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LOCAL ORGANIZATION AND PARTICIPATION IN INTEGRATED RURAL DEVELOPMENT IN JAMAICA

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LOCAL ORGANIZATION AND PARTICIPATION IN INTEGRATED RURAL DEVELOPMENT IN JAMAICA

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Harvey S. Blustain

Cornell University

Rural Development Committee
Center for International Studies
Cornell University

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ABBREVIATIONS USED

ACB	Agricultural Credit Board
AIBGA	All-Island Banana Growers Association
AICFA	All-Island Cane Farmers Association
AMC	Agricultural Marketing Corporation
BIB	Banana Industry Board
CGA	Citrus Growers Association
CIB	Coffee Industry Board
IRD Project	Second Integrated Rural Development Project
JAS	Jamaica Agricultural Society
JD Bank	Jamaica Development Bank
JLP	Jamaica Labour Party
PC Bank	Peoples' Cooperative Bank
PNP	Peoples' National Party
SDC	Social Development Commission
WPJ	Workers' Party of Jamaica

CHAPTER ONE

INTRODUCTION

The research on which this study is based was conducted between January and June 1979. It was initiated with two different, though complementary, goals in view. Our principal task was to generate empirical information on local organizations in the rural sector as part of the Cornell University Rural Development Committee's project on the participatory approaches to rural development. Jamaica, a country with long-standing democratic traditions, a large but stagnant rural sector, and a government elected on a platform of social change, seemed a particularly fruitful environment for studying participation in rural development. Our more immediate concern, however, was to provide a detailed portrait of Jamaican small farmer organizations for the Second Integrated Rural Development Project. This Project, a joint undertaking of the Government of Jamaica and the U.S. Agency for International Development, invited us to study participation in the organizations operating within the Project area. Our data were to assist Project staff in designing means to involve local residents in rural development activities.

The research was concentrated in the Two Meetings and Pindars River watersheds, the two ecological zones the Integrated Rural Development (IRD) Project is attempting to rehabilitate. Most of the local organizations we investigated, however, are of national scope. For this reason, and because the study sites were large, diverse, and comparable to many other peasant farming areas in Jamaica, our findings are of more than local interest. The problems and opportunities we witnessed apply with similar effect elsewhere on the island.

This study is an outgrowth of an earlier report we submitted to the Government of Jamaica, USAID, and the IRD Project.[1] Here we have eliminated many Project-specific observations and recommendations, while adding substantial background information on the Project and the two watersheds. We have also placed our observations in a more comprehensive framework. We hope, therby, to have made our findings more informative to the general reader, who may be interested in issues of local organization and rural development, but may know little about Jamaica or the particular history of the Two Meetings and Pindars River Project. We aim also to contribute something to emerging theory about the role of local organization in rural development.

In this introductory chapter we briefly review the background of the IRD Project in the context of Jamaica's rural problems, and examine the issues of popular participation that informed our analysis. In Chapter Two we describe in some detail the economy and social structure of the Two Meetings and Pindars River watersheds. Chapter Three recounts the structure and functions of the formal local organizations active in the study area, and Chapter Four examines the level of farmer participation in these organizations. The following chapters analyze the degree of local involvement in various government services (Chapter Five) and farmers' attitudes toward the IRD Project and give a summary of our findings and their implications for rural development activities in Jamaica (Chapter Six). Finally, we have appended a short discussion of our research methodology, and a description of the sample of local residents we surveyed.

THE SECOND INTEGRATED RURAL DEVELOPMENT PROJECT

Jamaica is an island of 2.1 million people and 4,200 square miles. It is located 90 miles south of Cuba in the Caribbean Sea. Most of the population,

---

[1] Harvey S. Blustain and Arthur A. Goldsmith, "Farmers' Organizations and Local Institutions in the Two Meetings and Pindars River Watersheds," 3 vols., Report Prepared for USAID/Jamaica, Kingston, June 1979.

about two-thirds, live in rural areas, and farming provides the livelihood for 30 percent of the work force. Agricultural productivity is low, however, and the GDP per farm worker is only one-sixth that of employees in the non-agricultural sector. Rural poverty is widespread, with an estimated 80 percent of farm families earning per capita incomes of less than U.S. $200 per year.[2]

Agricultural production has not kept pace with growth in the economy. During the decade following independence in 1962, agricultural output expanded by only 3.2 percent per year, considerably below the 5.3 percent real growth rate of the GDP.[3] In the 1972-1977 period, increases in agricultural production declined further, to a yearly average of 0.7 percent.[4] This is far below the rate of population increase (1.8 percent), and partly explains the large gap between Jamaica's agricultural exports and imports that has developed since 1966, the last year in which Jamaica was a net exporter of farm products.

The inefficiency of Jamaican agriculture has compounded the serious problems plaguing the country's economy in the 1970s, problems which caused the real GDP to decline by 11 percent between 1972 and 1977.[5] At the heart of this economic crisis is the country's inability to earn enough foreign exchange to finance essential imports. The agricultural sector, because of declining production of export crops and its inability to produce sufficient food to meet

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[2]This is according to USAID estimates. See Jamaica--Integrated Rural Development Project Paper (Washington, D.C.: Agency for International Development, 1977), p. 12.

[3]This is the real growth rate in 1960 prices, as reported in Green Paper on Agricultural Development Strategy (Kingston: Government of Jamaica, Ministry of Agriculture and Fisheries, 1974), p. 10.

[4]Calculated from government figures on GDP in constant (1974) prices. See Statistical Yearbook for Jamaica, 1978 (Kingston: Government of Jamaica, Department of Statistics, 1979), p. 649.

[5]This is reported in official statistical publications, such as the Statistical Yearbook, 1978, p. 651. The economy further contracted in 1978 and 1979, with severe impact on employment and real income.

domestic demand, has aggravated the chronic foreign exchange deficit. In 1976, for example, Jamaica imported J$71 million (U.S.$78 million) more food products than it sold abroad. This helped balloon the deficit on current account to a record J$275 million (U.S.$303 million).[6] The following year the Government was compelled to seek assistance from the International Monetary Fund and to adopt strict austerity measures. Although the agricultural sector is not solely responsible for the country's economic woes--rising petroleum costs, cutbacks in the vital bauxite industry, and a decline in tourist earnings have also been major factors--the Government recognizes that rural development is crucial for reconstruction of the national economy.[7]

The Second Integrated Rural Development Project is one part of the Government's larger effort to revitalize the country's farming areas. The IRD Project evolved from the activities of a UNDP/FAO team that came to Jamaica in 1967. This group recognized that the low productivity of small farmers, who produce most of the domestic food crop, was a major bottleneck in the economy. Too many peasant small holders were making inefficient use of their land, largely, it was felt, because their holdings were on steep badly eroded hillsides. The first step toward raising productivity, therefore, was to preserve existing land resources. With this end in view, UNDP/FAO helped the Ministry of Agriculture establish an experimental farm, to design techniques for preventing erosion and improving soil fertility.

The team also participated in a survey of the island's 33 watersheds, and helped the government identify five to receive priority attention. The

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[6]See Statistical Yearbook, 1978, pp. 578,585,586, and 633. The rate of exchange used here is J$1.00=U.S.$1.10.

[7]This is reflected in numerous policy statements, most recently in the Five Year Development Plan, 1978-82, Main Document (Kingston: Government of Jamaica, National Planning Agency, 1978), pp. 25-29.

Two Meetings and Pindars River watersheds were ultimately selected for detailed study and development planning, both because of their severe erosion problems and their importance in downstream water use. In 1975, UNDP/FAO recommended a ten-year project to rehabilitate the entire two watersheds.[8] The proposed project would put into practice the soil conservation technology developed at the experimental farm, and serve as a model for subsequent watershed management projects.

USAID agreed in 1977 to provide U.S.$15 million in loans, grants, and technical assistance, to be used in the Two Meetings and Pindars River areas. The Government of Jamaica, for its part, allocated an additional U.S.$11 million for the two areas. Under USAID auspices, however, the Project's time schedule was accelerated to four years. Its scope was also expanded, from soil conservation to a larger, integrated program for rural development. Erosion control remained the primary thrust, accounting for half the Project's proposed expenditure, but to this were added significant components to improve social services and rural infrastructure. These included construction and rehabilitation of roads and feeder tracks; expansion of domestic water supplies; rural electrification; construction of new housing; provision of credit for tools, seeds, and fertilizer; and improvement of the marketing system.[9]

Particularly important from our point of view was the Project's new emphasis on local organizations. These were to be a vehicle for delivering

---

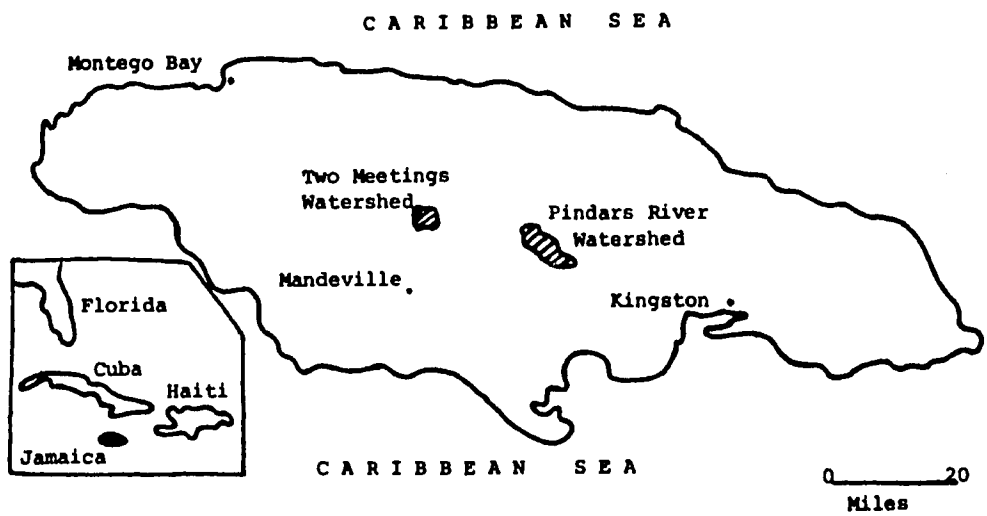
[8]The Project is fully described in Forestry Management and Watershed Management in the Upland Regions--Jamaica, Project for the Rehabilitation and Development of the Pindars River and Two Meetings Watersheds (Rome: United Nations Development Programme and Food and Agriculture Organization of the United Nations, 1977).

[9]USAID, Jamaica--Integrated Rural Development, p. 21.

critical farm inputs and for providing new outlets for farm products. As the Project paper stated:

> Groups of farmers associated for the purpose of coordinating their plans and sometimes engaging in unified action represent the best alternative to improve the credit, inputs, and marketing services available in the Project area. The Project...will attempt to assist and develop groups of farmers organized as cooperatives, associations, or societies.[10]

To this end, the Project proposed to provide funds for training personnel in the local Peoples' Cooperative Banks, to make money available to a local cooperative for inventory expansion, and to supply local branches of the Jamaica Agricultural Society with equipment and storage facilities. Once the Project got underway in 1978, its staff further decided to create committees to involve local people directly in planning and implementing IRD activities.



Map 1.1. Location of Two Meetings and Pindars River watersheds

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[10] Ibid., p. 34.

However, before more specific plans for local organizations could be drawn up, Project personnel needed more detailed and relevant social analysis. Consequently, the authors of this study were invited to the Project site, our primary directive being "to investigate various organizations serving the small farmer in the Pindars/Two Meetings project area and to provide an implementation plan designed to develop local organizations which are more responsive to the small farmer's needs."[11] During our research, we felt it necessary to go beyond our initial scope of work and investigate other participatory issues of direct relevance to achievement of IRD Project goals. These included marketing behavior, participation in labor markets, use of credit, and involvement in agricultural services provided to farmers. These additional areas of analysis were undertaken because of the limited sociological data available to Project staff, as well as our own research interests.

RELEVANCE OF PARTICIPATORY ORGANIZATIONS

In conducting our field work, we operated on the hypothesis that community participation in local organizations is critical for rural development. A large body of literature indicates that agricultural projects often fall short of goals because they fail to involve local people--not only in project implementation, but also in project planning, management, and evaluation.[12] Development efforts need local support to succeed, and this is most likely to be forthcoming if project beneficiaries are consulted about their needs, given assistance that meets those needs, and provided opportunities to influence project decisions. In the absence of local

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[11] "Cornell Team Scope of Work," internal memorandum, Integrated Rural Development Project, Christiana, January, 1979.

[12] This literature is reviewed in Norman T. Uphoff, John M. Cohen and Arthur A. Goldsmith, Feasibility and Application of Rural Development Participation: A State-of-the-Art Paper (Ithaca, N.Y.: Cornell University, Rural Development Committee, 1979).

participation, a development project will probably have trouble encouraging behavioral change among the rural majority. People may consider many project interventions and recommendations irrelevant, or even detrimental, to their needs. Indeed, local opinion may be correct in these matters. These problems can be counteracted if project clients have access to base level organizations capable of aggregating their interests, and of exercising influence on project activities.

In our view, local organizations have several related functions, which are critical to success of the IRD Project, but are relevant to other rural development projects too.

Communication: Agricultural projects can achieve economies of scale by communicating with groups of farmers, rather than with individuals. Because communication is a two-way process, such projects can also benefit from farmers' ideas. This input can be more effectively conveyed through groups of people. In either case, local organization facilitates communication from the top down and from the bottom up.

Legitimation: Because government programs frequently fail to achieve their goals, many local people are suspicious of new projects. This was true in Two Meetings and Pindars River. Numerous farmers there believed the IRD Project was "just politics", and that its promises would never be fulfilled. Permitting local people to enter into a project's deliberations can help dispel this distrust, as well as give project staff a better understanding of local needs and interests. By contrast, a public institution viewed as unworthy because it does not consult local opinion, should not be surprised if people do not join its programs.

Mobilization and Cooperation: The abandonment of familiar behavior is often difficult, but agricultural development requires people to marshal new resources and adopt novel farming techniques. Development projects must, therefore, strive to mobilize popular support for innovation. This process

can be aided by enlisting the support of local organizations and opinion leaders.

Often too, agricultural development requires that people cooperate more extensively than in the past, to achieve economies of scale through group action, or to make more efficient use of common resources. A good example of this need can be seen in the IRD Project. The soil conservation measures promoted by the Project are most effective when implemented on an entire hillside. It is not possible to treat an entire hillside through contractual agreements with individual farmers, however, for most of their holdings are small and fragmented. Getting groups of neighboring farmers to assent to simultaneous soil treatment would have a more immediate impact on erosion in their area, and could facilitate the construction of terraces, waterways, and other engineering works, all of which may entail moving heavy equipment through several farmers' fields.

Encouragement of Local Self-reliance: Development activities which have no organizational base in the local community, but which are sustained solely by a government agency, are unlikely to result in permanent improvements in rural living standards. Self-sustaining growth requires viable local organizations, to continually encourage adoption of innovations and maintainance of recommended practices. For the IRD Project this is a particular problem, for all previous soil conservation programs in the area failed when residents allowed earthworks to fall into disrepair.

We do not suggest that local organizations are a sufficient condition for rural development--technical knowledge, public resources, and above all, profitable technologies are also crucially important. We do believe, however, that such organizations are a necessary condition. Without their support the best technical package and the most skilled administrative personnel are not likely to be of much benefit to the rural poor.

CONDITIONS FOR PARTICIPATORY ORGANIZATIONS

While we believe that participation in local organizations is necessary for successful development, we also believe that it cannot occur unless certain conditions are met.

Benefits and Felt Needs: Farmers will not join in group activities unless by so doing they obtain clear benefits. Of utmost importance is that these be benefits from the farmer's point of view, and not that of a government technician or bureaucrat. It is naive to expect rural people to band together merely because a project desires local input, or wants local residents to engage in cooperative action. Tangible and immediate incentives are the *quid pro quo* for widespread participation in base-level organizations.

Social Base: Participatory organizations are unlikely to take hold if based on artificially created administrative units, rather than on communities with shared interests and identities. This does not mean that local organizations should always have universal membership; many effective groups may be restricted to persons of a particular class, sex, or other ascribed characteristic. The point is that viable organizations do not grow outside of their social context. To the extent possible, they must employ existing networks of communication and cooperation. Without an authentic social base, a local organization will lack the cement provided by common interests, and more fundamentally, be deprived of the resource-exchange system needed to sustain it.

Local Control: Long-term participation in development activities is more likely to occur in organizations that are subject to local control and direction. This implies a degree of local autonomy, though not necessarily isolation, as extra-local linkages are often needed to break some local resource constraints. But any such organization must be free of domination by bureaucratic staff, capable of generating its own resources, and led by officers of its own choosing. An organization too dependent on outside initiative and support will suffer in

its ability to guard its members' interests and to tap their resources. By the same token, an organization overburdened with external responsibilities may drift away from its members' needs and lose their support. Independently controlled and locally supported organizations, however, can be an important force for change.

