new administration also accepted the Echeverrista emphasis on the need to orient public investment in rural areas toward the peasant sector. Policy makers considered and then rejected the idea of stimulating the production of basic foods by the already developed commercial export sector.¹⁸ The importance of generating employment in rural areas as well as improving rural social conditions were arguments in favor of the traditional sector as they had been under the previous administration. Nevertheless, planners under López Portillo differed from their predecessors when they asked the central question: what keep peasants from being more productive? Their analysis stressed more conventional factors than the broad structural constraints considered important under Echeverría. Peasants, they stressed, were not productive because the regions where they lived lacked basic productive and social infrastructure and because risk

¹⁷ Officials have been consistent in stressing that self-sufficiency does not mean autarky; they expect that Mexico will continue to import some quantities of grains in the future. Although some debate has continued on the merits of importing grains as opposed to self-sufficiency, the president repeatedly stressed his commitment to the latter. See, for example his inauguration address in 1976, and his "First State of the Nation Report."

¹⁸ This alternative was rejected because of the limited amount of land involved (some 351,000 hectares) and because of the loss of foreign exchange it would entail. See José López Portillo, "Cuarto informe de gobierno, 1980, Informe complementario," pp. 120-122.
factors involved in subsistence and semi-subistence farming discouraged the adoption of new technologies. The concern with technological innovation, in particular, assumed great importance during these years. As the president's team viewed the problem,

It is known that peasant producers, in contrast to commercial producers, try to minimize risks instead of maximizing gains; this form of behavior is the result of a rational subsistence logic. That is, they try to ensure enough food for their families before thinking about producing a surplus for the market. They achieve this, within their given socioeconomic context, through the use of production techniques that have been tested by centuries and that are fully adapted to the ecological conditions of different regions. 19

The policy solutions implied by this critique were to expand government investments in infrastructure projects such as roads, irrigation, storage facilities, schools, and clinics in regions where peasants lived, and to make appropriate technological choices available to them on acceptable terms. There was little said in this analysis of the role of intermediaries and the exploitation of the peasantry. Instead, infrastructure and technological improvements would bring peasants more fully into participation in the national economy.

At the outset of the administration, this perspective was embodied in the creation of the rainfed districts within the Ministry of Agriculture and Water Resources. The rainfed districts, where the vast majority of the peasant population lived, were to serve as relatively large planning and administrative units for the diagnosis of regional production patterns and problems, and the introduction of goods and services to stimulate agricultural development. Supportive investments in the dis-

19 Oficina de Asesores del C. Presidente, SAM, Medidas operativas agropecuarias y pesqueras (Mexico, mimeo, March 1980), pp. 31-32.
istricts were to come from other programs such as PIDER and COPLANAR, a program for marginalized rural groups and regions. Much of the early development of the rainfed districts was an attempt to apply the solutions that had worked so well in the irrigation districts in the 1950s and 1960s -- infrastructure and the introduction of green revolution technology.

At the same time that the rainfed districts were created and other programs undertaken, government planners in the Office of the President were engaged in a series of studies to further understand the problem of food production in the country. As recounted by a top agricultural advisor to the president,

These studies we undertook revealed all the traditional problems: the change in consumption patterns (a result of cultural imperialism); very bad income distribution (the worst in Latin America); severe international penetration. We also realized that Mexico was in a unique position to do something about its problems because of petroleum wealth... We saw the problem of demand growing much faster than supply and we began to ask what could be done about problems of distribution, income, employment, and demand.

These extensive studies eventually led to the creation of the Mexican Food System (SAM), announced in March of 1980.

The documents outlining the SAM reemphasized the importance of food self-sufficiency and the role of the peasant sector in achieving this.

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21 See Hewitt de Alcántara, Modernizing Mexican Agriculture..., for a discussion of the development of the irrigation districts.


23 The goal of SAM was to become self-sufficient in corn and beans by 1982 and in rice, wheat, saffron, soybeans, sesame, and sorghum in 1985.
The system was to increase productivity in existing agricultural zones and to expand production by bringing new lands into cultivation, especially those dedicated to extensive, inefficient livestock. In addition, the Mexican Food System was a broader analysis of the nation's food problem than ever before attempted. As a result of extensive analyses of nutrition and consumption patterns in the country, planners predicted major increases in demand in the years ahead. They produced a strategy for improving food production, nutrition, and income levels by focusing on five interdependent areas: production, commercialization, processing, distribution, and consumption. For each of these areas, a variety of policy instruments was proposed to improve the availability, quality, and consumption of staple products at the same time that employment opportunities were created and levels of health, education, and income were improved. It was an attempt to deal comprehensively not only with the supply but also the processing, distribution, and demand for food. As such, SAM sought to enlist the support of the commercial producers, intermediaries, distributors, processors, merchants, and consumers as well as the peasants.

The rainfed districts would serve as the focal point for SAM efforts to increase production and to introduce new technologies and pricing systems to stimulate the supply of basic foodstuffs. It presented the idea of "shared risk," in which the government committed itself to underwrite a considerable portion of potential loss for the adoption of new technologies. It also announced a new effort to subsidize inputs, research, and extension for technological change at the farm level, and

---

24 Mexican officials were at pains to stress that SAM was a strategy, not a program, to be implemented through already existing agencies and programs. It was a result of twenty different studies undertaken in 1977.
promised to stimulate peasant organization in order to establish an alliance between the state and the campesinos. The Mexican Food System would be expensive; planners estimated that subsidies for production and consumption of basic food would cost about four billion dollars for 1980 alone. Overall, the government was committed to spending more than two billion dollars a year on rural development and 25 percent of the federal investment budget. By 1980, spending was about 20 percent of all investments. A rapidly expanding resource base due to petroleum revenues and a high rate of inflation help explain the availability of funds, but the concern for rural underdevelopment in the late 1970s was clear.