Local Leadership: A final important condition for participatory development is perhaps the most obvious--local leadership. Organizations need committed and active leaders to perform effectively. Such persons, we believe, are available in most rural communities. That they do not come forward, or that they have not effectively mobilized local people in the past, is largely a consequence of the opportunities for change within the community. Successful development projects must be able to tap this leadership structure if they are to stimulate participation. We believe, moreover, that the new opportunities created by development activities will often serve as a catalyst for the emergence of new, and perhaps more dynamic leaders.

None of the local organizations operating in the IRD Project area met all four of these conditions for participation, and not surprisingly, none had active followings or much capacity to mobilize residents for development activities. The agricultural stagnation and poverty in the watersheds is, in part, the result of the weakness of rural organizations. The extent and sources of this problem are discussed in subsequent chapters, but we should note here that a widespread network of organizations does exist in Two Meetings and Pindars River. One challenge for development agencies like the IRD Project is to revitalize this organizational structure, so as to make it more responsive to farmers' needs and more capable of fostering productive forms of group action.

CHAPTER TWO

THE TWO MEETINGS AND PINDARS RIVER WATERSHEDS

The two watersheds that were the site of this study are located in the hilly interior of Jamaica, roughly 30 miles apart (see Map. 2.1 and 2.2). Two Meetings is the smaller of the pair, covering approximately 10,000 acres, or almost 16 square miles.[1] As its name implies, it has two major drainage systems, the Yankee and Cave Rivers, which meet at the watershed's eastern boundary. The entire area lies between 1,950 and 3,200 feet of elevation and is of rugged topography -- the weighted mean slope is 18 degrees. Because of its altitude, the watershed is cooler and wetter than the island's coastal regions, particularly the south of the island. Mean annual temperature is 70 degrees Farenheit, and between 60 and 75 inches of rain fall during the average year. There is no true wet or dry season, although the driest months tend to be from December through February, and the heaviest rains occur in May, and again in October. Most of the rain falls during brief, but intense storms. Because of the steep slopes and shallow clay and loam soils, much of the area is badly eroded.

The Pindars River watershed is almost twice as large as Two Meetings, covering more than 19,000 acres, or 30 square miles. This area is one of the major headwaters for the Rio Minho River, and ranges in altitude from 530 to 2800 feet. As in Two meetings, the land is dissected by steep gorges, although

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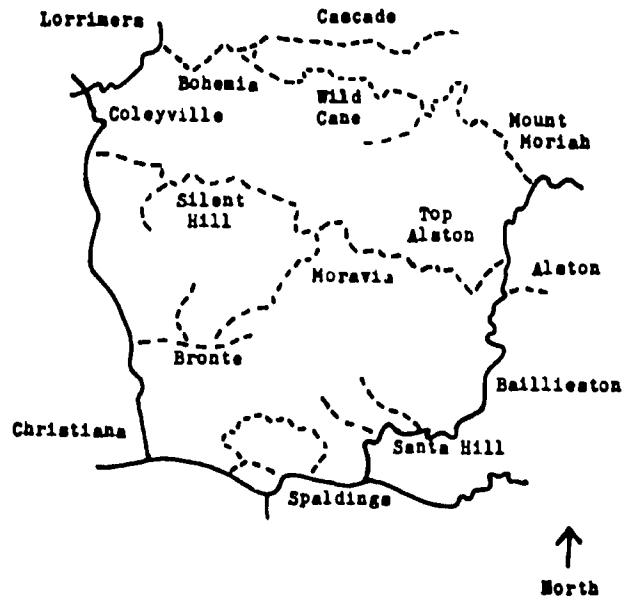
[1] These general data on the two watersheds were taken from Forestry Management and Watershed Management in the Upland Regions--Jamaica, Project for the Rehabilitation and Development of the Pindars River and Two Meetings Watersheds (Rome: United Nations Development Programme and Food and Agriculture Organization of the United Nations, 1977).

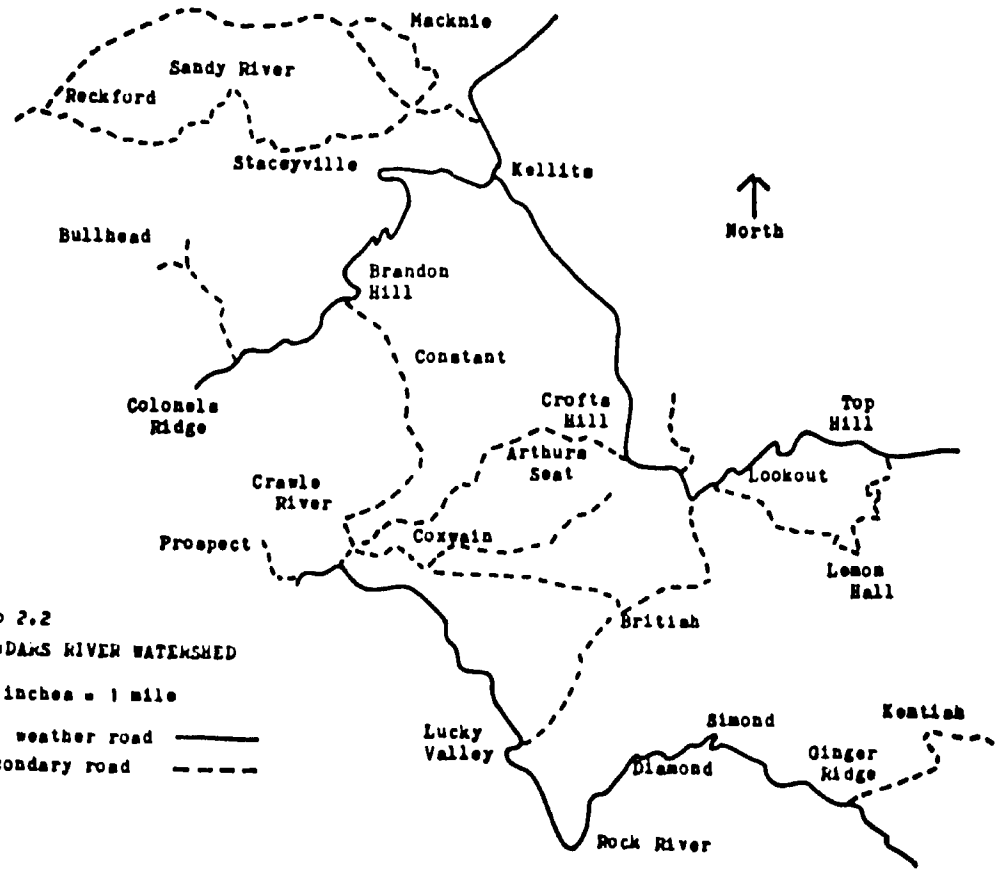


Map 2.1
TWO MEETINGS WATERSHED

.5 inches = 1 mile

All weather road ———

Secondary road - - - -



Map 2.2
PINDARS RIVER WATERSHED

.5 inches = 1 mile

All weather road ———

Secondary road - - - -

the average degree of slope (21 degrees) is somewhat higher. Pindars River's climate and soils are similar to that of Two Meetings, and erosion is a serious problem.

Each watershed has roughly the same population. According to the 1970 census, some 13,000 people live in Two Meetings, and 11,400 people in Pindars River. Given the difference in their areas, therefore, Two Meetings is more than twice as densely settled (833 versus 380 persons per square mile).[2] Both places appear to have somewhat fewer people in productive age groups than do other parts of the country: almost half are under 15 years of age, and perhaps 10 percent are aged 60 years or over. Heads of farm households are older than elsewhere on the island; 53 percent are over 50 years of age.[3] Most of these household heads are male, but evidence suggests that 22 percent of holdings in the watersheds are managed principally by women.[4]

Despite its greater population pressure, Two Meetings is the more prosperous area. One study estimated in 1974, that per capita income was one-third higher in Two Meetings than in Pindars River.[5] The former area has better access to social and public services, and appears more "developed" even to the casual observer. Towns are larger, houses look sturdier, roads are better paved, and automobiles are more in evidence. Pindars River, by

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[2] This compares with the average for all Jamaica of 419 persons per square mile.

[3] An Agro-Socio-Economic Survey--Pindars River and Two Meetings (Kingston: Government of Jamaica, Ministry of Agriculture, Data Bank and Evaluation Division, 1977).

[4] Jamaica--Integrated Rural Development Project Paper (Washington: U. S. Agency for International Development, 1977) p. 56.

[5] UNDP/FAO, Project for Pindars River and Two Meetings, p. 129.

contrast, seems more rural and "traditional."[6] The higher level of material prosperity in Two Meetings helps explain many of the other differences between the two watersheds, and is a point we shall return to frequently in this study.

We stress, however, that the affluence of Two Meetings is relative, and that in an absolute sense both watersheds are characterized by widespread poverty. The study cited above estimated that per capita income, including the value of subsistence production, was only J$306 (U.S.$336) in Two Meetings and J$224 (U.S.$246) in Pindars River, respectively 42 percent and 31 percent of the national average personal income in 1974.[7]

OWNERSHIP PATTERNS

Agricultural land in Jamaica is unequally distributed between the plantation and smallholder sections. Most of farm land, and almost all the fertile and level land, is held in blocs of over 100 acres. This sector has tended to be foreign owned, and specializes in production of export crops. The poorer and hillier land, by contrast, is owned by numerous peasant smallholders, who grow the bulk of Jamaica's domestic food, in addition to some export crops. According to the 1968 Census of Agriculture, holdings with fewer than five acres accounted for 79 percent of farms, but only 15 percent of agricultural acreage.[8]

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[6]Our survey revealed some major differences in social and other amenities between the two areas. Almost twice as many farm households in Two Meetings have electricity (42 percent versus 24 percent); about two-thirds as many get their water from rivers or springs (22 percent versus 35 percent); quite a few more have access to a public standpipe for water (53 percent versus 42 percent); and more own a radio (89 percent versus 80 percent).

[7]One Jamaican dollar equalled 1.10 U.S. dollars in 1976. By 1979, the rate had fallen to J$1.00 = U.S.$1.78.

[8]Statistical Yearbook of Jamaica, 1978 (Kingston: Government of Jamaica, 1979), p. 459.

This national pattern of land distribution is a legacy of the slave-owning period, when Europeans acquired large tracts of coastal land for sugar production. Escaped and, following Emancipation, freed slaves established themselves in the mountainous interior, on land too steep or remote to interest the white settlers. Although some of the larger holdings have since been broken up, and despite several programs to provide land to smallholders, the skewed pattern of ownership persists.[9]

There are two relatively large plantations in Pindars River, but in general the two watersheds exhibit the smallholder, hillside farming pattern. Our survey shows that over half of the farms in both watersheds are under five acres (Table 2.1). Only two percent of farms are over 20 acres. The data do indicate, however, that farms are on the whole larger in Pindars River than in Two Meetings. This is especially true in the "10 to less than 20 acres" category, in which there are more than twice as many farms in Pindars River, the less densely settled area. As a consequence, the average farms size (5.6 acres) is considerably larger than in Two Meetings (4.2 acres). These figures include land of all tenure categories, which are discussed below.

Even though most farms are relatively small, they tend to be fragmented. In fact, only a quarter of the farmers surveyed cultivated a single plot of land; about a third of them worked two separate plots, another quarter farmed three plots, and over ten percent farmed four or more pieces. In many cases these separate pieces of land are located at some distance from each other, greatly increasing the time a farmer spends walking to and from his fields.

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[9]For an analysis of the origins and consequences of this pattern of land distribution, see George L. Beckford, Persistent Poverty: Underdevelopment in Plantation Economics of the Third World (New York: Oxford University Press, 1972).

Table 2.1. Farm size in Two Meetings and Pindars River

Size category (acres)	Two Meetings (n=201)	Percent of farms Pindars River (n=214)	Both areas (n=415)
Less than 1	7%	6%	6%
1 to less than 2	19	14	16
2 to less than 5	43	36	40
5 to less than 10	24	27	25
10 to less than 20	6	14	10
20 and over	1	2	2
Not stated	-	1	1
All sizes	100	100	100

Table 2.2. Distribution of farmland in Two Meetings and Pindars River

Size category (acres)	Two Meetings	Percent of farm area[1] Pindars River	Both areas
Less than 1	1%	0.5%	0.7%
1 to less than 2	6	3.5	4
2 to less than 5	32	21	26
5 to less than 10	37	33	35
10 to less than 20	19	32	27
20 and over	5	10	8
All sizes	100	100	100

[1]Totals may not equal exactly 100 percent because of rounding.

Despite the absence of many very large holdings, land is not equitably distributed within the watersheds. These many be considered "peasant" areas, but they are nevertheless marked by an uneven pattern of land ownership similar to that prevailing at the national level. Thus, while the very small farms with fewer than two acres comprise 22 percent of all farms in the watersheds, they occupy only five percent of the agricultural land. By contrast, holdings with more than ten acres account for merely twelve percent of farms, but 35 percent of farm land (See Table 2.2).

Although farms tend to be physically larger in Pindars River, the relative inequality of land distribution is similar in both watersheds. This can be seen by looking at the ratio between the largest ten percent of farms and the smallest 40 percent. In Two Meetings, the top decile of farms cover 2.1 times more land area than the bottom four deciles. In Pindars River, the ratio is only slightly higher, at 2.4.

Based on the landholding pattern, the farming population of the two watersheds falls into three general categories. About one-fifth of farmers are landless or near-landless (fewer than two acres). These people have difficulty supporting themselves through own-account farming, and many must turn to off-farm employment to make ends meet. Another two-thirds of the population may be classified as small farmers (between two and ten acres). This middle group may or may not be able to derive adequate income from the farm enterprise, depending on the size of the family, the fertility of the holding, the availability of inputs, and so forth. Many in this category, particularly those with fewer than five acres, are in fact little better off than the near-landless. At the top of the social pyramid are the large farmers, with more

than ten acres. This strata makes up about one-tenth of the farming population, and is more secure economically than the other two categories.[10]

We would caution, however, that these classes of farmers are not rigidly bounded by farm size. The amount of land a farmer has is indicative, but not determinative, of his socio-economic status; the relative size and productivity of his holding are equally important. It is necessary to emphasize these facts in view of the difference in average holding size in the two watersheds. Although in Pindars River there is a higher percentage of farms over ten acres, there are not necessarily more "big farmers" than in Two Meetings. Residents of Pindars River have more limited access to markets, fewer opportunities for off-farm employment, and tend to cultivate less of the land available to them. Consequently, the same size holding does not provide the same level of income and security in the two areas.

LAND TENURE

Land is held under several forms of tenure in the study sites.[11] The most common and secure type is freehold. Rental of land on an annual or short-term basis is also prevalent, as to a lesser extent is leasing, which usually entails a written contract and a longer term commitment. Rent-free land

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[10]This three-level peasant typology is similar to others used to describe Jamaican farmers. Nancy Foner, for instance, distinguishes wage laborers (less than 3 acres), small independent farmers (3 to 10 acres), and big farmers (over 10 acres), in Status and Power in Rural Jamaica (New York: Columbia University Teachers' College Press, 1973), p. 20. C. J. Kruijer sees five subclasses of agriculturalists, the major divisions between farmers, cultivators, and laborer/tenants. These correspond closely to our typology. See Sociological Report on the Christiana Area (Kingston: Ministry of Agriculture, 1969), p. 21. In all these typologies, the distinguishing feature is the extent to which a farmer is able to support himself through own-account farming.

[11]For a discussion of various forms of land tenure in Jamaica, see David Edwards, An Economic Study of Small Farming in Jamaica (Kingston: Institute of Social and Economic Research, 1961), pp. 93-103.

is a more ambiguous category. It can be family land, in which case the farm manager has been given use of the land by his related co-owners. It can also be land, usually a small parcel, which the owner allows a friend or relative to use. Alternately, some people interpret it to mean squatted land. On our survey, we had surprisingly few people admitting that they farmed squatted, or "captured" holdings. It is likely they included these plots in the "rent-free" category.

Of all the farm land in both watersheds, our data show that 71 percent is owned by the person or persons who cultivate it. The rest is held under the other forms of tenure, of which rented and rent-free land each account for about ten percent. The proportion of agricultural land in these various categories is shown in Table 2.3. Noteworthy is the fact that in Two Meetings, rented land is more common than rent-free land while the opposite is true in Pindars River. The likely explanation for this difference is land scarcity: where land is in shorter supply, as in Two Meetings, more of the people wanting additional land must pay rent to get it.

Many farmers work several plots, and these are not all held under the same form of tenure. So it is important to see how many farmers own all the land they farm; how many own some of their land; and how many own no land. Table 2.3 summarizes this data. More than half the farmers in both watersheds own their entire holding, and another quarter own at least part of their holding. A significant minority, however, do not hold title to any of the land they operate, but rent, lease, squat, or get it rent-free. These non-landowning tenants comprise 19 percent of farmers in Two Meetings, and twelve percent in Pindars River. The lower proportion of tenants in Pindars River is due to the greater availability of farm land in that area.

Table 2.3. Percent of farmland in various tenures, Two Meetings and Pindars River

Type of tenure	Percent of farmland		
	Two Meetings	Pindars River	Both areas
Owned	70%	72%	71%
Rented	16	6	10
Leased	4	8	6
Rent-free	9	13	11
Squatted	1	0.5	1
All tenures	100	100	100

Table 2.4. Land tenure status of farmers, Two Meetings and Pindars River

Land tenure status	Two Meetings		Pindars River	
	Percent of farmers	Size of avg. holding (acs.)	Percent of farmers	Size of avg. holding (acs.)
Landowner	53%	4.2 ac.	57%	5.1 ac.
Mixed tenure	26	5.1	29	7.4
Non-landowner	19	2.6	12	3.0
All tenures[1]	100	4.2	100	5.6

[1]Includes farmers who did not state their land tenure status.

Not only do these non-landowners have less secure claim to land, but their holdings are one-third smaller than average (Table 2.4). Interestingly, farmers with mixed tenures, that is those who own only part of their holding, have larger than average farms. Thus the act of renting or leasing land does not, by itself, indicate a person's economic status or security. Indeed, some of those with mixed tenure are the larger farmers who have supplemented their freeholdings. Non-renting farmers, by contrast, are often the smaller owners who cannot afford to pay for the use of additional land.

There is, therefore, a correspondence between land tenure status and the rural class structure, but as discussed above, the relationship is not a simple one. Non-landowning tenants often also have dwarf holdings, and fall into what we have termed the near-landless category. Landowning, but non-renting farmers tend to be in the small farmer class, and have holdings barely adequate to support their families. Peasants with mixed forms of tenure are a more heterogeneous group. Some are near-landless persons who lack enough freehold land to survive, but many are those we have classified as large farmers. For this latter group, renting, leasing, or using rent-free land is not usually a matter of economic necessity.

FARM LABOR

Jamaican farmers have three major sources of labor--family labor, hired labor, and day-for-day labor exchange.[12] As shown in Table 2.5, however, the two watersheds differ in the importance of these sources of labor. In Two Meetings, the more densely populated area, family labor was the principal source in one-third of the households interviewed. The

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[12]Day-for-day labor is discussed more fully by M. G. Smith, A Report on Labour Supply in Rural Jamaica (Kingston: Government of Jamaica, 1955), pp. 12-17.

proportion was much higher in Pindars River, 57 percent. The pattern is reversed for hired labor; it was the major labor source of 41 percent of farmers surveyed in Two Meetings, versus only 17 percent in Pindars River. Interestingly, the proportion relying mainly on day-for-day labor was about the same in the two watersheds, 20 percent and 23 percent, respectively.

Most farmers, of course, do not use family or hired or day-for-day labor exclusively, but rely on two or three sources for different amounts of labor input, depending on the time of season, crop grown, and so on. A majority of farmers in both watersheds hired some laborers during the year, though hired labor was the primary source of farm labor for less than half of these farmers. Again, the proportion of farmers hiring some labor was considerably higher in Two Meetings (80 percent) than in Pindars River (57 percent). Day-for-day exchange was also very common, used by roughly half of the farmers in both watersheds, though as might be expected, a somewhat greater percentage of farmers did day-for-day labor in Pindars River.

Table 2.5. Labor Use in Two Meetings and Pindars River

	Percent of Farmers	
Sources of labor	Two Meetings	Pindars River
Hiring some labor	80%	57%
Using some day-for-day labor	45	53
Major source of labor		
Household	34	57
Hired	41	17
Day-for-day	20	23
Other/not stated	5	2

The observed differences in labor use between the areas follow the pattern observed repeatedly in this study. Pindars River is the lower income area; consequently farmers have greater difficulty finding the money to hire workers, and must rely more heavily on labor sources that do not require cash outlays. In rural Jamaica, this means having family members help out in the fields, and setting up day-for-day groups with one's friends and neighbors.

These inferences are supported by differences in labor patterns among farmers of various farm size categories within the two watersheds. Smaller farmers were less likely to report that hired workers provided the farm's major labor input, and in general, relied more heavily on day-for-day labor exchange groups (See Table 2.6). Dependence on household labor, interestingly, bore little relationship to farm size: between 41 and 54 percent of farmers in all size categories (except those farming more than 20 acres) said their household was the major source of farm labor. Differences in household size may account for this pattern. The fact remains, however, that many of these farmers still find it necessary to get some non-household labor--either by paying wages or exchanging work--to cope with busy periods, such as spring planting or cane harvesting. Thus, even among farmers with less than one acre, about one-quarter hired some field hands during the year, and almost one-half had day-for-day workers helping with farm work.

Many farmers find it difficult to fill the gap between household and non-household labor. About half of them get some extra input through day-for-day exchanges, but many also use (or feel they could use) hired labor. A majority of farmers, however, stated that hired labor is difficult to come

Table 2.6. Major Sources of Labor of Farmers in Different Farm Size Categories, Two Meetings and Pindars River

Farm size (acres)	Percent of farmers' major source of labor		
	Household	Hired	Day-for-day
Less than 1	54%	8%	38%
1 to less than 2	41	24	35
2 to less than 5	49	32	18
5 to less than 10	47	37	16
10 to less than 20	54	29	17
20 and over	17	50	33
All sizes	47	31	22

Table 2.7. Farm Size of Households Providing Wage Labor, Two Meetings and Pindars River

Farm size (acres)	Percent Households Providing Wage Labor
Less than 1	35%
1 to less than 2	24
2 to less than 5	16
5 to less than 10	10
10 to less than 20	17
20 and over	17
All sizes	17

by.[13] The problem is most severe for the smaller farmer, who while he may have proportionately less need for outside labor (assuming family size is the same for all farms), also is less able to pay for the additional labor he does need.

The shortage of wage labor is somewhat surprising, given the demand for non-household labor and the number of marginal smallholders in the watersheds, most of whom could use extra income. The extent of this shortage is indicated by the fact that only 17 percent of respondents said someone from their family worked for pay on another farm. As expected, these wage laborers came disproportionately from among the landless and near-landless peasants, whose holdings are too small to provide full employment. (See Table 2.7).[14] But even among the smallest farmers (less than 1 acre), only one-third reported employment as agricultural laborers.

Some commentators have noted that agricultural wage labor is stigmatized in rural Jamaica, and the possibility exists that respondents were ashamed to admit to such work.[15] This suggests the supply of wage labor could be somewhat higher than indicated by our data. Nevertheless, it is evident

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[13]The proportions were 40 percent in Two Meetings and 60 percent in Pindars River. Smaller proportions (32 percent and 7 percent, respectively) felt labor was relatively easy to hire. The differences between the two watersheds are due, in part, to the higher incomes in Two Meetings, which make it easier for farmers to pay wages, and to the fact that farmers in Pindars River have greater seasonal demand for labor because of the cane harvest.

[14]Our data showed that the proportion of larger farmers (10 acres or more) supplying wage labor was higher than that of the preceding size category. Because large farms can employ family labor more fully, this trend may not be accurate, particularly in view of the relatively small number (48) of large farmers surveyed. What is clear, however, is that farms of all sizes provide some agricultural wage labor. This indicates that even families on the larger farms are sometimes under-employed.

[15]See for example, Kruijer, Sociological Report on Christiana, p. 24. Smith also reported negative perceptions of wage labor, due largely to the low level of remuneration. See Labour Supply in Rural Jamaica, p. 7.

that many persons with idle time and low incomes do not have jobs on other holdings. Prospective employers cannot or will not pay wages that will clear the farm labor market, and potential laborers are unwilling to accept prevailing wages (J$5-7 per day) for work that is difficult, and sometimes regarded as demeaning.[16] The consequence is paradoxical: a shortage of agricultural labor in a "labor surplus" economy. This poses a severe constraint on rural development, and in particular on the labor-intensive soil conservation measures promoted by the IRD Project.

CROPPING PATTERNS

There are major differences between the two watersheds in the types of crops that are economically significant. One way to measure these differences is to look at the proportion of cultivated land devoted to pure stands of various crops. According to the UNDP/FAO report, banana is the most prevalent crop in Two Meetings, accounting for almost half the land in pure stand. Root crops (yam and potato) take up another third. In Pindars River, by contrast, banana and root crops together account for only 15 percent of the pure stand area. The major crops in that watershed are sugar cane, which accounts for 50 percent of the land, and tree crops (citrus, coffee, and cocoa), which together occupy 24 percent of the land. (See Table 2.8.)

Because of the skewed pattern of land distribution, these statistics on aggregate land use may be misleading. Persons with larger farms may specialize in the production of a few crops, while smaller farmers often have much of their land under mixed crops, which are not broken down in the UNDP/FAO data. So it is also important to consider the proportion of farmers

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[16] Smith reached similar conclusions about the labor market (Labor Supply in Rural Jamaica, pp. 6-8). Another factor affecting the labor supply is that employers often want to pay by the task, while employees frequently prefer to be paid by the day. Ibid., pp. 18-21.

Table 2.8. Cropping Patterns in Two Meetings and Pindars River

Crop	Percent of land in pure stand[1]		Percent of farmers producing	
	Two Meetings	Pindars River	Two Meetings	Pindars River
Coffee	3%	8%	57%	83%
Cocoa	1	6	16	76
Sugar cane	5	50	18	53
Banana	47	5	83	64
Citrus	2	10	17	21
Irish Potato	9	-	62	1
Yam	20	10	n.a	n.a.
Other crops	14	10	n.a	n.a.

[1]Taken from UNDP/FAO, Jamaica-Project for Pindars River and Two Meetings, p. 155.

Table 2.9. Farmers Selling to Commodity Associations, Two Meetings and Pindars River

Crop	Percent of all farmers selling to association		Percent of producing farmers selling to association	
	Two Meetings	Pindars River	Two Meetings	Pindars River
Coffee	43%	80%	75%	96%
Cocoa	10	72	63	95
Cane	0	49	0	92
Banana[1]	68	14	82	22
Citrus	2	9	12	43
Potato[2]	41	0	66	0

[1]Farmers selling to boxing plant (not necessarily members of AIBCA).

[2]Farmers belonging to Potato Cooperative (not necessarily selling to it).

who grow these particular crops. On our survey, specific information was collected on six crops that can be marketed through a commodity organization, such as the Cane Farmers' Association or the Citrus Growers' Association. These organizations are discussed at length in Chapter Three. Thus, while yams, cabbage, and red peas constitute an important proportion of a farmers' total production, our data only cover coffee, cocoa, cane, banana, citrus, and potato. Table 2.8 shows the percentage of farmers who grow these particular crops. Noteworthy is that 83 percent of Two Meetings farmers grow banana, and 62 percent grow potato. In Pindars River, coffee and cocoa are the most widely grown crops, each being grown by more than three-quarters of the farmers. Cane is also prevalent, and is found on about two-thirds of the farms.

Because a farmer cultivates one of these six crops does not mean he produces it in quantities large enough to sell. All or most of the output may be retained for home use. And if he does sell, it may not be to a processing facility, but to a local small-scale trader (higgler) or directly to the consumer. An important factor to consider, therefore, is the proportion of farmers who sell these crops to nearby processing facilities. This figure indicates both the commercial importance of specific crops, and more importantly, how many farmers are likely to have contact with any of several producers' organizations. (This latter point will be discussed more fully in Chapter Four, where we look at farmers' participation in local organizations.) The data are reported in Table 2.9.

The importance of each crop changes considerably from the picture presented in Table 2.8. For example, while 18 percent of the farmers in Two Meetings grow sugar cane, the fact that no one sells it to a factory all but precludes their active involvement in the All-Island Cane Farmers'

Association. Similarly, 64 percent of the farmers in Pindars River grow bananas, but only 14 percent market their bananas to boxing plants, and thus could have some relationship with the All-Island Banana Growers' Association. Such differences in the types of crops grown, and the way they are marketed, greatly affect the types of commodity associations which exist, their activities, and the level of farmer involvement.

As the data presented in this chapter indicate, there are some substantial differences between the two watersheds, despite similarities in social structure and culture. The farmers of Two Meetings concentrate on food crop production, and are more densely settled, less likely to own all of their farm land, and more likely to hire wage labor. The inhabitants of Pindars River focus more on the production of sugar cane and tree crops, have larger holdings, and rely more heavily on day-for-day labor. In general, however, Pindars River is poorer, more remote, and has a less developed infrastructure than does Two Meetings. As will be shown in later chapters, these factors have important implications for the organizations found and the pattern of participation in development activities. They also create different needs in the two areas and pose somewhat different constraints on rural development.

While the watersheds are by no means identical, they do share certain basic features. Perhaps the most significant is the presence of a large number of landless and marginal peasants, whose land tenure is often insecure and whose off-farm employment opportunities are limited. These people will have difficulty participating in some of the programs sponsored by the IRD Project. For example, farmers with rented or rent-free holdings will hesitate to invest in bench terraces or drainage ditches. Even if they are willing to make such improvements, they may be unable to get per-

mission from the landowners, who often live outside the local area. Similarly, the smallest farmers may have greater difficulty hiring laborers to assist in the construction of on-farm earthworks, or in getting the credit needed to finance such work. The fact that diverse intercropping is practiced, with various short-term, medium-term, and permanent crops being harvested throughout the year, is also likely to interfere with soil conservation work. Such problems are important constraints on development in both watersheds, and indeed in all of Jamaica's hillside farming areas.

CHAPTER THREE

FORMAL LOCAL ORGANIZATIONS IN PINDARS RIVER AND TWO MEETINGS

In this chapter we will present data on the formal organizations that are active in the Two Meetings and Pindars River watersheds. Analysis of these organizations is undertaken in the next chapter. The purpose of this chapter is essentially descriptive--what these organizations are, where they are located, how they are structured, what they do, and what benefits they provide their members.

Our description is of the twelve rural organizations listed in Table 3.1, each of which has numerous local chapters or branches in the study area. Their location are shown in Maps 3.1 and 3.2. All these organizations are also active in other parts of Jamaica, but our discussion concentrates on their activities within the two watersheds. The most important and extensive organization, the JAS, is discussed first. Next, we describe the several commodity associations, which are charged with the promotion of specific cash crops. This is followed by a portrayal of the PC Banks, the most significant source of small farm credit in Jamaica. Finally, we review briefly some of the non-agricultural local organizations, such as community councils.

THE JAMAICA AGRICULTURAL SOCIETY

This Society, founded in 1895, is the oldest and largest farmers' organization in Jamaica.[1] It claims 80,000 members island-wide. The organization's

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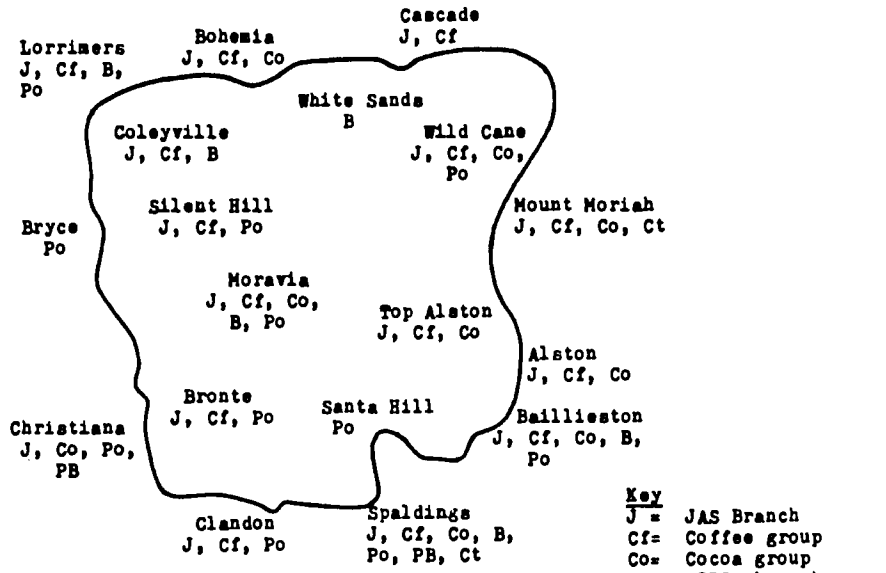
[1]For a review of the JAS and its activities up to 1960, see Clyde Hoyte, History of the Jamaica Agricultural Society, 1855 to 1960 (Kingston: JAS, n.d.).