One result of the new resources available for rural development was an explosion of government programs. Under Echeverría, PIDER was developed to achieve coordination among a number of agencies necessary for integrated rural development and the Agricultural Sector Planning Committee was created for planning and coordination at national and state levels, but most rural programs were developed within specific agencies. These programs attempted to coordinate their activities with other agencies but normally ended up concerning themselves primarily with the goods and services that could be provided within the agency, often attempting to expand resources to duplicate what they had difficulty obtaining from others. In the succeeding administration, more emphasis

\[25\text{Oficina de Asesores de C. Presidente, Primer planteamiento...},\]
\[p. 18.\]

\[26\text{For example, CONASUPO trained its own corps of extensionists, promoters, and organizers even though other agencies were primarily responsible for supplying these personnel to the agricultural sector.}\]
was given to intersectoral planning and coordination, reflecting the difficulties encountered by Echeverría's effort. In 1977, PIDER was joined by the rainfed districts program, COPLAMAR, and a revenue sharing program known as CUC. Each of these had distinct modes of organization and operation, but all sought to break out of an agency mold to bring about greater coherence and coordination in government investments in rural zones. A similar rationale lay behind the fusion of the Ministry of Agriculture and the Ministry of Water Resources in 1977. Planners under López Portillo also built upon concerns and failures of the Echeverría administration in attempting greater degrees of decentralization in decision making and resource allocation. Once again, decentralization of all government programs had been decreed under Echeverría but its success had been limited. Under his successor, greater efforts were made to discover mechanisms for making decentralization work. In addition, in a pattern similar to that of the Echeverría administration, individual agencies such as the Ministry of Agriculture and Water Resources, CONASUPO, Banrural, and the Bank of Mexico increased their poverty-oriented programs.

The López Portillo administration did build upon the experience of the previous sexenio, although for political reasons, policy makers were at pains to differentiate themselves from Echeverría. The importance of rural development to national independence and economic development, the focus on poverty areas and problems specific to peasant agriculture, the emphasis on coordination and decentralization all emerged in the early 1970s to gain new importance in the latter half of the decade. Nevertheless, the López Portillo administration stepped away from an analysis
of rural poverty and underdevelopment that stressed economic exploitation to embrace an explanation based on regional disparities in infrastructure development, technological advancements, and peasant decisional styles. While Echeverría's policies sought to exclude economic intermediaries from their traditional (and exploitive) roles, those of the succeeding administration reflected a desire to incorporate these groups and individuals and to allay the fears of large landowners. Many of the instruments included in the SAM strategy, for instance, were devised to stimulate commercial agriculture as well as the traditional sector. For officials of the new administration, Echeverría's style and rhetoric had considerably added to the rural social tensions and political activities; the return to a less confrontational approach was their attempt to limit rural polarization and to reestablish confidence in the government.

Beneath the surface of government policy toward rural development was another difference between the administrations, this one owing much to the political perspectives of the two presidents. Echeverría, a populist politician with strong links to the country's agrarian past and the dominant party, was concerned to rescue Mexico's ejidos from the economic decline they had suffered since the 1950s. Under his administration in 1974, the Department of Colonization and Agrarian Affairs -- the agency responsible for the ejidos and land distribution -- became the Ministry of Agrarian Reform and great efforts were made to increase the amount of credit and irrigated lands available to ejidos. López Portillo, more a technocrat than a politician, did not single out the ejido sector of the agricultural population for special attention but included it in

27See Latin America Weekly Report, WR-80-31, August 8, 1980. The SAM strategy has been popular with business and banking groups as well as with large landowners.
more general categories of subsistence or small farm production units. The clearest signal that his more conservative administration was less enthusiastic about the ejidos than administrations of the past was the law for Agricultural Development, passed in late 1980. Among other things, the law legalized contracts for land and labor between private and ejido organizations, a measure that amounted to legalizing the renting of ejido plots and the sale of ejido labor to private farmers. This legislation would therefore strengthen the ability of small, medium, and large private farmers (both national and transnational) to expand at the expense of the ejidos, turning ejidatarios into wage laborers. Critics of the new law suggested repeatedly that this meant that the government had abandoned the ejidos and was stimulating the expansion of private landowners for the increase in production that it sought, and abandoning the original intent of the SAM in the process. 28 Thus, what was hailed in 1976 as "the only historically viable possibility to improve farm sector conditions," the collectivization of the ejidos, was considered by the López Portillo administration to be an anachronism. In addition, the president emphasized repeatedly the need to bring the distributive phase of the 1917 agrarian reform to an end. 29

28 See articles by Gustavo Esteva in El Dia, April 18, August 22, 25, 27, September 6, 9, 1980. Other critical commentary is found in daily newspapers during December 1980. See especially Uno Mas Uno, December 8, 16, 18, 27, 1980. Some called the new law an agrarian counterreform and many considered it to be the most serious defeat suffered by Echeverria since he left office in 1976. See Latin America Weekly Report, WR-80-47, November 28, 1980; Accion, January 12, 1981.

It seems clear, then, that official interpretations of rural under-development in Mexico in the 1970s demonstrated significant reorientations both in terms of specific sectoral policies and in terms of the priority given to agricultural and agrarian problems within the broad context of national development efforts. At this point, it is important to assess the impact of the new programs and the new expenditures on levels of agricultural production and on rural social and economic conditions, a task taken up in the following section of this paper, along with a discussion of the implementation problems that were encountered by both the Echeverría and López Portillo administrations.

THE IMPACT OF RURAL DEVELOPMENT EFFORTS

Figure 1, presented earlier, makes clear that federal government investment in agricultural and rural development efforts grew impressively in the 1970s. TABLE 3 indicates the total amounts invested each year and attests to the greater resources available to the government in recent years and the higher priority that rural development efforts had for the government. What impact, if any, has this increased investment had on agricultural production and rural life? For a number of reasons, it is of course difficult to assume a linkage between money invested and outcome. This is especially true in the agricultural sector where climate and other factors can significantly affect production from year to year and where efforts to improve economic and social conditions may be overwhelmed by mounting population pressures and the severity of rural underdevelopment. Rising inflation may also have negated program impact. Further,
insufficient time may have passed for higher levels of performance to be realized; this may be particularly the case with social welfare efforts such as health nutrition, and education whose benefits often do not become apparent for many years or even a generation. Finally, information to assess a wide range of aspects of change in rural conditions is not available. With the data that are available, however, and cautioned by the foregoing qualifications, some preliminary suggestions about how development initiatives have affected rural areas can be made.