Table 3.1. Formal Local Organizations in Two Meetings and Pindars River

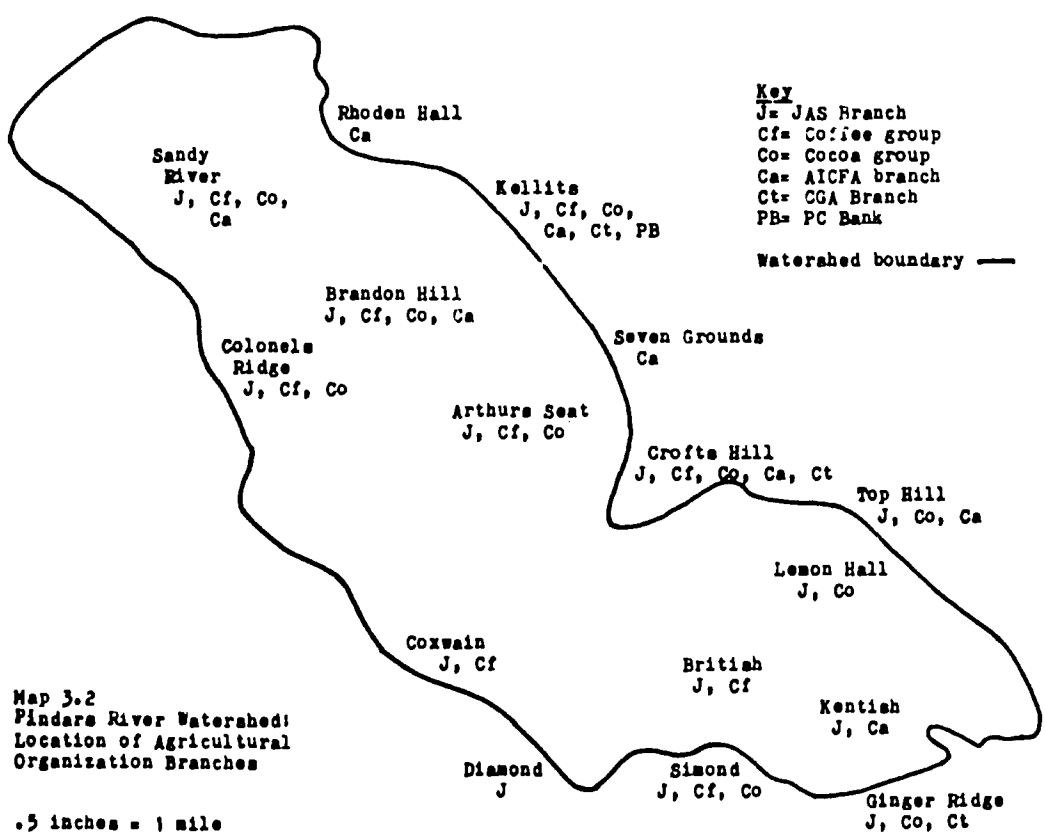
Organization	Function	Qualification for membership	Type of membership
Jamaica Agricultural Society (JAS)	multi-functional	all farmers	voluntary (compulsory for members of coffee and cocoa groups)
Coffee Cooperative group	coffee marketing	farmers selling coffee	compulsory
Cocoa Cooperative group	cocoa marketing	farmers selling cocoa	compulsory
All-Island Cane Farmers' Assoc. (AICFA)	marketing of sugar cane	farmers selling to cane factory	compulsory
All-Island Banana Growers' Assoc. (AIBGA)	representation of banana growers' interests	farmers growing 50 roots of banana	voluntary
Citrus Growers' Assoc. (CGA)	marketing of citrus crops	farmers selling to citrus factories	compulsory
Christiana Potato Growers' Cooperative	marketing of potatoes	all farmers growing potatoes	voluntary
Peoples' Cooperative Bank (PC Bank)	credit delivery	all farmers	voluntary
Community Council	community development	all adult residents	voluntary
Youth Club	sports and training	all interested youth	voluntary
Parents' and Teachers' Association (PTA)	school activities	parents and teachers of school children	voluntary
Chruch group	church and community activities	church members	voluntary



Map 3.1

Two Meetings Watershed:
Location of Agricultural
Organization Branches

.5 inches = 1 mile



Map 3.2
Pindars River Watershed:
Location of Agricultural
Organization Branches

.5 inches = 1 mile

primary unit is the branch society, of which there are a total of 900. Each branch or chapter has a minimum of 20 active members, and is located at least one and a half miles from the nearest other JAS group. Professional field staff from the parent organization organize and supervise the branches, and visit them at least once every two months. In the areas we studied are 29 branches; 15 located in Two Meetings, and 14 in Pindars River.

Each local branch schedules a convenient day for its regular monthly meeting, usually held in a local school or church. These meetings are a forum for discussion of farmers' problems, for presentation of information from extension agents and other government or JAS personnel, and such business as may arise related to local agriculture and the community's needs. Meetings can and do address far-ranging topics, with the exception that branches are not supposed to take sides in matters of political or religious controversy.

Once a year, a special annual meeting is held to elect a branch president, secretary, and managing committee. In some of the smaller branches, therefore, a high proportion of active members will hold official leadership roles. Membership is open to all farmers from the district who pay the 50¢ per annum dues, although persons who are not paid-up members do sometimes come to meetings. This money is divided between the national JAS and the local branch.

The organizational tier immediately above the district branch is the parish association of branch societies. This body meets twice yearly, and is composed of delegates chosen by each local branch in the parish.[2] Here, too,

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[2]Jamaica is divided for political and administrative purposes into 13 parishes and the Kingston Corporate area. These are the lowest level of government, are governed by elected councils, but have little independent financial power. For a discussion of parish government in Jamaica, see Paul G. Singh, Local Democracy in the Commonwealth Caribbean (London: Longman Caribbean, 1972).

farmers' problems are discussed and resolutions passed. The top organizational level is the annual general meeting, made up of delegates from all branch societies on the island. The three-tiered structure of the JAS is typical of Jamaica's farmers' organizations, such as the All-Island Banana Growers' Association (see sections below).[3]

JAS has a long history of service to Jamaica's rural community, both as a lobby for agricultural interests, and as an action agency directly involved in improving the lot of farmers. The organization provided the first extension service in Jamaica, was instrumental in establishing the Ministry of Agriculture, and has run development projects such as the one in north Clarendon, which included parts of the Pindars River watershed.[4] Since 1951, however, when extension was taken over as a government service, JAS has lost many of its more concrete functions. This is reflected in the rise of specialized commodity organizations, which now exercise important powers over many major crops. Consequently, JAS offers fewer individual incentives for membership than in the past, when farmers could not obtain needed services from other agricultural organizations and government agencies. Even JAS's role as the "voice of the farmer" has come under suspicion, for the organization receives an annual subvention from the government to cover its operations. This has caused some to question how independently the JAS can pursue its members' interests.

Today, branch meetings are the most important JAS activity. They can be a source of information for farmers, as extension officers, other government

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[3] Carl Stone argues that this "three-tiered associational structure encourages rank and file apathy and cynicism which both weakens the association and encourages inertia at the top level." See "Political Aspects of Postwar Agricultural Policies in Jamaica (1945-1970)", Social and Economic Studies, 23,2 (1974), p. 157.

[4] This project is described by Hugh Robotham, Jamaica Agricultural Society North Clarendon Self Help Project Survey (Kingston: JAS, 1969).

personnel, and professional JAS staff, often use them as a platform to recommend new agricultural practices or advise people of recent government programs. During our study, for example, one JAS branch arranged for personnel from the Banana Industry Board to give a field demonstration on the cultivation of this important crop. Members in JAS may also be able to get tools and farm inputs through the JAS parish field officer serving the branch. These officers sometimes play an important role as intermediaries, interceding for branch members with the Ministry of Agriculture, the parish council, or any of the farm commodity organizations.

Another function of the branch meetings is to pass resolutions. These resolutions, which may be forwarded to the field officer or to the higher echelons of the JAS, attempt to obtain improved public, social, or agricultural services for the local community. They are not restricted to farming, narrowly defined. Some JAS branches, consequently, assume the role of de facto local government and deal with problems of general community need. At the annual meeting of the Clarendon Branches' Association in 1979, eight of the nine resolutions passed concerned lights, roads, gullies, and other community needs.[5] One local branch we studied tried for years to get its parish council to repair the district's roads. They were unsuccessful until, at their request, the President of the national JAS visited the area and intervened on its behalf with the agencies responsible for road rehabilitation. Funds were soon allocated, and temporary repairs made.

In addition to, but separate from, its branch activities, JAS runs an island-wide system of farm retail stores. One is located in or near each of the watersheds. These farm stores are strictly commercial operations, selling

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[5]Carl Stone found similar trends in analyzing representations from JAS branches between 1963 and 1971. See "Political Aspects of Postwar Agricultural Policies", p. 155.

tools, fertilizer, and other products needed in agriculture. Prices are comparable with those in private retail outlets, and no special discounts are given to branch members. The JAS stores will soon have new responsibilities in the marketing of farm tools; under an agreement with the government in 1979, JAS is to become the sole distributor of these crucial items.

COMMODITY ORGANIZATIONS

Coffee Cooperative Societies

To improve and standardize the quality of Jamaican coffee, growers have, since 1950, been organized into coffee cooperatives.[6] There are currently 19 of these cooperatives island-wide. Each one is comprised of numerous local coffee groups, and each of these groups, in turn, is affiliated with a branch society of the JAS. In Two Meetings watershed are 15 local coffee groups, joined to four different coffee cooperatives; the Pindars River area has nine groups, attached to two cooperatives.

The coffee cooperatives were established as the base marketing unit for the Coffee Industry Board, which has a legal monopoly on commercial coffee purchases in Jamaica. This statutory board, in addition to buying domestic coffee from private farmers, operates its own nurseries and plantations, manages the coffee processing factories, handles exports and imports of the product, and is the sole domestic wholesaler. The Board runs two factories near the IRD Project area, one serving the producers from each watershed.

While some coffee does leak into the private market, the bulk is sold to the Board. Most of these sales, in turn, are made through the local coffee groups,

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[6] A description of the coffee industry of Jamaica can be found in R. L. Williams, The Coffee Industry of Jamaica (Mona: Institute for Social and Economic Research, 1975).

although a few large growers may deliver directly to the CIB's pulperies. The coffee groups, therefore, are the primary collection point for the legal marketing system, and membership is compulsory for all small farmers who want to sell to the CIB.

Each coffee group elects a secretary, who handles payments and correspondence, and one or more collectors, who supervise collection of the crop. A chairman is also chosen, to preside over the group's meetings. Most often the secretary and collector or chairman are also the secretary and president, respectively, of the local JAS branch. Coffee groups do not meet separately from the JAS; rather some monthly JAS meetings are wholly or partly devoted to coffee business. Twice yearly the group sends representatives to meetings of the coffee cooperative with which it is affiliated, and once per year sends delegates to the national meeting of all coffee coops in Kingston.

Members of the local coffee group choose a centrally-located spot--usually the secretary's home--to be the group's collection point. During the harvest season, berries are brought there, measured in standardized boxes, and inspected by the collector. If his crop is of acceptable quality, the farmer obtains a receipt from the secretary, who keeps record of each farmer's delivery during the season.

The factory that processes the group's coffee arranges for a truck to transport and deliver the coffee accumulated by the group. Personnel attached to the CIB accompany the truck on its rounds, and make spot checks of the coffee presented for delivery. If any is found to be below grade, i.e., containing too many green berries, it may be rejected, and the group's collector held financially responsible. A check is sent to the secretary a few days later for all the coffee purchased from the group on the previous pick-up. Farmers received J$12 per box in 1978, from which a cess of 28¢ per box (2.3 percent) was taken. Sixteen

cents of this was paid to the secretary, 8¢ to the collector, and 4¢ to the group's operating fund.

A second payment or bonus is made in July, after the CIB has processed and sold the coffee bought during the previous harvest. The amount of the second payment was J$10 per box in 1978. This money is distributed by the secretary, who pays each farmer according to the number of boxes he delivered to the group. The secretary is held accountable to group members, and has to cover the cost of any errors that may occur. Eighty cents (8 percent) is deducted from every member's bonus--50¢ for JAS dues and 30¢ for the group's contingency and travel fund. By marketing coffee through a coffee group, therefore, a farmer is automatically enrolled in the JAS.

Membership in these groups is open to all farmers growing coffee. Shares in the parent cooperative cost J$2 each, and members build up equity in their respective coops through compulsory deductions (at 10¢ per box of coffee delivered). These shares have not paid dividends, however, and the money generated goes to cover the coop's operating expenses.

The coffee cooperatives do not provide services other than marketing. The CIB, however, in addition to its processing functions, makes available spraying services to help farmers cope with pests and disease. The Board used to handle coffee extension as well, but this has been taken over by the Ministry of Agriculture's general field staff. The Ministry now also provides low cost coffee seedlings.

The Cocoa Federation

In 1957, the JAS and the Cocoa Industry Board set up the Cocoa Federation to ensure efficient marketing of the crop to the four processing factories operating in Jamaica. The structure of this Federation is similar to that of the coffee industry, and is comprised of area cooperatives, branches (which are the same as JAS branches), and local groups. Theoretically, a branch can

consist of two or three groups, but in the areas we studied all branches incorporate only one group, and thus these two levels are coterminous. It is at the group level that the farmer comes in contact with the Federation. There are a total of 20 groups within the two watersheds; nine in Two Meetings, and eleven in Pindars River.

Each group has its own collector who, every week (and every other week during the off-season) stays at a set location and receives cocoa from local farmers. He measures the amount delivered, issues each farmer a voucher, and waits for the truck to come from the cocoa factory. The Morgans Pass factory (which serves both watersheds) has its own trucks, but in case of breakdown, transport is by a private hauler. Ten days later, the factory issues payment to the secretary of the group, who in turn pays the farmers. This initial payment was J$10 a box in 1979. Out of this sum, a cess of 50¢ is taken for administrative expenses. At the end of the financial year (in September), a bonus is declared based on the industry's profit; in 1978, the bonus was J$4 a box. From this bonus, an additional 50¢ is taken out for JAS membership. Thus, by marketing cocoa, a farmer automatically becomes a member of JAS.

Marketing is the primary benefit provided by the Federation. Neither the factory nor the Federation currently supply fertilizer to the farmers, although they do provide vouchers which allow the farmer to buy it at a subsidized rate. Until 1978, the local cocoa factory had its own extension agents who would inform farmers about pests, fertilizer, and practices. Now, however, these agents have been merged with the Ministry of Agriculture extension service.

All-Island Cane Farmers' Association

The AICFA is organized, at the local level, into groups which are associated with one of the island's twelve cane factories. Two of these factories--Worthy Park and Monymusk--serve farmers in the study area. Each factory has a network

of local groups on which it depends for cane, and to which it gives its orders for the week. Worthy Park Estate has 28 groups associated with it, nine of which lie in the Pindars River watershed. Monymusk has two general administrative units; the northern unit has 26 local groups, four of which, although lying outside of Pindars River, serve cane farmers within the watershed. In Two Meetings, because of the different cropping pattern, the Cane Farmers' Association is not active.

When a farmer delivers cane to the factory, 20¢ per ton is taken out of the payment and put toward dues in the AICFA. All farmers who sell cane to the factory, therefore, are simultaneously enrolled in the Association. As is true of cocoa and coffee groups, individual marketers of cane have no choice in this matter. General meetings of the AICFA groups are supposed to be held bi-annually. In December or January, announcements are made as to when the reaping will commence and the initial price that will be paid per ton. At the August meeting, farmers learn of the bonus to be paid at the end of the harvest season. It is at the January meeting that the group elects its leaders--chairman, secretary, and treasurer--for the coming year.

Every week during the cane season, the factory issues "tickets" to the group leaders. Each ticket represents a truckload of cane; the number of tickets corresponds to the amount of cane the factory will be able to process during the upcoming week. The main function of the secretary of the group is to issue these tickets to individual farmers within his or her jurisdiction. Without one, the farmer cannot sell his crop.

After the farmer has received his tickets, his responsibilities are to cut the cane and arrange for transport. This latter is usually done by flagging down a truck and arranging with the driver a time and place for gathering the week's harvest. The AICFA and the factory together draw up a list of rates for

transport, based on distance from the factory. A week or two after the cane has been delivered, the factory issues checks to the farmers. A second payment, which is based on the average sucrose content in the cane supplied by all members in the group, arrives approximately four weeks after the end of the cane season. A third payment, again based on sucrose content, is made in December. In 1978, the first payment was J$14 per ton, and the second and third payments averaged J$3 and J$1-2, respectively.

Until 1975, the AICFA was able to provide fertilizer to its members at a subsidized rate. Now, however, subsidized fertilizer is unavailable. The farmer can still purchase unsubsidized fertilizer, but the cost (J$22.50 per 100 pounds) is prohibitively expensive for most of them. Farmers can also buy fertilizer directly from the cane factory, the cost being deducted from the second payment. The local branches of the AICFA are not involved in these transactions.

The main functions of the AICFA, therefore, are to inform farmers of seasons and prices, and to issue tickets to them so they can reap their crop. In the areas of transportation, payment, and fertilizer supply, the AICFA plays only a marginal role.

The All-Island Banana Growers' Association

The AIBGA was founded in 1946, "to promote, foster, encourage, and institute measures for the well being of banana growers in Jamaica, and to protect their interests."[7] Any grower with at least 50 roots can become a member. There are no annual subscriptions or fees; a farmer merely registers with the Association through his extension agent. The AIBGA operates through ten area councils and 236 district branches. Six such

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[7] Report of the Commission of Inquiry into the Banana Industry of Jamaica, 1959, vol. I (Kingston: Government of Jamaica, 1960), p. 11.

branches exist in Two Meetings.[8] Each branch, which must have a minimum of 16 members, elects a president, secretary, and managing committee. Meetings are supposed to be held monthly. The branches also elect one or more delegates to the annual meeting of the area council.

Until 1966, the AIBGA provided numerous direct services to farmers, such as agronomic advice and crop insurance. In that year the industry was reorganized, and these service functions given over to the Banana Industry Board (est. 1953). The Board, initially concerned solely with purchase and shipment of bananas for the overseas market, is today directly involved in the production support services provided by the AIBGA.[9] The Growers' Association, consequently, is relegated the residual task of communicating growers' needs and problems to the BIB.

The banana industry's organizational structure differs from that of other cash crops, in that membership in the AIBGA is not a prerequisite for receiving benefits from the marketing board. Nor does the act of selling bananas to the export market automatically enroll a farmer in the AIBGA, although it does qualify him for the Board's services. Unlike growers of coffee, cocoa, or sugar cane, therefore, banana cultivators must take the initiative to join their commodity organization. But, also unlike the case of these other crops, banana cultivators do not have to enlist in the banana organization to market their produce.

Banana extension services, which are available to all growers, are provided by the industry's own staff, who also assist growers to obtain

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[8]The AIBGA has several branches in Pindars River as well, but personnel at the area office had no current record of the location of these branches, nor of their officers.

[9]Shortly after our research was completed, the Jamaican government again reorganized the banana industry, creating a statutory Banana Company to replace the Banana Industry Board.

fertilizer and other inputs from the Board. Fertilizer, however, has been in short supply recently and is not available in quantities sufficient to meet demand. The Board also provides crop insurance; it is available to all farmers selling to the overseas market, and is covered by a cess on sales. The Board used to provide credit as well, but defaults and the poor overall health of the banana industry caused it to abandon its loan programs in 1975. The BIB is still trying to collect over J$1 million in delinquent loans.

By far the most important service provided by the Banana Board is marketing. The farmers' contact with the marketing system is at the local boxing plant. Four such plants serve the study area: at Alston, Coleyville, and Ritches in Two Meetings; and at Summerfield in Pindars River. Boxing plants are of several types. Most are run by the Board on a strictly commercial basis. Some are privately owned and managed; and others are managed by the AIBGA, some as cooperatives.[10] Despite these various management systems, the plants are very similar in their operations. They open periodically, for one or more days per week during the peak season, less often at other times of the year. Farmers arrange to bring their harvest to the plant on the assigned days. At the plant, an inspector examines the fruit for quality, and cuts off any damaged or blemished fingers. Next, the approved fruit is weighed, and the farmer is given a stamped voucher certifying the amount he delivered. The bananas are then washed and packed for overseas sale by plant employees; the farmer only has to take his receipt to the plant's cashier for payment. In 1979, payments were 9¢ per pound.

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[10]The AIBGA has proposed that all boxing plants be made into cooperatives, which cultivators will have to join by purchasing share capital.

Citrus Growers' Association

As with most farm commodity organizations in Jamaica, any farmer who sells to a citrus factory unavoidably becomes a member of the Citrus Growers' Association, by means of a levy on the quantity delivered. The CGA has the standard three-tiered structure of local branches, parish associations, and island-wide meetings. Of the 90 local branches of the CGA, seven are active in and around the study area. In addition to a chairman and secretary, each branch also has one or two selectors. These people have the responsibility of going from farm to farm to approve the quality of the fruit to be sold, and to supervise its packing.

Like most commodity groups, the CGA's primary function is marketing. During the citrus season, the two factories serving the study sites issue orders to the citrus branches, indicating the number of boxes to be supplied by each branch. The selector then arranges for transportation of the crop, either by private or factory truck. At the annual meeting of the Clarendon Parish CGA, held in March, 1979, there was much debate over the issue of transportation. In addition to complaints raised about the unreliability of transportation (a complaint voiced by members of all the commodity associations), particular attention was paid to the problems of small farmers who can supply only a few boxes. Understandably, truckmen would rather pick up one big load than travel over the countryside visiting small farms. While no specific action was taken at the meeting, a resolution was passed calling for incentives for truckmen to pick up small loads.

It is also the job of the selector to issue vouchers to farmers, and to keep track of which farmers contributed how many boxes. The factory then sends payment to the branch secretary, who, after consultation with the selector, distributes the money to the farmers. Deducted from the payment is

approximately 30¢ per box; this sum goes toward membership in the CGA, administrative expenses, and "honoraria" for the branch selector (2¢ per box) and secretary (1 1/2¢ per box). In 1979, prices were J$2 per box of grapefruit and J$2.20 for oranges.

Until 1976, the CGA had fertilizer for sale to its members; since then the Association has not supplied fertilizer. It does, however, provide credit to farmers for the purchase of fertilizer at a subsidized rate. The cost is then deducted from the payment to the farmer.

The Christiana Potato Growers' Cooperative

The Christiana Potato Cooperative is largely responsible for making Two Meetings and the surrounding area Jamaica's major source of Irish potatoes. Founded in the 1950s, the organization today claims some 8,000 members. In 1978, it purchased 1,800 tons of potatoes from members and had gross sales of J$3 million. In addition to marketing potatoes, the Coop also sells fertilizer to its members, and provides seed potatoes, as well as planting material for carrots and onions.

The basic unit of the Cooperative is the district branch, of which there are currently 23. Nine of these are located within the Two Meetings watershed. The Coop does not operate in Pindars River. Each district branch has a minimum of ten members and is managed by a district committee. The district committee, in turn, chooses a chairman, vice-chairman, and secretary from its members.

District branches must hold one meeting per year, where the Coop's annual report and bonus are discussed, the district committee elected, and delegates chosen to represent the branch at the Coop's annual general meeting. Branch meetings can also be called to discuss specific problems as they arise, but this rarely occurs in practice. The branch, through its secretary, does

serve as an important communication link between the Coop's management and the ordinary members.

Ultimate authority over the Coop is vested in the general meeting, made up of delegates from the branch districts. Those in attendance must approve the distribution of surplus from the previous year's transactions, sanction cess rates, and elect members to the board of directors. This board meets monthly to supervise and control operations of the society.

The services provided Coop members -- who join by paying a 25¢ entrance fee -- center on the provision of seed potatoes and crop inputs, and marketing of the mature crop. Each summer growers contract for planting material, putting a deposit on each bag ordered. In recent years, six or seven thousand of the members have placed orders for planting material. The Coop then makes a bulk order to overseas distributors, with delivery expected at the start of the planting season in December or January. Upon arrival, the seeds are distributed to members.

This system has been constrained in recent years by foreign exchange shortages and labor trouble at the Kingston docks. In 1978, much of the planting material rotted on the wharf, and in 1979, a dockworkers strike delayed delivery for several weeks. Consequently, many farmers complain they cannot get their planting material in time for planting, and frequently decline to pick up seed potatoes they have made down payment for.

The potatoes are harvested in the spring, approximately three months after planting. Coop members bring their crop to the branch assembly point, where it is graded before delivery to the Coop's central storage area. Producers were paid J$30 per 100 pounds in 1979. Ten cents is deducted per 100 pounds and invested in share capital held by the farmer. A bonus may also be paid at the end of the financial year, the amount proportionate to

the quantity of produce the member delivered to the organization. No bonus, however, has been paid in the past two years.

Until 1978, the Coop sold its potatoes to the Agricultural Marketing Corporation, a statutory company, which marketed the crop. In that year the Coop decided to market the crop itself. Results have been mixed. Operating a large refrigerated warehouse, the Coop is in the position to hold the crop until prices are favorable. New seed types, however, resulted in a bumper crop in 1978. As supply exceeded demand, the Coop had difficulty disposing of its stocks, much of which had to be dumped. Losses amounted to J$100,000.

Members, not unexpectedly, complain of the price paid to growers, and one to two thousand do not bother to sell their crop to the Cooperative, but market directly to private traders or to the AMC. In fact, early in each season, before the Coop's marketing facilities gear up, it is common for all potato producers to dispose of some of their crop in this manner.

In addition to its marketing services, the Coop also runs a farm store at Christiana, the largest town in Two Meetings watershed. A commercial venture, this store grants no special discount to members, but does provide the particular inputs, such as fertilizer and spray, needed for potato cultivation.

THE PEOPLE'S COOPERATIVE BANK

There are currently seven branches of the People's Cooperative Bank serving farmers in the study area--three in Two Meetings and four in Pindars River. To become a shareholder in the bank, a person pays J$10 per share in addition to a 50¢ entrance fee. It is only by being a shareholder that one can take out a loan.

There are two types of PC Banks--the committee or secretary's bank and the manager's bank. The former is organized like a cooperative. The shareholders elect the six to twelve members of the loan review committee, mainly

from among the prominent farmers in the community. In principle, a shareholders' meeting is held once a year, and it is at these meetings that the committee is elected. In fact, however, few of the branches in the watersheds have had a meeting in recent years. If a branch is having serious financial difficulty, the Agricultural Credit Board may exercise its prerogative and appoint the review committee itself, along with the manager of the bank. This is then known as a manager's bank.

There are also different types of loans. The Farmer Development Program Loan is geared primarily to increase agricultural production--loans are taken out for planting material, farm improvement, and so forth. All of these loans carry six percent interest. One problem with them is the long time lag between application and receipt of loan. The review committee meets once a month. If the application is approved, it is then sent to the Agricultural Credit Board in Kingston for final approval, after which the money is sent to the branch bank. The process can take from six weeks to eight months, by which time the need for the loan may have passed.

Another type of loan is made from the PC Bank's share capital, rather than from ACB funds. Despite the higher interest rate (7 1/2 percent), this loan, because it does not have to be allocated from Kingston, has the advantage of being processed more quickly.

For both of these loans some sort of security is required, in the form of either land title (which many farmers, even if they have it, are very unwilling to surrender), or two or three guarantors who would be responsible in case of nonpayment. There have been some problems with the guarantor form of security, and some bank managers have indicated that their banks are examining the guarantors more closely; one manager mentioned, for example, that an inordinately high proportion of guarantors were unhealthy old men.

There is also a crop-lien program, established in 1976, by the Ministry of Agriculture, aimed at increasing the production of certain crops. The funds for these loans come from the Ministry, but the administration is handled by the PC Bank. Applications are reviewed, however, not by the full committee, but by the secretary of the bank and Ministry extension officers, the latter being responsible for drawing up the "farm plan". No security is required for this loan. Many farmers who were recipients of crop-lien loans complained that they were encouraged to borrow money to plant crops (such as sweet potato or cassava), only to find either that no market existed for the crop, or that soil conditions were unsuitable for its cultivation.

Bank managers were understandably reluctant to discuss the default rate. Some simply claimed it is high, others downplayed it. The default rate is apparently a considerable problem, however, exceeding 50 percent at most of the watersheds' branch banks.[11] Defaulters are rarely prosecuted, bank officials attributing this to political interference. Even when prosecution does take place, the process is lengthy and expensive, the settlements are low, and the farmer may still refuse to pay. Some borrowers, in fact, have been taken to court two or even three times, with little effect. Due to the number of delinquent loans, dividends have not been issued to shareholders for many years.

NON-AGRICULTURAL ORGANIZATIONS

Community Councils

Community councils are local organizations whose task is to "a) discuss common problems which affect their community, b) make plans for solution of

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[11] In Jamaica as a whole, J$5.5 million in PC Bank loans were in arrears in March, 1978. This amounted to 39 percent of loans outstanding. See The Small Farmer in Jamaican Agriculture: An Assessment of Constraints and Opportunities (Kingston: USDA and USAID, 1978), p. 176. Credit use in Two Meetings and Pindars River is discussed more fully in Chapter Five, below.

these problems, c) monitor the implementation of public projects and programmes which affect the welfare of the community, d) organize the community action for solution of problems affecting the community."[12] Community councils have existed in some Jamaican communities since the 1930s, but recently the Social Development Commission (SDC), a division of the Ministry of Youth, Sports and Community Development, has attempted to accelerate their creation. Today there are an estimated 424 councils across the island. SDC organizers have tried to set up several in the two watersheds, but only four were functioning when we conducted our research.

Community councils lack a statutory basis at present, but a Green Paper has been presented to Parliament, containing proposed legislation to grant them legal status. This legislation would, if passed in its present form, make the councils a new, and the lowest, tier of government.

The councils are an attempt to foster grass-roots democracy, and resemble a New England town meeting. Membership is open to all community residents over the age of 18, regardless of sex, religion, or partisan affiliation. Dues are fixed by the council. All members meet monthly to discuss problems and once a year elect an executive committee to manage the group's activities. These officers are prohibited from holding any office for more than three years, so as to ensure constantly renewed leadership.

SDC is instrumental in establishing these organizations. The field agent for the area will call a community meeting, and try to persuade those in attendance to establish a council. If people agree, they register with the SDC on a provisional basis; after twelve months they may apply for chartered status, provided they have held regular meetings and enlisted ten percent of eligible

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[12]Social Development Commission, "Guidelines on the Structure and Role of Community Councils (Revised April 1979)", mimeo, p. 1.

residents. In the future, if the appropriate legislation is passed, these chartered groups will be able to own and manage property; to nominate representatives to bodies such as school boards and price control committees; and to receive and comment on government development plans for the community.

"The major functions of the community council," an SDC brochure states, "are planning, mobilization, co-ordination, communication, and representation."[13] What this means in practice is that the councils can plan and implement projects in the locality, and elicit funds or other support from government and private agencies, as needed. In one district studied, for instance, the council organized self-help labor for construction of a community center, and attempted to win government funding for a local canning factory. In another district, the council sponsored workshops at which SDC personnel provided training in handicrafts. Most councils also try to enlist the local parish councilor or M.P. to improve the community's roads, water supply, and other public services.

These local organizations, however, are widely perceived as partisan and"socialist" bodies, aligned with the governing People's National Party (PNP) or the left-wing Workers' Party of Jamaica (WPJ). Supporters of the opposition Jamaica Labour Party (JLP) are unwilling to join, often out of fear that councils are the first step in a Cuban-style revolution that will ultimately take away their land. The SDC organizers we spoke to denied any partisan intentions, and blamed JLP agitators for the climate of suspicion. Irregardless of the validity of these charges and countercharges, political conflict has hampered community councils in the watersheds. For instance, in one town in Pindars River a council was briefly active and organized a workday to put fencing around a community center. That same night the fence was stolen.

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[13] *Ibid.*, p. 2.

Council members attributed this crime to the fact that their's was a "JLP town." Similarly, the local school principal in one village in Two Meetings tried and failed to interest residents in establishing a council. He explained that he was known as a "PNP" man", but that his community was politically "mixed". Under these circumstances he was unable to mobilize public support. In another village, the president of the council stopped calling meetings after hearing rumors that the WPJ was behind the council movement. Because of such political controversy, as well as the fact that community councils have no legal basis at present, few functioning councils exist in the watersheds.

Youth Clubs

The SDC is also responsible for organizing youth clubs. These are specialized groups, concerned primarily with organizing sports practice and competition. A club is usually attached to a school, and membership open to all interested young people. The definition of "youth", however, is highly variable among clubs, depending on the wishes of members. Some clubs consist mostly of people in their 20s or early 30s.

There are several youth clubs in the Two Meetings and Pindars River watersheds. They are supposed to meet weekly. Members decide on dues, and elect a president and secretary to run its meetings, handle finances, keep records, and so on. They are active in various sports, such as cricket and soccer, and occasionally compete with other clubs in the area. The groups may also organize self-help projects, such as acquiring and maintaining a playing field, and sometimes have workshops for training in arts, crafts, and other skills in addition to sports. Social functions may also be held. As with community councils, however, SDC involvement in youth clubs leads to suspicion of partisan influence and motivation. This mistrust is reinforced by

the fact that SDC personnel sometimes try to use a youth club as the organizational base for creating a community council.

Parents' and Teachers' Association

Many of the 33 schools in the two watersheds have an affiliated PTA. This organization has two basic functions. The first is to provide a link between the school and the community, and to offer parents the opportunity to become involved in school affairs. The second is to organize fund-raising activities for community and school-related projects. In one community, for instance, J$2,000 was raised recently to build an outdoor platform and to pave the area around the school. In another, the PTA was instrumental in constructing a new basic school building.