According to government figures, the 1970s witnessed impressive advances in the use of agricultural inputs, extension services, and official credit (see TABLE 4). For example, the annual production of improved seeds increased over two and a half times during the decade; for
# Table 4

## The Green Revolution, Extension, and Official Credit in Mexico, 1970-1980

### Government Sponsored Programs

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<tr>
<td><strong>Green Revolution</strong></td>
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<tr>
<td>Production of improved seeds (tons)</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>31,642</td>
<td>43,344</td>
<td>85,411</td>
<td>84,017</td>
<td>118,352</td>
<td>122,313</td>
<td>101,538</td>
<td>63,945</td>
<td>85,342</td>
<td>88,607</td>
<td>82,825</td>
</tr>
<tr>
<td>Corn</td>
<td>8,011</td>
<td>5,645</td>
<td>4,555</td>
<td>5,662</td>
<td>7,789</td>
<td>14,839</td>
<td>17,069</td>
<td>9,879</td>
<td>11,901</td>
<td>9,380</td>
<td>15,615</td>
</tr>
<tr>
<td>Beans</td>
<td>830</td>
<td>1,667</td>
<td>4,807</td>
<td>1,447</td>
<td>5,675</td>
<td>13,894</td>
<td>9,925</td>
<td>986</td>
<td>2,347</td>
<td>5,278</td>
<td>9,060</td>
</tr>
<tr>
<td>Fertilizers (tons sold)</td>
<td>515,230</td>
<td>546,052</td>
<td>671,520</td>
<td>679,719</td>
<td>769,976</td>
<td>957,296</td>
<td>1,143,887</td>
<td>977,169</td>
<td>1,093,022</td>
<td>1,115,328</td>
<td>1,278,761</td>
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<tr>
<td>Insecticides (tons used)</td>
<td>93,000</td>
<td>82,000</td>
<td>74,000</td>
<td>65,000</td>
<td>58,000</td>
<td>52,000</td>
<td>49,000</td>
<td>17,500</td>
<td>19,425</td>
<td>20,502</td>
<td>23,782</td>
</tr>
<tr>
<td><strong>Agricultural extension</strong></td>
<td></td>
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</tr>
<tr>
<td>Total hectares assessed</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>1,576,753</td>
<td>2910,500</td>
<td>4791,706</td>
<td>5,264,129</td>
<td>5,036,000</td>
<td>5,578,135</td>
<td>6,601,929</td>
<td>6,946,755</td>
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<tr>
<td>Corn</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>574,410</td>
<td>810,179</td>
<td>1,781,807</td>
<td>1,708,087</td>
<td>540,000</td>
<td>2,633,905</td>
<td>3,031,722</td>
<td>3,249,887</td>
</tr>
<tr>
<td>Beans</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>113,188</td>
<td>198,896</td>
<td>557,148</td>
<td>548,565</td>
<td>540,000</td>
<td>648,212</td>
<td>722,038</td>
<td>747,971</td>
</tr>
<tr>
<td>Total producers assisted</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>363,152</td>
<td>762,997</td>
<td>1,326,415</td>
<td>1,323,369</td>
<td>1,342,760</td>
<td>1,469,352</td>
<td>1,687,454</td>
<td>2,302,989</td>
</tr>
<tr>
<td>Corn</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>145,014</td>
<td>190,231</td>
<td>309,479</td>
<td>651,087</td>
<td>651,184</td>
<td>753,658</td>
<td>826,530</td>
<td>1,256,997</td>
</tr>
<tr>
<td>Beans</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>34,222</td>
<td>34,139</td>
<td>117,901</td>
<td>121,331</td>
<td>172,630</td>
<td>178,073</td>
<td>180,315</td>
<td>309,998</td>
</tr>
<tr>
<td><strong>Credit - Banrural loans</strong></td>
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<tr>
<td>for basic products</td>
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</tr>
<tr>
<td>Total hectares (thous.)</td>
<td>1,490</td>
<td>1,736</td>
<td>1,758</td>
<td>2,059</td>
<td>3,089</td>
<td>3,866</td>
<td>3,415</td>
<td>3,353</td>
<td>3,046</td>
<td>3,207</td>
<td>3,643</td>
</tr>
<tr>
<td>Corn</td>
<td>578</td>
<td>598</td>
<td>517</td>
<td>666</td>
<td>1,161</td>
<td>1,434</td>
<td>1,378</td>
<td>1,428</td>
<td>1,298</td>
<td>1,307</td>
<td>1,569</td>
</tr>
<tr>
<td>Beans</td>
<td>133</td>
<td>192</td>
<td>153</td>
<td>160</td>
<td>165</td>
<td>179</td>
<td>597</td>
<td>413</td>
<td>395</td>
<td>363</td>
<td>377</td>
</tr>
</tbody>
</table>

*Year refers to agricultural cycles; thus, 1970 refers to the 1969/1970 agricultural cycle, etc.

**preliminary

***estimate

Source: José López Portillo, "Cuarto Informe de Gobierno," September 1980, Anexos
corn and beans, crops that had the highest priority in government plans, two and eleven times more seeds were available. Two and a half times more fertilizer was used in 1980 than in 1970. Similarly, agricultural extension is reported to have reached four and a half times more land in 1980 than in 1973. Five and a half times more land dedicated to corn and eight and a half times as many corn producers were assisted; even higher increases were made in extension to bean cropping and producers. Credit available for basic crop production through the official agricultural bank, Banrural, increased threefold during the decade.\(^{30}\) In terms of these figures, then, it seems undeniable that the government attempted to bring the green revolution and financial assistance to the producers of basic commodities.