Church Groups

Every district in the two watersheds has several churches, with the major denominations being Anglican, Baptist, Moravian, the Church of God, Seventh-Day Adventist, and the New Testament Church of God. When speaking of church groups, however, we are referring to those organizations sponsored by churches, such as religious education classes, women's auxiliaries, social clubs, and choirs. There are many such organizations in the study area, and it is difficult to generalize about their structure or functions, except to note that they are locally-supported, voluntary, and specialized by religious sect. Fairly typical is one group in Two Meetings. Under the leadership of a local woman, who was also the secretary of the JAS chapter, several interested church members organized a fund-raising campaign to construct a house of worship. Although unfinished, the building is now occupied. In addition to its religious functions, it also serves as a community meeting site and houses a basic school. Many church groups address themselves, in like manner, to community-wide needs and charitable activities, as well as to more narrowly defined sectarian endeavors.

SUMMARY

Residents of Two Meetings and Pindars River have access to a multitude of formal local organizations. For convenience's sake, we have classified them according to their main function, as either agricultural or non-agricultural. In practice, however, the activities of many of these organizations overlap. The JAS and the community councils, for instance, may both address themselves to issues of the community's social or economic development; and even among the agricultural organizations, activities often converge.

Except for the JAS, which is concerned with a wide range of farmers' needs, the agricultural groups tend to have narrow responsibilities, for administering credit in the case of the PC Banks, and for providing markets in the case of the commodity organizations. With the exception of the AIBGA, all agricultural groups require that farmers who use their services pay a membership fee. This is true even of the JAS, which is not itself responsible for any single crop, but in which membership is compulsory for people selling coffee or cocoa to the respective cooperatives.

All these farmers' organizations have a similar structure -- members are enrolled in local branches, which hold meetings and elect officers. Most have two other organizational levels, one at the parish, and the other at the national capital. All, however, have a paid professional staff who are assigned to supervise the local branches and farmer-members. In the case of the commodity associations, employees of the respective processing facilities and/or national crop association also exercise important functions. In no instances are these staff paid directly by the branch organization; salaries are covered by the central organization, out of funds derived from membership fees, crop cesses, income from crop sales, or government subvention.

The administrative staff, not elected local officials, make the major economic decisions affecting members of the respective organizations. Such employees, to take several examples, have final approval over loan applications to the PC Banks, are responsible for rejecting below-grade bananas at the local boxing plants, and have the task of maintaining quality control of coffee delivered to coffee pulperies. Bureaucratic personnel are also heavily involved in the creation of organization branches, the calling of local meetings, the election of officers, and the dissemination of information to members.

These employees, however, have fewer resources at their disposal than they did previously. Most commodity associations once provided some members with fertilizer and loans, but these and other inputs are currently in short supply. The JAS field officers used to have access to tools which could be distributed to the branches. These items are also very scarce at present. A comparable situation prevails in the PC Banks, whose limited funds require applicants to wait months for loans. Consequently, the major role of agricultural organizations is not to supply a range of agricultural services, but simply to provide marketing channels for smallholders, to get them access to processing facilities and export markets.

Despite the involvement of these organizations in agriculture, much of farming enterprise occurs without organizational assistance. Private traders, known as higglers, remain a very important market outlet for most farmers. Much of the transportation to and from processing facilities and group accumulation points, is done by private, not public, vehicle. farmers get their tools, planting material, and what fertilizer they use from private retailers, if not from their own farm.[14]

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[14]The role of private trade, and the problems farmers have with non-commercial services, are discussed in greater detail in Chapter Five.

The non-agricultural organizations in the watersheds differ from farmers' groups because of their non-commercial nature. All are more concerned with the social well-being of the community, and less with the economic success of their members. This is not to say that the farmers' groups do not also speak to community needs. They can and do; but their primary function is to assist individual members to farm more productively and profitably. The non-agricultural groups also differ in that membership is always voluntary and usually open to anyone, rather than compulsory for persons who use certain crop channels. In general these groups have fewer resources available to them than do farmers' organizations, and they tend to be less dependent upon paid staff and national organizations. This is least true of the community councils and youth groups, which are sponsored by the SDC, but which still do not provide direct economic benefits to members. The consequence is that the non-agricultural organizations fall far short of the membership achieved by the service-oriented farmers' groups.

CHAPTER FOUR

PARTICIPATION IN LOCAL ORGANIZATIONS

In the preceding chapter we provided a descriptive summary of the numerous local organizations active in Two Meetings and Pindars River. Our primary concern was to present briefly their history and scope of activity. Here our focus is the participation that occurs within them. We will analyze how widespread participation is, and explain the patterns that exist.

The concept "participation" is complex and difficult to measure by a single indicator.[1] For the purposes of this chapter, however, we define it as the individual's involvement in the activities of rural organizations, whether they be agricultural or non-agricultural groups. One convenient measure of participation in this sense is organizational membership. In most cases only people who belong to an organization can be said to "participate" in it, although non-members may sometimes benefit either directly or indirectly from an organization's presence. Membership, however, can be a passive form of behavior. This is particularly true in the study area, where many agricultural organizations are compulsory for farmers who market a particular crop. A significant proportion of producers, in fact, have joined compulsory marketing associations without realizing it. For them, participation does not extend beyond the simple economic transaction of selling produce. We have termed this phenomenon "nominal" participation, and it is widespread. Note that nominal participation does not necessarily indicate a farmer is unaided by an organization or avoids using its services; simply that he is unaware of being a member.

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[1] See the discussion in John M. Cohen and Norman T. Uphoff, Rural Development Participation: Concepts and Measures for Project Design (Ithaca: Cornell University Rural Development Committee, 1977), esp. pp. 1-26.

There is another kind of membership that entails greater consciousness of an organization and its functions. This we call "reported" membership, referring to the fact that many respondents to our survey accurately reported membership in an agricultural group, even though to join was obligatory. These people are distinguished from nominal members because they are cognizant of their membership in the organization; they use its services, but are not necessarily more engaged in its other activities. (For strictly voluntary organizations, of course, the distinction between nominal and reported participation does not apply.)

To differentiate organizational members further, we establish a third category of "active" membership, based on attendance at group meetings. Such gatherings are important forums for conveying information and airing grievances, and to be active, members must take part in these proceedings.

LEVELS OF PARTICIPATION

Membership in Agricultural Organizations

Many people in Two Meetings and Pindars River belong to farmers' organizations, although total membership ranges widely among the different organizations studied. As Table 4.1 shows, the JAS was the largest; some two-thirds of all households surveyed had members in this organization. The coffee and cocoa cooperative groups, which are affiliated with JAS branches, also had significant followings, with members coming from 62 percent and 42 percent, respectively, of farm families. The next most prominent organization was the PC Bank, with shareholders in more than a third of households. Somewhat less widespread were the organizations for growers of cane, banana, and potato, which could count participants from 20 to 25 percent of farm families. By far the smallest organization was the Citrus Growers' Association, whose clientele represented only five percent of households.

Table 4.1. Membership in Farmers Organizations, Two Meetings and Pindars River

Organization	Percent of Households		
	Reported Members[1]	Nominal Members[2]	Total Members[3]
JAS	41%	27%[4]	68%
JAS/coffee group	31	31	62
JAS/cocoa group	23	19	42
AICFA	17	8	25
AIBGA	25	n.a.[5]	25
CGA	3	2	5
Potato Cooperative	20	n.a.	20
PC Bank	35	n.a.	35

[1]Households with members reporting membership in the organization.

[2]Households which did not report membership, but which had membership by virtue of marketing behavior.

[3]Reported membership plus nominal membership.

[4]Households which sold coffee to a JAS group, but did not report JAS membership.

[5]Nominal membership was not applicable to AIBGA, the Potato Cooperative, or the PC Bank, because they were voluntary associations.

Most of the differences in inter-organizational membership are explained by the crops grown and marketed in the study area. As Table 4.2 shows, membership in most commodity associations corresponds to the number of producers. The more widely a crop is grown, the more widespread tends to be membership in the respective producers' group. (Although not itself a commodity association, the JAS' membership is boosted by the prevalence of coffee and cocoa producers, whose groups are affiliated with JAS branches.)

The correlation is highest for those crops needing processing, such as coffee, cocoa, and sugar cane. Farmers who grow these items in significant quantities must turn to the respective marketing organizations. The proportion of potato growers belonging to the Potato Cooperative is also high (67 percent), because these producers rely on the organization for planting material, as well as for a convenient market outlet. Instructive is that relatively few growers belong to the CGA and AIBGA, for both citrus and banana are an important component of the farm diet, and any surplus can be sold locally, on the private market. An additional factor explaining the relatively small membership in AIBGA is that this organization, unlike most other commodity groups, is voluntary. A producer is not required to join to export his crop.

"Nominal" versus "Reported" Participation

The figures for total organizational membership must be viewed cautiously, for they tend to reflect marketing behavior, rather than conscious involvement in an organization. Most farmers sell some crops through commodity associations, but many belong to these groups in name only: they are unaware of membership. "Nominal" or unaware members comprised between one-half and one-third of total enrollment in the five organizations with compulsory membership (Table 4.1). For instance, 32 percent of farmers who sold to cane factories did

Table 4.2. Producers and Commodity Group Members, Two Meetings and Pindars River

Crop	Percent of Households: Producers of Crops	Percent of Households: Members of Commodity Groups[1]	Total Members as % of Producers
Coffee	70%	62%	89%
Cocoa	47	42	89
Cane	36	25	69
Banana	73	25	34
Citrus	21	5	24
Potato	30	20	67

[1]Total members (nominal plus reported). See text for definitions.

not realize they had thereby joined the AICFA. Likewise, only half the farmers who used the services of the JAS coffee groups understood they belonged to the JAS. The compulsory farmers' organizations, evidently, have failed to communicate with many members, even to the extent of informing them of their membership.

More indicative of an organization's real strength among farmers are the figures on "reported" membership. These data indicate awareness of organizations, and do not simply mirror the use of organizations as crop outlets. Fewer respondents reported belonging to famers' groups than qualified as members by virtue of marketing behavior, but the number was still substantial. Four out of ten households said someone in the family belonged to the JAS. The other organizations had lower levels of reported membership, but except for the CGA (3 percent), each was claimed by one-sixth (AICFA), to one-third (PC Bank) of farm families. So a significant minority of the population belongs to, and more importantly, is aware of belonging to, organizations established to benefit farmers.

"Active" Participation

Not all reported members, however, exercise a voice in their organizations, or participate beyond using market, credit, or input services. Accordingly it is important to distinguish the "active" participants, who take part in discussions, elections, and the passage of resolutions.[2] A good measure of this kind of

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[2]M. G. Smith, who did extensive field work in Jamaica in the early 1950s, made a similar distinction between "enrollment" and "effective participation". He found "enrollment within these farm service organizations may be quite heavy.. ..[but] branch meetings may be poorly attended unless some outstanding issues such as price are at stake." See "Community Organization in Rural Jamaica", in M. G. Smith, The Plural Society in the British West Indies (Berkely: University of California Press, 1965), p. 188.

participation is attendance at meetings.

Because many local groups meet only once or twice per year, we used a liberal definition of "active" membership -- presence at one of the organization's meetings within the previous two years. The results are reported in Table 4.3, which shows that no more than 28 percent of all surveyed households had persons who were "active" in any single organization. Interestingly, however, the proportion of members who were active was similar in most organizations, with the exception of the AICFA and the PC Banks. Forty-one percent of JAS members had attended recent meetings of their branch, as had 40 percent of coffee group members, and 37 percent of cocoa group members. The level of active membership was comparable in the Potato Cooperative (45 percent) and the Banana Growers' Association (34 percent).

The reason more members do not attend meetings is that no individual incentives are involved.[3] The major benefit of meetings is information, but as one farmer put it, "If it's good news, I'll hear about it anyway; and if it's bad news, too." In any event, many farmers are openly skeptical of the announcements and promises made at meetings, and see little advantage to attending. As to the opportunities for exercising democratic control over organizational affairs, most farmers see little pay-off. The three-tiered structure of these groups removes effective decision-making authority from the local level. We frequently heard complaints about the lack of responsiveness of the farmers "own" organizations; organizations which many farmers identify with the government. And it is true, of course, that the major decisions about

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[3]Many observers of rural Jamaica have noted that people usually attend meetings to get concrete personal benefits. See for example, Nancy Foner's discussion of local political meetings in Status and Power in Rural Jamaica (New York: Columbia University Teachers' College Press, 1973), pp. 120-124.

Table 4.3. Active Members in Farmers Organizations, Two Meetings and Pindars River

Organization	Active Members[1] as Percent of: All Respondents[2]	Total Membership
JAS	28%	41%
JAS/coffee group	26	40
JAS/cocoa group	15	37
AICFA	10	58
AIBGA	8	34
CGA[3]	n.a.	n.a.
Potato Coop	9	45
PC Bank[4]	11	26

[1]Active membership defined as having attended a meeting of the organization within the last two years.

[2]In this table "respondent" refers not only to the individual surveyed, but to all members of his or her household.

[3]Not applicable to the CGA, because this organization has not held any meetings within the past two years.

[4]Ever attended meeting of the PC Bank.

agriculture are made by government bodies, and not by agricultural associations. That most farmers see meetings as a waste of time, or at best, as an obligation, is not surprising; they do not believe meetings are a source of valuable information, or an effective platform to influence public policy. Under these circumstances, it appears most farmers' organizations can expect no more than about one-third of their total membership to attend meetings, even on an occasional basis.

The effect of individual incentives on meeting attendance is clearly demonstrated in the AICFA, which had the highest proportion of active members (58 percent). Cane meetings are where the farmer learns the date of the harvest and the price to be paid. Because cane is the major crop for most of these producers, this information is vital. Also, cane farmers must establish contact with the group's leaders to be able to get the "tickets" necessary to market the crop. The meetings of other commodity associations are generally of less importance, both because the crops handled are not usually the major source of income, and because the coordination of crop deliveries is less complex.

That PC Banks had lower than average active participation (26 percent) is due to similar factors. A farmer's attendance at this group's meetings has no bearing on his receiving a loan. Nor does the meeting have any financial implications for the individual, since the PC Banks have not paid dividends for many years, and shareholders interests are protected by the government. Consequently, meetings of the PC Bank are even less important to farmers than meetings of other agricultural organizations.[4]

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[4]These findings lend support to the theory, advanced by Mancur Olson, that people participate in groups because of individual incentives (or compulsion) rather than to promote common interests. See The Logic of Collective Action: Public Goods and the Theory of Groups (Cambridge: Harvard University Press, 1965).

Membership Differences in the Watersheds

In addition to inter-organizational differences in participation there are also differences between the two watersheds. As measured by reported membership, participation tends to be higher in Pindars River than in Two Meetings. In the latter area, no more than 40 percent of the households reported belonging to any single farmers' group; that was approximately the rate achieved by the coffee groups, the AIBGA, the Potato Cooperative, and the PC Banks (Table 4.4). In Pindars River, by contrast, 70 and 81 percent of households reported membership in the coffee and cocoa groups, and about half said family members belonged to the JAS and AICFA.

The inter-watershed variation is attributable largely to the dominance of different crops in the two areas. More sugar cane is grown in Pindars River than in Two Meetings, so more farmers there belong to the AICFA. Similarly, coffee and cocoa are more important crops in Pindars River, so a higher proportion of farmers are members in the coffee and cocoa groups, and their JAS affiliates. In Two Meetings, on the other hand, banana is the major cash crop, but farmers can sell it locally or to the boxing plant, without becoming affiliated with the AIBGA. Another very important crop in Two Meetings is yam, which is associated with no specialized commodity organization. The consequence of this cropping pattern is that farmers in Two Meetings generally have less need for organizational membership.

Another factor explaining the pattern of membership is the relative remoteness of the two watersheds. Because Pindars River is more isolated, residents find it difficult to dispose of crops by themselves. They are induced,

Table 4.4. Differences Between Reported Membership in Agricultural Organizations in Two Meetings and Pindars River

Organization	Percent of households reporting membership	
	Two Meetings	Pindars River
Jamaica Agricultural Society	31%	50%
JAS/Coffee group	43	80
JAS/Cocoa group	10	71
All-Island Cane Farmers Assoc.	3	49
All-Island Banana Growers Assoc.	42	14
Citrus Growers Assoc.	2	9
Christiana Potato Growers Coop.	41	-
Peoples' Cooperative Bank	38	33

therefore, not only to seek marketing assistance, but to grow crops that can be sold in bulk through organizational channels. Farmers' organizations in Pindars River have a "captive audience". Two Meetings' farmers have larger and more concentrated markets nearby, and access to a better transportation system as well. Thus, incentives exist for them to grow food crops, to be sold privately. Having more marketing options, fewer require help from organizations.

Non-agricultural Organizations

Participation in non-agricultural organizations is low, even in comparison to the agricultural organizations just discussed. Although there are differences in non-agricultural organizational affiliation between the two watersheds,in both areas two-thirds of respondents said neither they, nor any other person in their household, belonged to any such group or club (Table 4.5.)[5] The most frequently cited non-agricultural organization, the PTA, claimed only 18 percent of the households in both watersheds . No other non-agricultural group had members from more than twelve percent of households in either watershed.[6] Even the new community councils lacked significant followings -- only ten percent of respondents in Two Meetings, and seven percent in Pindars River,

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[5]For purposes of our survey we defined "church groups" as specialized groups such as choirs or religious education classes. Reported membership in these organizations was low. Attendance at religious services, however, was quite high and the majority of people in the watersheds were affiliated with one of the church denominations. This form of participation in church groups was excluded from our scope of analysis.

[6]The low level of participation in non-agricultural organizations is striking. Earlier research in rural Jamaica made similar findings. G. J. Kruijer, who worked in Two Meetings in the early 1950s, noted limited involvement in what he termed "formal utilitarian social systems". He attributed this phenomenon to poverty and malnutrition. See his Sociological Report on the Christiana Area (Kingston: Ministry of Agriculture, 1969), pp. 5, 17. Smith also found participation in voluntary organizations to be "depressingly low", a problem he ascribed to lack of community integration and heterogeneous membership. ("Community Organization in Rural Jamaica", pp. 187 and 192). We think the major problem is inadequate incentives for membership. Cf. Olson, Logic of Collective Action, esp. pp. 5-53.

Table 4.5. Reported Membership in Non-agricultural Organizations, Two Meetings and Pindars River

Non-agricultural Organization	Percent of Respondents[1]		
	Two Meetings	Pindars River	Both Areas
PTA	8%	29%	18%
Sports Club	12	3	7
Community Council[2]	10	7	8
Church group	10	2	6
4-H Club	4	1	2
Women's Club	1	0	1
Other organizations	1	2	2
None	67	69	66

[1]Columns equal more than 100 because of multiple answers.

[2]Were aware of community council in their district (not necessarily members).

were even aware of a council in their district. None said they were members.

The reason behind the relatively low participation in these groups is twofold. First, as strictly voluntary associations, they lack the captive membership of the JAS, the Cane Farmers, and most other farmers organizations. Second, they are essentially non-economic associations, and do not provide material benefits, such as marketing and other services, that are a powerful incentive for membership, if not for active involvement in organizational meetings. While these non-agricultural groups do enrich community life, in their present form none has the capacity to mobilize the local population for rural development. Hence we will focus the rest of our analysis on the farmers' organizations, which, for all their shortcomings, have greater potential as agents of change.

Multiple Organizational Affiliation

The JAS, and its affiliated coffee and cocoa groups, is the predominant local organization in the two watersheds. It has more branches, and a larger membership, than any other agricultural or non-agricultural group. Because of the prominence of the JAS, we wanted to see what affect JAS had on participation in other farmers' organizations. During our field work, we had noted that farmers active in JAS often belonged to additional organizations, and we hypothesized that JAS members were generally more "participatory."

To test this hypothesis we cross-tabulated reported JAS membership with reported membership in the AICFA, AIBGA, the Potato Coop, and PC Banks. We excluded the coffee and cocoa groups from these calculations, for the obvious reason that membership in these commodity groups automatically enrolled the farmer in JAS. As Table 4.6 shows, the "aware" JAS members were considerably more likely to report joining other agricultural groups, than were farmers

Table 4.6. Relationship Between JAS Membership and Membership in other Agricultural Organizations, Two Meetings and Pindars River

Organizations	Percent Reporting Membership in Agricultural Organizations (Other the JAS)		
	all farmers	JAS members[1/]	JAS non-members
AICFA	17%	20%	16%
AIBGA	25	32	22
CGA	3	5	2
Potato Coop[2/]	41	47	39
PC Bank	35	46	28
Weighted Average	22	28	19

[1/] Reported JAS members only.

[2/] Two Meetings only.

without ties to the JAS. Almost half the JAS members, for example, also belonged to the PC Bank and to the Potato Cooperative.[7]

Because of their greater tendency to participate, these JAS members form a core group in all farmers' organizations. Fully half the members of PC Banks and the AIBGA, for instance, also reported belonging to JAS, as did two-thirds of farmers in the Potato Cooperative and 42 percent in the AICFA.

That a correlation exists between participation in the JAS and other farm organizations is not surprising, for JAS and non-JAS activities tend to overlap at the local level. Staff from other organizations often contact farmers through the JAS branch, and the JAS itself has a hand in promoting these non-JAS groups. Thus a farmer in JAS is likely to be exposed to other organizations as well. If these provide the credit, agricultural inputs, or crop outlets he needs, he is likely to join. Farmers lacking JAS contact, by contrast, have fewer opportunities to find out about supplementary agricultural services and organizations, and are less likely to become members.

CHARACTERISTICS OF PARTICIPANTS

We have thus far concentrated on the magnitude of farmers' participation, looking at aggregate membership in various organizations. There is, however, another dimension to be considered: who is involved in these local bodies.[8] Are some groups, such as the rural poor or women, excluded, whether through

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[7] The figure for the Potato Cooperative refers only to JAS members in Two Meetings, since this organization does not operate in Pindara River.

[8] The importance of considering who participates in rural development activities is put forth in Cohen and Uphoff, Rural Development Participation, pp. 10-15, 59-88.

self-selection or discrimination? Do other groups monopolize membership and any consequent benefits? How egalitarian is organizational membership? To answer these questions, we looked at the relationship between reported membership and the farmer's socio-economic status, age, and sex.

Farm Size and Participation

The issue of participation among farmers with various land size holdings is particularly salient in the two watersheds, because of the skewed pattern of resource distribution, reported in Chapter Two. All the agricultural organizations claim to serve the "small farmer", but as we saw, "small" is a relative term. The people of Two Meetings and Pindars River are not a homogeneous peasantry, but an agricultural society divided into three, fairly distinct categories. The economic base of these classes is land -- the amount that a person farms, and the security with which he holds it. Though we caution against any rigid definition of class by farm size or land tenure status, the rural poor generally farm less than two acres, and often do not own any land, but rent, squat, or temporarily use land held by relatives. Small and medium farmers are relatively better off, though still poor, and may have anywhere from two to ten acres. Often they own all the land they cultivate. The most secure, but by no means wealthy, category is the larger farmers. These people work ten or more acres, own at least part of their holding, and frequently rent additional land. (See Chapter Two)

There are two ways to look at the influence of farm size on participation. First, is to consider the participation rate among farmers of different status, or in other words, the proportion of people from a given category who report membership in an organization. This number indicate differences in the organization's drawing power among small, medium, and large farmers. Second, is to see the proportion of members with similar size

holdings that is to say, the relative weight of different categories of farmers within the organization. This figure shows how representative membership is of the farming population, and implicitly, their interests.

The rate of participation in an organization, and that organization's socio-economic composition are, of course closely connected. Land-size groups with a greater tendency to join have, by definition, disproportionate membership. At the same time, the socio-economic makeup of members undoubtedly influences each individual farmer's decision to participate. Several people told us, for instance, that they were uninterested in joining JAS, because they felt it was only for "big farmers".

Because JAS is the largest farm organization, its makeup is particularly important. The rate of participation of farmers in various size categories is presented in the left-hand column of Table 4.7, which shows a positive correlation between farm size and reported membership. Only one-quarter of those with less than one acre said they belonged to the Society, compared to one-third of farmers with between one and two acres. The rate of participation increased in each size group, except for the last category of farmers with more than 20 acres. The drop-off among these largest farmers may be due to sampling error -- they comprised only two percent of farmers surveyed. We suspect, however, that large farmers are less likely to join JAS, because they can get agricultural advice and services on their own.

Despite the different rates of reported membership of the various farm size groups, the membership of JAS is very representative of the farming population. This is clearly seen by comparing the middle and right-hand columns of Table 4.7. The proportion of JAS members in each size group corresponds closely to the magnitude of [illegible] group in the farming population.

Table 4.7. Farm Size and Reported JAS Membership, Two Meetings and Pindars River

	Percent resp. reporting JAS membership	Percent of reported JAS members	Percent of all farmers
Farm Size (acres)			
Less than 1	23%	4%	6%
1 to less than 2	33	15	16
2 to less than 5	36	39	40
5 to less than 10	40	28	25
10 to less than 20	48	13	10
20 and over	33	1	2
All farm sizes	37[1]	100	100

[1]This figure is lower than the figure on reported JAS membership in Table 4.1 because it only includes respondents who said they belonged to JAS. Table 4.1 covered household membership, which was 4 percentage points higher (some respondents were not themselves in JAS, but reported that a spouse or other family member was).

Consequently, medium-sized farmers, who are the most populous category also dominate JAS membership, with about 67 percent of reported members (compared with 65 percent of the sampled farming population).

A similar pattern emerges in the relationship between land tenure status and reported JAS membership. Only about one-quarter of farmers owning no land said they had joined, compared to 40 percent of landowners, and 35 percent of people with mixed tenure. Consequently, non-landowning peasants were somewhat underrepresented in JAS, comprising 12 percent of members, but 17 percent of all farmers. Nevertheless, the land tenure status of JAS members as a group is not very different from that of the local population.

These findings indicate that JAS, with significant participation of farmers of all land size categories and forms of tenure, is indeed a "farmers' organization." Its membership extends to all kinds of farmers, small as well as large. That the organization has had least success recruiting landless and near landless peasants, is due to two factors. First, many of the smallest farmers are younger people, who have yet to inherit much land from their kinsmen. Second, some people with marginal holdings, particularly in Two Meetings, work in agriculture only part-time. Because these people do not consider themselves bona fide farmers, they may not be interested in joining the Agricultural Society. Overall, however, the JAS has demonstrated an impressive capacity to enlist farmers of differing socio-economic status.

A comparison with the rates of class participation in the AICFA, AIBGA, CGA, and Potato Cooperative is instructive. As in JAS, farmers with less than two acres were the least likely to report joining these marketing organizations. Membership rates tended to increase among farmers with two to ten acres, but in most cases leveled off or declined among farmers with more than ten acres. The

only major exception to this pattern was the Citrus Growers, in which membership was highest among the largest farmers (Table 4.8).[9]

Significantly, none of these four organizations was as representative as the JAS of local population. All had a lower proportion of members from among the landless and near-landless; three had more middle-size farmers (AICFA, AIBGA, Potato Coop); and two had a higher proportion of large farmers (AICFA, CGA).[10]

The middle and large farmer bias of these other agricultural organizations stems from their primary function as marketing agencies. The smallest farmers devote a high proportion of resources to subsistence production, and have relatively little surplus to offer for sale. This means, simply, that smaller farmers have less need for the main services offered by the commodity associations. The situation of JAS is different. Although it too has marketing functions, primarily through its affiliation with local coffee and cocoa groups, these are not its primary activities. Nor is it limited to the promotion of any single crop. As a multi-functional organization, JAS has the potential to offer something to all farmers. Consequently, it i able to draw members from a more typical slice of the farm population than are the commodity associations.

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[9]The total number of percentage points difference from the size distribution for all farmers in the areas was 28 for the AICFA, 31 for the AIBGA, 59 for the CGA, and 27 for the Potato Cooperative. The AICFA, AIBGA, and Potato Cooperative thus diverged about equally from the norm for all farmers with the CGA about twice as divergent.

[10]This can be seen by comparing the second column in Table 4.7 with Table 4.9.

Table 4.8. Rate of Participation Among Farmers of Various Land-size Categories in Farmers' Organizations (Other than JAS), Two Meetings and Pindars River

Size category (acres)	Percent of farmers who are members				Weighted Average
	AICFA	AIBGA	CGA	Pot. Coop[1]	
Less than 1	4%	19%	0%	29%	11%
1 to less than 2	7	16	0	26	11
2 to less than 5	19	22	3	40	18
5 to less than 10	20	40	5	62	28
10 to less than 20	21	19	10	33	17
20 and over	33	33	17	0	25
All farm sizes	17	25	3	41	19

Table 4.9. Percent of Members in Farmers' Organizations (Other than JAS) From Various Land-size Categories, Two Meetings and Pindars River

Size category (acres)	Percent of members				Percent of All farmers
Less than 1	1%	5%	0%	5%	6%
1 to less than 2	7	10	0	12	16
2 to less than 5	44	34	33	39	40
5 to less than 10	31	41	33	39	25
10 to less than 20	13	8	27	5	10
20 and over	3	2	7	0	2
All farm sizes	100	100	100	100	100

[1]Two Meetings only.

Age of JAS Members

It is sometimes asserted that JAS is an organization of elderly farmers. But, as the data in Table 4.10 show, the likelihood of a respondent to our survey reporting JAS membership, did not increase significantly with age, except for people over 70. About one-third of farmers aged up to 50 years claimed JAS membership; the proportion climbed slightly among those in the 50 to 60 year (37 percent) and 60 to 70 year (40 per cent) age groups. Among the oldest farmers, the rate of membership jumped to 55 percent.

Since many of these elderly farmers are long-time JAS members, their greater representation in the organization indicates membership commitments made many years ago. The suggestion is that, in the past, JAS had greater drawing power than it does today. This is consistent with the fact, observed in Chapter Three, that JAS has lost many of the service functions it previously had.

Because of the way we conducted our survey, it is difficult to formulate the relationship between age and JAS membership with precision. It is clear, however, that JAS membership is not concentrated among any single age group. The median age of farmers in the watershed is about 50 years, and just over half the respondents who said they belonged to JAS were 50 and over. So, while JAS members do tend to be beyond middle age, this is reflective of the age composition of the population.

Women in JAS

One of our most surprising findings about JAS concerned the participation of women. We had observed that women were often present at meetings, and that 20 of 29 branch secretaries were women, but this did not prepare us for the findings of our survey. Thirty-five percent of the women questioned

Table 4.10 Age and Reported JAS Membership, Two Meetings and Pindars River

Age Group (years)	Percent resp. reporting JAS membership	Percent of JAS members
Less than 20	33%	1%
20 to less than 30	34	12
30 to less than 40	34	16
40 to less than 50	32	16
50 to less than 60	37	22
60 to less than 70	40	22
70 and over	55	11
All ages	37[1]	100

[1]This figure is lower than the figure on reported JAS membership in Table 4.1, because it only includes respondents who said they belonged to JAS. Table 4.1 covered household membership, which was 4 percentage points higher (some respondents were not themselves in JAS, but reported that a spouse or other family member was).

reported that they were members of the organization. This figure was not very much lower than the proportion of male respondents reporting JAS membership (40 percent).

It is difficult to say how reliable these data are, for our survey covered farm households, not individuals, and we did not administer questionnaires to as many women as men. Also, our survey did not establish whether these women were paid-up members in their own right, or whether they considered themselves members because their spouses belonged. We suspect, in fact, that the figure for women's participation may be inflated, for many women may state that they belong to JAS only because they occasionally accompany their husbands to meetings.

Still, the level of female involvement in the Society is impressive, and understandable given the major role women play in farm decision-making. Twenty-two percent of farm households in the watershed, it will be recalled, are headed by women; and even in two-parent households the wife often shares equally the responsibility for farm management.[11]

ORGANIZATIONAL LEADERSHIP

Another facet of participation to consider is local leadership. What opportunities exist for ordinary farmers to assume positions of responsibility in their organizations? Our research found that, despite the democratic structure of all farmers' organizations, leadership tends to be drawn from a narrow circle.

We identified a total of 163 organizational officers in the two watersheds -- 64 from the JAS and 99 from other agricultural organizations. While not an

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[11] Almost half the males in one survey of the two watersheds, said their spouses participated equally in the major decisions about the farm and family budget. See Jamaica--Integrated Rural Development Project Paper (Washington, D.C.: Agency for International Development, 1977), Appendix R, Tables 2 and 4.

exhaustive list, it covered most of the important leadership positions. Given the fact that some 5,000 farm families live in the watersheds, it is obvious that only a handful of people can serve as leaders at any one time. What was most striking, however, was the extent to which incumbents of these offices overlapped. Of the 99 non-JAS positions, 60 were filled by persons who were also officers in a JAS branch society. In other words, almost three-quarters of the organizational positions identified were occupied by people holding two or more offices.

Why is leadership in these organizations so concentrated? The qualifications for office are a major reason. Relatively few people in the watersheds have the education needed to keep records, conduct correspondence, and so forth. Another factor is the time involved. Farmers tend not to have a lot of leisure time, and few want to spend it on organizational work, for which the financial gain is limited. To be certain, leaders are usually reimbursed for travel to parish and national meetings, and may receive a small fee for handling crop deliveries and payments, but these are not a significant source of income. In fact, many leaders we spoke with said the fees they earned did not compensate for the effort involved; not a few said they continued their duties only because no one else would volunteer.

There simply are not many people in Two Meetings and Pindars River who have the skills, the spare-time, and the volition to assume organizational leadership positions. The few people who meet these criteria tend to dominate public life in their communities. Local residents call them "country lawyers"; we prefer the term local elite, for they tend to provide the leadership strata in all local organizations, not just the JAS and the other agricultural groups.