However, overall levels of agricultural production did not increase significantly during the 1970s, as is evident in TABLE 5. For the decade until 1979, the average growth rate was about 2 percent a year. Agriculture continued its decline relative to other sectors of the economy. Between 1960 and 1964, the sector accounted for 15.2 percent of the GDP in Mexico. By 1970, it had dropped to 10.8 percent and by 1979 to 8.7 percent.\(^{31}\) Imports of food in 1980 amounted to a third of all imports and cost about three billion dollars. Some of this disappointing performance is a result of capricious and difficult weather conditions. Droughts in 1975-1976 and 1979 were particularly devastating to peasants; commercial farmers with access to irrigated land were much less affected. Neverthe-\(^{30}\) These crops included rice, beans, corn, wheat, sesame, saffron, sorghum, cotton seed, soybean.  

TABLE 5
AGRICULTURAL GROWTH RATES IN THE
1970s

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<tbody>
<tr>
<td></td>
<td>1.7</td>
<td>1.2</td>
<td>5.1</td>
<td>3.6</td>
<td>-0.4</td>
</tr>
</tbody>
</table>


less, it is particularly notable that high priority crops like corn and beans did not show an increase in the area harvested. Figure 2 indicates that the harvested areas for these two crops actually declined slightly over the course of the decade in spite of an overall increase in the total agricultural surface harvested. While the area dedicated to basic crops (corn, beans, rice, sugarcane, oils, wheat) declined by 0.16 percent annually between 1970 and 1977, the area dedicated to export crops such as fruits and vegetables increased by 6.3 percent each year and that for forrage crops by 3.4 percent annually.\textsuperscript{32} Harvested area in irrigated districts increased over one and a half times, while the harvests in rainfed districts clearly remained subject to the vicissitudes of weather and peasant insecurity. TABLE 6 indicates that overall production of basic crops increased only slightly.

\textsuperscript{32} COPLAMAR, Mínimos de bienestar, Vol. 6, (Mexico, 1979), p. 11. In many places, corn has been replaced by sorghum, grown for animal feed; in advanced agricultural areas, wheat has often been replaced by more remunerative fruits and vegetables for export to the United States and elsewhere. See Latin America Regional Report, Mexico and Central America, RM-80-02 (February 15, 1980).
FIGURE 2
HARVESTED SURFACE IN MEXICO
1970-1980

millions of hectares

18.0
17.0
16.0
15.0
14.0
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0

1970 72 74 76 78 80

Source: TABLE 7
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</thead>
<tbody>
<tr>
<td><strong>Total area harvested</strong> (thousands of hectares)</td>
<td>14,975</td>
<td>15,487</td>
<td>15,243</td>
<td>15,868</td>
<td>14,905</td>
<td>15,495</td>
<td>14,776</td>
<td>16,734</td>
<td>15,903</td>
<td>15,022</td>
<td>17,699</td>
</tr>
<tr>
<td>Irrigated zones</td>
<td>2,984</td>
<td>2,990</td>
<td>3,353</td>
<td>4,126</td>
<td>4,471</td>
<td>4,803</td>
<td>4,421</td>
<td>3,386</td>
<td>4,262</td>
<td>4,651</td>
<td>4,932</td>
</tr>
<tr>
<td>Rainfed zones</td>
<td>11,991</td>
<td>12,497</td>
<td>11,890</td>
<td>11,742</td>
<td>10,434</td>
<td>10,692</td>
<td>10,355</td>
<td>12,248</td>
<td>11,641</td>
<td>10,365</td>
<td>12,767</td>
</tr>
<tr>
<td><strong>Corn production</strong></td>
<td></td>
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<tr>
<td>Total area harvested (thousands of hectares)</td>
<td>7,440</td>
<td>7,692</td>
<td>7,292</td>
<td>7,606</td>
<td>6,717</td>
<td>6,694</td>
<td>6,783</td>
<td>7,470</td>
<td>7,184</td>
<td>5,916</td>
<td>7,075</td>
</tr>
<tr>
<td>Production (thousands of tons)</td>
<td>8,879</td>
<td>9,786</td>
<td>9,223</td>
<td>8,609</td>
<td>7,848</td>
<td>8,449</td>
<td>8,017</td>
<td>10,134</td>
<td>10,909</td>
<td>8,752</td>
<td>10,774</td>
</tr>
<tr>
<td><strong>Bean production</strong></td>
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</tr>
<tr>
<td>Total area harvested (thousands of hectares)</td>
<td>1,747</td>
<td>1,965</td>
<td>1,687</td>
<td>1,870</td>
<td>1,552</td>
<td>1,753</td>
<td>1,316</td>
<td>1,631</td>
<td>1,580</td>
<td>988</td>
<td>1,801</td>
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<tr>
<td>Production (thousands of tons)</td>
<td>925</td>
<td>954</td>
<td>870</td>
<td>1,009</td>
<td>972</td>
<td>1,027</td>
<td>739</td>
<td>700</td>
<td>940</td>
<td>555</td>
<td>1,005</td>
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<tr>
<td><strong>Rice production</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total area harvested (thousands of hectares)</td>
<td>150</td>
<td>154</td>
<td>156</td>
<td>150</td>
<td>173</td>
<td>257</td>
<td>159</td>
<td>180</td>
<td>121</td>
<td>150</td>
<td>159</td>
</tr>
<tr>
<td>Production (thousands of tons)</td>
<td>268</td>
<td>244</td>
<td>266</td>
<td>297</td>
<td>324</td>
<td>473</td>
<td>306</td>
<td>374</td>
<td>262</td>
<td>317</td>
<td>296</td>
</tr>
<tr>
<td><strong>Wheat production</strong></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Total area harvested (thousands of hectares)</td>
<td>886</td>
<td>614</td>
<td>687</td>
<td>640</td>
<td>774</td>
<td>778</td>
<td>894</td>
<td>709</td>
<td>759</td>
<td>600</td>
<td>716</td>
</tr>
<tr>
<td>Production (thousands of tons)</td>
<td>2,676</td>
<td>1,831</td>
<td>1,809</td>
<td>2,091</td>
<td>2,789</td>
<td>2,799</td>
<td>3,364</td>
<td>2,456</td>
<td>2,643</td>
<td>2,273</td>
<td>2,731</td>
</tr>
</tbody>
</table>

*years refer to agricultural cycles; thus, 1970 refers to the 1969/1970 agricultural cycle, etc.
**preliminary
***estimate

Moreover, in spite of considerable emphasis on employment creation through rural development, a government study of rural areas completed in 1979 estimated that nearly 70 percent of the country's rural workers, 5.7 million people, were unemployed or underemployed. Estimates for 1970 indicate a rate of about 40 percent unemployment and underemployment. Rural wages remained well below those for urban areas and the difference between them increased (see TABLE 7). Although comparable data do not exist for the early 1970s, the levels of social welfare in rural areas sampled in a 1979 study of the National Institute of Nutrition were arresting -- almost 90 percent of the rural population suffered calorie and protein deficiency of various degrees. Almost half of these people were receiving 25 to 40 percent less than the minimum of 2,750 calories a day per person established by the Institute. In all areas of the country except the north, the calorie consumption level was demonstrated to have declined or to have remained stable since 1959. Other studies carried out by COPLAMAR and published in 1979 indicated extremely low levels of education, health, nutrition, and housing in the country's most rural states. If social and economic conditions were improving in rural areas in the 1970s, they were undoubtedly doing so at a very slow rate.


34 Statistical Abstract for Latin America, 1980, p. 174

35 Oficina de Asesores del C. President, SAM, Primer planteamiento..., pp. 8-9.
## TABLE 7
### INCOME AND MEXICAN AGRICULTURE

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<tr>
<td>National Average</td>
<td>4.313</td>
<td>2.5%</td>
<td>6,053</td>
<td>3.4%</td>
<td>7.093</td>
<td>1.8%</td>
</tr>
<tr>
<td>(1960 pesos)</td>
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<tr>
<td>Rural Average</td>
<td>1,323</td>
<td>3.3%</td>
<td>1,626</td>
<td>2.1%</td>
<td>1,777</td>
<td>1.0%</td>
</tr>
<tr>
<td>(1960 pesos)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National/rural</td>
<td>2,990</td>
<td>4,427</td>
<td>5,316</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>difference</td>
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</table>

Low levels of agricultural production, rising levels of un- and under-
employment, stagnating or declining social conditions.-- these are indica-
tions that government programs in rural areas during the 1970s were not
visibly ameliorating rural problems. It is possible, of course, that the
magnitude of rural poverty and the impediments to increased production and
productivity are so severe that much more massive amounts will be needed be-
for any impact is apparent. Certainly it is true that rural underdevelop-
ment is a complex phenomena whose amelioration is bound to be expensive and
time consuming. Government officials themselves continue to blame poor
performance on still inadequate levels of investment. In addition, however,
institutional and political factors in Mexico during the 1970s acted as
constraints on the effective implementation of rural development efforts
that were initiated.

Institutional Obstacles to Policy Implementation

The new approaches to rural development required much greater degrees
of coordination among a large number of official agencies and ministries
and implied the need for many of them to reorient their own priorities, pro-
grams, and projects. Under both administrations, in spite of numerous ef-
forts to resolve such institutional problems, investments were frequently
made without careful planning, agencies and ministries resisted coordination,
personnel -- especially at the field level -- were not adequately prepared,
organizations competed with each other rather than cooperating, and a variety
of other problems were encountered. One observer has summed up the implica-
tions of institutional obstacles such as these.
Agricultural policy is carried out by more than a hundred official institutions. Many were created in order to replace another that was performing poorly but that continues to exist. There is duplication and triplication, lack of cooperation and competence or open conflict among promoters of agricultural development; there is ineptitude, inefficiency and corruption. Tens of thousands of bureaucrats, who depend on the amount and direction of public investments, exert one of the strongest pressures for keeping agricultural policies fixed and invariable. From this they derive their privileges which, above all in provincial cities, locate them at the top of the social pyramid. Their economic, political, and social linkages with big businessmen are an additional barrier keeping public resources from reaching the campesinos who are rhetorically declared to be their beneficiaries.36

Frequently, cooperation among official agencies was elusive and there was a marked difference in the willingness to commit themselves to the new priorities. In the early 1970s, for example, the marketing agency, CONASUPO, was an eager promoter of the new policies, in large part because they implied a tremendous expansion in the resources and power of the organization. Other agencies, such as the Ministry of Agriculture, were less enthusiastic. This large and fragmented organization favored the development of modern, capital intensive agriculture such as that characterizing the successful development of northwestern Mexico. As a result, the ministry's corps of specialists was strongly committed to research and application of advanced agricultural technologies and had little experience with or sympathy toward peasant agriculture. The agency also had a politically powerful desire to reorient programs toward the traditional sector. The ministry was also fearful of collaborating with other agencies because of its declining prestige and its claim to priority in agricultural

policy making. Problems with this agency continued under the succeeding administration, even though it was reorganized and integrated with the prestigious Ministry of Water Resources.37

Problems of coordination and competition among official agencies were also endemic during both sexenios; they were particularly noticeable during the López Portillo administration when the number of rural oriented programs and agencies expanded. One example is the tension that existed between the integrated rural development program created by Echeverría, PIDER, and COPLANAR, the program for marginal groups and regions established by López Portillo. These programs competed with each other for presidential support and resources and the problems of monitoring, financing, coordinating, and evaluating them assumed considerable proportions by the late 1970s. A number of problems that PIDER experienced, such as a drop in salary levels and a paucity of high caliber personnel can be linked -- and often were by PIDER officials -- to the creation of COPLANAR and its greater presidential support. Where COPLANAR and PIDER regions overlapped or abutted each other, duplication and planning errors resulting from a lack of coordination between the two programs were reported. One widely cited anecdote concerned the COPLANAR health clinic built next door to the PIDER health clinic. At local levels such experience, even when minimal, could not have increased beneficiary regard for official programs. Partisans of the two programs continually sniped at each other. According to followers of COPLANAR, it had fallen heir to PIDER's original functions which PIDER was not able to carry out. Partisans of PIDER questioned the integrated

37 For a discussion of institutional problems in recent years, see Bailey and Link, "Statecraft and Agriculture in Mexico...."
nature of COPLAMAR's activities and decried its lack of attention to productive activities. In both cases, these tensions inhibited cooperative activity.

Other institutional problems resulted from the impact of national political processes. A brief example of this is the experience of CONASUPO. In 1970, a new political administration with new priorities provided CONASUPO leaders an opportunity to be at the forefront of the government's efforts to improve production and conditions in rural areas. Their goals included a significant expansion in the size and power of the agency, and in this they had considerable success. CONASUPO added 11 new subsidiary companies (for a total of 16) and increased its budget two and a half times between 1972 and 1975, during which it substantially increased its rural activities. However, in early 1976 the directorship of the agency changed hands at the initiative of the president. In the same year, political tensions, particularly in rural areas, caused the president to halt further expansion. By 1977, CONASUPO was required, this time by a new president, to cut back actively on its rural presence. The agency was also placed under the more vigilant eye of the Ministry of Commerce during a government-wide reorganization in the same year. Then, in 1979, CONASUPO was given another opportunity to expand and was expected to become,

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38In an interview in September of 1980, a former CONASUPO official reflected on the agency's programs in rural areas. "The change in CONASUPO policy came immediately after the political change. They began closing consumer outlets in the rural areas, as many as 50 to 100 at a time. It was claimed that they were corrupt, that they were inefficient, that they were all sorts of things. But the point was simply to close them down. The director went so far as to claim that CONASUPO had no business in rural areas. An interesting thing happened in January of 1977. They tried to close down a CONASUPO installation and the peasants just took it over. They refused to acknowledge that CONASUPO was withdrawing and they insisted on maintaining the program. Now, three years later, they are again opening all these consumer outlets and expecting the peasant to go along with it."
once again, a key link in the government's rural development effort. These changes in status and the programs of CONASUPO not only impaired the stability and continuity of its efforts, but also seriously affected its ability to maintain the confidence of peasant and low income beneficiaries. Waste of effort and resources was a correlary of the waxing and waning power of the agency.

The change of sexenios had other institutional consequences that limited the impact of rural investments. For instance, because of the six year limit on presidential administrations, programs and policies are frequently abandoned before they have proved themselves to be successes or failures. The attempt under Echeverría to alter the structural conditions of exploitation in rural areas was pursued only between 1973 and 1976; in 1977, it was replaced by a different perspective and a different set of programs. The ambitious goals of the SAM, announced in the spring of 1980, will be pursued for only twenty months before a new administration takes over. Thus, Mexico may be missing opportunities to assess the viability of various models of rural development. Moreover, peasants and other beneficiaries who have become involved in programs under one administration may be left in the lurch by the next; the case of CONASUPO is instructive here. Given the realities of the Mexican political system, the rainfed districts, COPLAMAR, CUC, and other programs may also lose priority, be renamed, or disappear in late 1982 when López Portillo leaves office. The rural areas will not be forgotten, but the new administration will undoubtedly undertake extensive studies and analyses of rural problems in order to develop its own priorities and policies. In the case of Mexico,
six years is not sufficient time to develop an understanding of a problem, create policy and program solutions to it, implement these, and correct the deficiencies that come to light in the process.

Political Obstacles to Policy Implementation

Innovative and complex public initiatives like the rural development programs of the Echeverría and López Portillo administrations not only faced significant institutional barriers to effective implementation, they were also affected by constraints of political feasibility, given the realities of the Mexican political system. For instance, the efforts of Echeverría to distribute land to ejidos was ultimately stymied by the threat of social and economic upheaval, conditions that the political elite since the 1940s have sought strenuously to avoid. Throughout 1975 and 1976, land invasions and peasant mobilization in the northern states of Sinaloa and Sonora and resulting resistance and violence from landowners occurred. At one point, landowners in these two agriculturally important states declared a strike that required presidential intervention to resolve.39 The importance of this modern commercial sector to the national economy in the 1970s was too great for the government to permit the kind of rural instability that accompanied the redistributive efforts of the 1930s. Just prior to leaving office in November of 1976, Echeverría expropriated 100,000 hectares of land in the state of Sonora and redistributed it to 9,000 peasants, plunging the northwest into a serious political crisis. A

federal court subsequently ruled the expropriation illegal.\textsuperscript{40} After that, considerable efforts were required to pacify the peasants and landowners involved in the expropriation matter and to avoid similar unrest elsewhere; the López Portillo administration thereafter consistently discouraged the use of land distribution as a feasible solution to rural and agrarian problems. Landless peasants were to accept a future as better paid and organized rural laborers, but not as landowners.\textsuperscript{41}

Similarly, public initiatives in rural areas were limited by the economic and political power of the caciques and other middlemen who are supported by the peasant economy. The Echeverría administration sought to replace these agents with new government programs to provide the goods and services traditionally provided to the peasants by these intermediaries. However, his programs underestimated the tenacity of the caciques. Often they ended up as the beneficiaries of the very programs pursued in order to exclude them.\textsuperscript{42} Frequently, also, they were able to use linkages to state and national political figures in order to halt expansion of various government programs. In other cases, they were able to create conditions of unrest in rural areas that caused headaches and tensions for central and local program administrators. Problems of this kind were in part responsible for the cutbacks in CONASUPO's rural activities in 1976, when the agency had succeeded in threatening the interests of local merchants, businessmen,

\textsuperscript{40} Latin America Weekly Report, Vol 10, nos. 43, 46-49.

\textsuperscript{41} On June 1, 1978, the Minister of Agrarian Reform resigned in disagreement with the president over the role of agrarian reform in the government's policies. See Latin America Economic Report, Vol. 6, no. 23 (June 16, 1978).

\textsuperscript{42} See Grindle, Bureaucrats, Politicians, and Peasants in Mexico, Chapters 5 and 6
and political bosses. Under López Portillo, efforts to avoid the rural
tensions of the previous administration meant the incorporation of the
intermediaries in public actions rather than their exclusion. While this
may have done much to keep the political peace, it also meant continuing
failures to reach target groups with effective programs. In any event,
neither Echeverría with his more confrontational approach nor López
Portillo with his inclusionary tactic was able to undermine the power of
the caciques in terms of their linkages to national politics or their
hold over the peasant economy. Effective solutions to the plight of the
rural poor and to their low productive potential were not and will not
be found without confronting and breaking the power of the caciques. As
these individuals remain central to the stability of the political system,
it is not likely that future administrations will willingly undertake
this task. 43

Another factor that limited the impact of rural development efforts
was the problematic nature of beneficiary participation in the programs.
Such efforts could not be successfully imposed from above, and both ad-
ministrations repeatedly committed themselves to stimulate peasant organiza-
tion and to encourage active participation.44 However, some forms of partici-

43 The relationship between the cacique and the government is indicated
by Lorenzo Meyer. "The cacique acts as mediator between the local govern-
ment and the rural community. In exchange for the assurance of tranquility
in its area, the local government and, in the event, the national Government,
relinquishes certain rights in the exercise of power in favor of the cacique."
"Twenty-five Years of Mexican Political Life," Comercio Exterior, Vol. 22,

44 The importance of participation in rural development efforts is a
topic of growing interest among development planners. See Norman Uphoff and
John M. Cohen, Rural Development Participation: Concepts and Measures for
Project Design, Implementation and Evaluation (Rural Development Monograph
No. 2, Center for International Studies, Cornell University, January 1977),
for a discussion of important points.
Participation had serious implications for the stability of the political system and government officials were wary of encouraging them. Mexico's authoritarian system has long been noted for the control it exerts over the political behavior of the population. This has been an important ingredient in maintaining the striking maldistribution of wealth that is apparent in the country. In rural areas, the dominant party has been especially successful in maintaining a supportive but inarticulate base through the manipulation of the National Peasant's Confederation and clientele and coercive relationships with local caciques. Not surprisingly, the level of participation in Mexican politics is low and marked by ritualistic observance and this behavior is especially notable in the countryside.

Under the rural development efforts of the 1970s, encouragement of organizational efforts stopped short of supporting the autonomous demand making capacity of the target population. The devolution of power, especially to the masses of the population, is a direct threat to the carefully maintained and much touted stability of the political system. The consequences of this political cautiousness were to constrain the potential for cooperative peasant activities, to limit challenges to the status quo, and to inhibit communication between beneficiaries and administrators.

These institutional and political constraints, although largely un-measurable in terms of resources wasted, misdirected, or inefficiently

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45 One PIDER official, for example, described the problem in the following terms. "If participation is stimulated too much it gets out of PIDER's control and brings political problems. It becomes a political problem for PIDER when it begins to break up or threaten commercial interests or interests outside the specific ejido or community. If they want to collectivize the ejido, that's fine and it creates no problems. But if they make other decisions that threaten particular interests, then PIDER is in hot water." Interview, Mexico City, September 1980. In recent months, SAM has backed away from direct participation of peasants in programs. See Latin America Weekly Report, WR-80-31 (August 8, 1980).
used, are important in explaining the disparities between government plans and investments and actual payoffs in terms of improved levels of production and rural social welfare. One further consideration in assessing rural development efforts of the 1970s is the extent to which the programs and policies were based on a realistic assessment of the constraints on development in rural areas. That is, did the array of government initiatives actually address the fundamental causes of rural underdevelopment? If they did not, then there is little reason to expect much improved performance in spite of the government's laudable goals.

CONCLUSION: RURAL REALITIES AND RURAL DEVELOPMENT

Both administrations of the 1970s developed comprehensive and coherent explanations for why rural regions in Mexico were underdeveloped and underproductive. As we have seen, the analysis that gained acceptance under the Echeverria administration tended to emphasize the importance of structural constraints on peasant agriculture while the Lopez Portillo administration concentrated much more on the issues of poor infrastructure and technological development. In both cases, interpretations were based on extensive data collection and thoughtful analyses. And in both cases, logical and consistent sets of public actions were proposed to deal with what were considered to be the underlying causes of rural backwardness. Nevertheless, these official perspectives of the 1970s failed to address an issue that is central to the dynamics of agricultural development in Mexico -- the relationship between advanced commercial agriculture and its needs and those of the underdeveloped peasant sector. Confronting the con-
lict over basic agricultural resources between these two sectors may well be fundamental to explaining rural poverty and the kinds of programs necessary to bring rural areas into a more beneficial relationship with processes of national development.

The bifurcation of the agricultural economy is apparent in Mexico; its reality was accepted and well documented by the administrations of the 1970s. However, except for the modest land redistribution efforts of Echeverría, it was assumed in both administrations that traditional benefits -- irrigation, subsidies, extension and research -- would continue to flow to the large scale capital intensive commercial zones at the same time that new resources were channeled toward the ejidos and minifundios that were to produce basic crops in greater quantities. The enormous political and economic power of the large landowners made it essential to continue programs in their benefit. In this "new dualism," as distinct from the "old dualism," the peasant sector was no longer expected to benefit through trickledown effects from investment in commercial agriculture, nor was its production expected to respond to the same kinds of stimuli that encouraged large scale enterprises. It was accepted that different kinds of programs would have to address the specific problems and specific rationalities of peasant agriculture. Nevertheless, while the two sectors were assumed to be developing according to different productive patterns, they were also assumed to be doing so in relative isolation from each other.

46 Agricultural development policies from the 1940s to the 1960s generally stressed the dual characteristics of agricultural production -- traditional and modern. It was assumed that the traditional sector would gradually develop in the same manner as the modern sector through the diffusion of education, technology, and communication.
other. Even the emphasis on exploitation and structural constraints under Echeverria was concerned with conditions only within the traditional sector and how these were related to the urban and industrial economy. Reflecting this perspective, new priorities for rural development were pursued through a reassessment of existing allocations and programs. Both interpretations therefore implied that rural and agricultural crises could be dealt with within the existing agrarian structure.

This dualistic perspective on the development of agriculture ignored the possibility that the development of large scale capital intensive agriculture has a direct and detrimental impact on production and social and economic conditions among the masses of the rural poor; it ignored the possibility that the relationship between the two sectors is one of conflict, especially with regard to the issue of control over good quality land and water resources. The process of capitalist expansion and related peasant deterioration is amply apparent in the agrarian history of Mexico during the pre-revolutionary period, in the period after the revolution to 1935, and again after 1940. The process continued in the 1970s and may well have been encouraged by government investments in aid of large scale commercial agriculture. For example, in the past decade, unemployment and underemployment in rural areas increased, at the same time that the government announced great advances in the mechanization of irrigated zones (see TABLE 8). 47 Similarly, TABLE 8 indicates that the expansion of large scale

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47 In 1970, 12 percent of the country's agricultural units accounted for about half its production, 42 percent of its productive land, 48 percent of its irrigation and its government investment, 73 percent of its machinery, and 61 percent of its green revolution technology, but only 20 percent of its agricultural jobs. The same statistics indicate that these landowners produced only 48 percent of the total production, suggesting that the sector is not as efficient as is often claimed. Latin America Economic Report, Vol 7, no. 20 (May 25, 1979), p. 156. Mechanization of Mexican agriculture is also stimulated by subsidized energy sources.
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<tbody>
<tr>
<td><strong>Mechanization in irrigated zones</strong></td>
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<tr>
<td>Area completely mechanized</td>
<td>1,165</td>
<td>1,263</td>
<td>1,234</td>
<td>1,422</td>
<td>1,606</td>
<td>2,026</td>
<td>1,901</td>
<td>1,793</td>
<td>2,138</td>
<td>n.a.</td>
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<tr>
<td>Area partially mechanized</td>
<td>821</td>
<td>928</td>
<td>779</td>
<td>888</td>
<td>901</td>
<td>902</td>
<td>956</td>
<td>1,026</td>
<td>1,082</td>
<td>957</td>
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<tr>
<td>Area not mechanized</td>
<td>336</td>
<td>205</td>
<td>221</td>
<td>199</td>
<td>230</td>
<td>200</td>
<td>199</td>
<td>180</td>
<td>363</td>
<td>175</td>
<td>n.a.</td>
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<td><strong>Area benefited by irrigation</strong></td>
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<tr>
<td>Area benefited by irrigation and drainage</td>
<td>20</td>
<td>111</td>
<td>170</td>
<td>135</td>
<td>134</td>
<td>201</td>
<td>158</td>
<td>177</td>
<td>187</td>
<td>304</td>
<td>323</td>
</tr>
<tr>
<td>Area benefited by large irrigation projects</td>
<td>4</td>
<td>59</td>
<td>115</td>
<td>81</td>
<td>90</td>
<td>96</td>
<td>72</td>
<td>122</td>
<td>99</td>
<td>190</td>
<td>157</td>
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<tr>
<td>Area benefited by small irrigation projects</td>
<td>11</td>
<td>20</td>
<td>15</td>
<td>19</td>
<td>17</td>
<td>67</td>
<td>37</td>
<td>41</td>
<td>45</td>
<td>56</td>
<td>88</td>
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\(^a\) years refer to agricultural cycles; thus, 1970 refers to the 1969/1970 agricultural cycle, etc.
\(^b\) preliminary
\(^c\) estimate

irrigation projects, which historically benefited the commercial sector, grew much more rapidly than the area serviced by small irrigation projects, presaging an even greater gap between commercial and peasant producers. The Agricultural Development Law introduced by López Portillo will, according to its numerous critics, expand the potential of commercial farmers to increase their production and control over ejido lands.

As this process of expansion and capitalization continues, peasants face an increasingly insecure future, even given the investments of the 1970s. In fact, to the extent that programs for infrastructure and technological advancements increase the productive potential and value of land, ejidatarios and minifundistas will find it increasingly difficult to maintain control over their land; concentration of landholdings through purchase, rental, or contract will undoubtedly occur. In the past decade, concentration of landholding has accompanied mounting population pressures to bring the total of landless rural workers from about 3 million in 1970 to almost 4 million in 1980. Added to this are the very large number of ejidatarios and minifundistas whose tiny plots place them in the infrasubsistence category.

It may well be, therefore, that rural development strategies that channel extensive resources into the peasant sector without confronting the relationship between it and the commercial sector and that fail to consider the limited nature of the two most important agricultural resources, land and water, will not do much to stimulate production, create jobs, or raise living standards. Policies and programs to reverse the concentration of landholdings; to discourage capital intensive tech-
nologies; to make better quality land and water resources available to ejidos, small landowners, and the landless in sufficient quantities; to inhibit the capacity of national and transnational agribusinesses to control conditions of small scale commercial agriculture; as well as those to break the power of the caciques and other intermediaries within the peasant economy and those to bring appropriate infrastructure, technology, and credit to poor rural areas -- these may be the instruments necessary to stimulate authentic rural development in Mexico. Ultimately, a new agrarian reform is implied by these proposals. This is clearly a difficult task and one not taken on lightly by politicians and bureaucrats who value social, political, and economic stability. Nevertheless, they are issues central to the solution of Mexico's agricultural and agrarian crises.
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