We do not have complete data on the economic background of this local elite, but we do have some information on the background of JAS presidents and secretaries. They tend to be the older and relatively larger farmers, and often live in homes that are more comfortable than average. A few are local shopkeepers, others are teachers, and many have significant sources of non-agricultural income. None of this is surprising, for larger farmers and people with off-farm jobs are more likely to have sufficient income and free-time to take on voluntary work. They are also more likely to have the book-keeping skills that may be required. Finally, because they often have prior leadership experience, they are a logical choice for these jobs.

The recruitment process keeps the circle of JAS leaders narrow. All officers are elected, of course, but there is little competition for office. Usually only a single nominee is named for each position; the choice is then ratified by the members in attendance. In practice, this often amounts to self-selection, and explains why many JAS leaders hold office for 20 years or more.

Despite the narrow social base of these local farm leaders, they do not constitute the kind of oligarchy found in rural areas in many other developing nations. In the first place, large landowners are not common in their ranks; most JAS leaders are medium to large peasants, and some hold only a couple of acres. Second, the farm leadership cadre is neither hereditary, nor immune to criticism from below, although it is largely self-selected. Members who attend meetings are quite willing to complain about the services their organizations provide, even if it usually is to no avail. There are also a remarkable number of women among the elite, and they almost always hold the financially responsible position of secretary. Because they control the books, these women may know more of an organization's activities than do the male officers.

Finally, it is questionable how much power any farm leaders have by virtue of their office. Their local branch organizations command no independent resources, but serve primarily as conduits for agricultural products assembled from below, and for information and inputs dispensed from above. The group leader has little control over these activities, whose pace and scope are determined by larger institutions, such as the marketing boards or the Ministry of Agriculture. Indeed, under current economic conditions, these national institutions have few resources to channel through local organizations, which rural leaders could use as patronage. Consequently, rural leaders are relegated either to ceremonial duties, such as presiding over infrequently-held meetings, or to routine bookkeeping tasks. They may thereby win prestige, but not much capacity to command a local following, or to influence the policies of larger agricultural organizations. Under these circumstances, it is not surprising that relatively few farmers seem interested in organizational office; they simply do not see much opportunity for personal gain, or for improving conditions in their community. If they did, these offices would be more desirable, and competition for them greater.

SUMMARY

Participation in local organizations is closely tied to the benefits that members derive therefrom. Few people are involved in voluntary non-agricultural groups, which do not confer commercial advantages on participants. A far higher proportion of people join agricultural organizations, primarily to gain access to marketing channels for crops which need processing. Participation for most people in Two Meetings and Pindars River is, therefore, primarily a function of the type of crops they grow. Roughly a third of the people involved in this participation cum marketing, were not even aware they had taken part in an activity sponsored by farmers' organizations--bodies in which they had rights

to attend meetings, run for office, elect officials, and vote on resolutions. About another third exhibited some awareness of these organizations, but still limited their contacts to marketing. This leaves only a third of participating farmers who can be considered actively involved in their organizations, in the sense that they take part in group meetings and have access to the organizations' channels of communication.

There seem to be two general explanations for the pattern of participation. First, is the tutelary character of farmers' organizations. Despite opportunities for ordinary members to express their interests and opinions, there is in fact limited scope for bottom-up influence over organizational affairs or national agricultural policy. Most farmers view agricultural organizations not as "their own," but as external, government-related agencies. They are willing to approach these agencies for assistance of various kinds, but have shown little inclination to contribute their time and resources to improving the level of service. The members of these organizations, in other words, consider themselves to be clients, rather than participants in a local action group.

The second main factor explaining the pattern of participation is the level and type of benefits that these organizations distribute. Were a wider range of services and material goods available, farmers might be more aware and active, even in the relatively limited client role these organizations encourage. Presumably, if the stakes got high enough farmers would want to have some say in who received what benefits. Certainly the appeal of obtaining a leadership role would be greater under such circumstances. At present, however, the major role of farmers' groups is to provide markets; deeper involvement in organizational affairs is not needed to gain this particular benefit.

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CHAPTER FIVE

PARTICIPATION IN AGRICULTURAL SERVICES

In the previous chapter we analyzed farmer participation in formal local organizations--who joined which organizations for what purposes. Our main unit of analysis was organizations. Here we want to look at participation in functional agricultural programs, that is, to explore the use by farmers of governmental and local organizational services, such as credit, marketing, and input supply.

One reason for the low productivity of Jamaican agriculture is that farmers have inadequate access to such services. Local organizations, which offer economies of scale and opportunities for farmers to pool resources, are one means to fill the gap in services. At present, however, formal organizations in rural Jamaica are not meeting their potential, and farmers frequently have to make informal arrangements to get the services they need.

Our task in this chpater is threefold. First, is to explore how adequately farmers fill their credit, marketing, and similar needs through participation in government-sponsored programs. Second, is to investigate the reasons these programs have not been more successful. Third, is to look at the non-formal strategies farmers use to provide themselves with working capital, market outlets, crop inputs, and other essential goods and services.

PARTICIPATION IN CREDIT PROGRAMS

Farmers in the watersheds studied need new and expanded sources of capital, to increase their agricultural output, as well as to pay their share of the soil conservation work sponsored by the IRD Project. Over half the farmers surveyed do not currently use credit. These farmers

pay as they go, and many are proud of the self-reliance and independence this entails. As one stated, "I just take it out of the ground and put it right back in." The proportion of credit non-users is higher in Pindars River (56 percent), than in Two Meetings (47 percent). (See Table 5.1). This is not surprising, since Pindars River is the poorer, more remote, and less well-serviced watershed, but the difference is not very great. We examine issues affecting credit non-use more fully below.

Table 5.1. Farmers' Major Source of Credit, Two Meetings and Pindars River

Major Credit source	Percent of Farmers	
	Two Meetings	Pindars River
Do not use credit	47%	56%
PC Bank	33	26
Personal loans	7	4
JD Bank, commercial bank, commodity boards	4	3
Other/not stated	9	10
	100	100

Non-institutional Credit

Few of the respondents who did use credit said personal loans were their primary source. We had expected that friends, neighbors, or relatives would provide a significant portion of farm capital, but only seven percent of Two Meetings respondents, and four percent of Pindars River respondents, said they got most of their credit from these sources. Family and friends may still be called upon for some loans, but these usually go to cover emergencies, and are not important for productive investment.

Another non-institutional source of loans is the informal savings group, known as "partners".[1] Members of these groups contribute a fixed amount of money to a central fund on a regular basis, usually every week. The total collected is then given in turn to one of the partners, who often uses it for a special purchase, such as a goat or pig. This process is repeated weekly, or at whatever set interval has been arranged, until each member has received the pool one time. The partnership may end there, or may be repeated through as many cycles as the participants desire. No interest is obtained, of course, and a person could save by himself an amount equal to that advanced by his partners. Many Jamaicans, nevertheless, prefer the "forced" nature of this savings system, and enjoy getting a relatively large sum of money every few weeks.

This indigenous saving and loan system, however, is not very widespread in the two watersheds. Only 18 percent of households surveyed in Two Meetings, and ten percent in Pindars River, had members who belonged to a partnership. This practice is relatively infrequent because few people in either watershed have a regular source of income, without which a person has trouble putting aside cash according to a fixed schedule. Own-account farming tends to have seasonal returns, and is simply not conducive to this type of saving.

This explanation is supported by the fact that "partnerships" are almost twice as common in Two Meetings as in Pindars River, the former area having greater opportunities for off-farm and wage-earning employment. We note, interestingly enough, that institutional forms of credit, which are more prevalent in Two Meetings, have not put an end to the practice. Rather the informal

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[1] For more information on these non-formal organizations, see Margaret Katzin, "Partners: An Informal Savings Institution in Jamaica", Social and Economic Studies, 8,4, (1959), 436-440.

and formal systems exist side by side. The fact remains, however, that farmers in the watersheds do not consider partners an important source of capital for running their farm.

Institutional credit

For farmers who use credit, the PC Banks are by far the most important source. Only three to four percent of respondents said they got most of their credit from commercial banks, the Jamaica Development Bank, or the commodity boards; whereas one-third of respondents in Two Meetings, and one-quarter in Pindars River, got most of their credit from PC Banks (Table 5.1). This comprised most of the farmers who said they belonged to PC Banks, so most shareholders rely on the institution for the bulk of their loans.

Given the facts that over half of the respondents said they did not use credit, and that PC Banks were the most important source of loans for small-holders who did use credit, it is interesting to see why people said they did not join the PC Banks. We asked such a question, and the responses are shown in Table 5.2.

There are evident differences between the two watersheds in the frequency of responses given, though on balance there is not as much divergence as first meets the eye. In Two Meetings, because of the greater proximity of PC Banks, only nine percent of credit non-users said they did not know about the bank and its services. The figure was four times higher (36 percent) in Pindars River, indicating much less awareness of this important rural institution.

On the other hand, the proportion of people who said they did not use credit, or were not interested in joining the bank, was much higher in Two Meetings (38 percent) than in Pindars River (16 percent). Many of the farmers in the former watershed who were more aware of PC Banks, nevertheless did not want to get

Table 5.2. Reasons Given for Not Taking Loans from a PC Bank, Two Meetings and Pindars River

Reason for no loan	Percent of farmers	
	Two Meetings	Pindars River
Don't know about PC Bank	9%	36%
Don't use credit/aren't interested in credit	38	16
In process of joining Bank/getting loan	11	20
Afraid won't be able to repay loan	12	12
Use alternate sources of credit	3	2
Value self-reliance	4	5
Other	24	10

involved with this institution. In Pindars River, by contrast, where fewer people were aware of the bank, a smaller proportion had made a decision not to seek loans from it. (This also accounts for the fact that only eleven percent of bank non-members in Two Meetings said they were in the process of joining the bank, compared to 20 percent in the other watershed.) Had farmers in Pindars River been as familiar with the PC Banks as were Two Meetings farmers, the proportion of "credit resisters" would probably have been equivalent.

Twelve percent of credit non-users in both watersheds indicated thay they were afraid of going into debt. There were a variety of reasons for this: some thought the interest on PC Bank loans was too high, others did not think a loan would help them earn enough extra to repay their debts, and still others were concerned what might befall them should their crop fail. Underlying all these fears is the farmer's worry that he could lose his land if he defaults on a loan. It is for precisely this reason that many are unwilling to use a land title to secure their loans.

Credit Use and Farm Size

Because farmers are divided so clearly between those who are disposed to use credit, and get most of it from PC Banks, and those who are suspicious of credit and do not belong to the Bank, we decided to see what influence farm size had on credit use. As Table 5.3 shows, a clear negative correlation exists between the two variables. Eighty-three percent of households with less than one acre in Two Meetings did not use credit, in Pindars River the proportion was slightly less (73 percent), but still very high. The proportion of credit non-users tends to fall in each of the successive size categories, so for instance, only 57 percent and 52 percent of farmers with between five and ten acres did not use credit.

Table 5.3. Farm Size and Credit Use, Two Meetings and Pindars River

	Percent of farmers in various size categories			
	Two Meetings		Pindars River	
Farm Size (acres)	who do not use credit	whose major source of credit is PC Bank	who do not use credit	whose major source of credit is PC Bank
less than 1	83	8	73	9
1 to less than 2	57	24	71	14
2 to less than 5	43	45	68	25
5 to less than 10	57	36	52	38
10 to less than 20	50	50	33	43
20 and over	0	0	50	0
All sizes	47	33	56	26

Similarly, a positive correlation exists between farm size and reliance upon the PC Banks. Only seven percent and eight percent of the farmers in the smallest size category said this was their major source of credit (if they used credit at all, which most obviously did not). The proportion tends to increase as one moves to successively larger farm categories, until reaching farmers with more than 20 acres. In our sample none of these largest farmers relied upon PC Banks for most of their credit. Most of them have relatively easy access to commercial sources of credit, and hence are not solely reliant on the Cooperative Banks.

Several explanations for the tendency of smaller farmers not to use credit suggest themselves. First, because their farms are small, they may feel they do not need loans to operate. Second, near-landless and landless farmers have limited "risk-taking" capacity--both because the output of their farms is small, and because they can ill-afford repayment should any catastrophe befall their crop. Of course, the fear of losing one's land looms especially

large to the smaller farmer. Third, many of these individuals are tenants, and must find guarantors to secure their loans. But guarantors may be unwilling to assume responsibility for loans subscribed by people with insecure tenure and low output. Finally, the PC Bank's officers discriminate against some farmers with dwarf holdings. As one of these committee members said, "We check to see if the man is a real farmer." While such screening procedures are necessary to prevent fraud, some marginal smallholders are denied loans as a result.

We would like to note also a couple of more specific problems with PC Banks, which limit the borrowing of small farmers in particular. The first is the slowness with which PC Bank loans are processed. The procedure can last months, by which time the farmer may no longer need the loan. This obviously hurts repayment rates, and ultimately harms the entire small farmer credit program. The snail-like pace of loan dispersals also deters many people from even bothering to seek a loan. Larger farmers, who may have access to alternative sources of credit, are not as constrained by slow credit delivery.

The second special problem is farmers' uncertainty over loan security. Even many landowners who lack a registered title to their land are unaware that payment of land taxes qualifies them for a loan, and hence believe they cannot get one from the PC Bank. A large number, owners and tenants alike, do not realize they can secure loans through guarantors, even if they do not hold a title. The larger farmer is less affected by this problem--he is more likely to have a title in hand, and is perhaps more willing to use some of his larger holding as collateral. He is also likely to have an easier time finding guarantors, if he needs them.

Credit programs in the study area thus have two important effects on rural development. First, they tend to reinforce existing inequities, by

favoring the better-endowed farmers over the more marginal. Second, they do not provide sufficient resources to support capital improvements on the majority of farms, and thereby hold down agricultural production. Most farmers, but especially the small peasants, continue to finance farm operations out of pocket, and so are compelled to use familiar but often inefficient production techniques.

THE MARKETING SYSTEM

When and if farmers raise their production levels, they will need new markets for their more plentiful crops. Produce which rots in the fields for lack of transport or market will do nothing to promote either the economic growth of Jamaica or the well-being of the farmer. We have previously discussed the marketing system for sugar cane, banana, coffee, cocoa, citrus, and potato. All these cash crops can be sold through commodity organizations, which pack and process them, usually for export. There is, however, another major dimension to marketing This is the selling of food to the domestic market. When a farmer decides to sell food crops, he has two possible options: to sell to the state-run Agricultural Marketing Corporation (AMC), or to sell to private traders, called higglers in Jamaica. If he takes his crops to market himself, then he becomes a higgler.

Agricultural Marketing Corporation

The AMC is a bureaucratic organization, not a participatory farmers' group of the type discussed in the previous two chapters. Farmers in the study area can market to this Corporation in three different ways. Those living near the large towns of Christiana or May Pen, or with readily available transport, can bring their produce directly to the main depots in these two places. The AMC also sends trucks on buying routes, and persons living near these can sell to one of the trucks as it makes its stops. Each pick-up area has a "contact

man", under contract to the AMC, who informs farmers when the truck will arrive and how much produce is to be collected. It is the responsibility of the farmer to get his crops to the pick-up point. In a few districts in Two Meetings farmers have a third means. There the JAS and AMC have created joint buying stations. These are located in places that produce large quantities of vegetables and root crops, and which lie along an established AMC truck route. The JAS president serves as the AMC's "contact man", and does some cursory pre-selection of produce. Because of the pre-selection, farmers are paid a slight premium over the normal AMC price.

Forty-nine percent of the farmers in Two Meetings, and twelve percent of those in Pindars River, market some of their produce to the AMC. The lower percentage in Pindars River is attributable to the distance from the depots, the poor transport facilities, and the fact that vegetables and root crops are not produced in great quantity.

When asked to say why they did sell to the AMC, farmers cited seven basic reasons, shown in Table 5.4. The primary ones are that the AMC buys in quantity, at a better price, all the time, and is more convenient for the farmer. The latter two reasons are not very applicable in Pindars River. The depot at May Pen, although it does buy all the while, is a considerable distance from the watershed; and the truck stop at Macknie, which is a few miles to the north of the watershed boundary, buys only one day a week.

More important for later analysis are the reasons why farmers did not sell to the AMC. These data are tabulated in Table 5.5. The major reasons for not selling to the AMC include low production by farmers (especially in Pindars River) and distance to the depot.

Table 5.4. Reasons for Selling to AMC, Two Meetings and Pindars River[1]

Reason	Percent of Sellers: Two Meetings (n=98)	Pindars River (n=25)	Both areas (n=123)
Buys all the time	27%	8%	23%
Buys quantity	8	60	19
Pays better price	12	24	15
Convenience	17	4	15
Pays cash	7	8	7
Provides transport	4	16	7
Purchases by net weight	5	0	4
Other reasons	20	12	19
Not stated	4	4	3

[1]Totals equal more than 100 percent due to multiple answers.

Table 5.5. Reasons Farmers Do Not Sell to AMC, Two Meetings and Pindars River[1]

Reason	Percent of Non-sellers: Two Meetings (n=103)	Pindars River (n=189)	Both areas (n=289)
Farmer doesn't produce enough	30%	56%	46%
Too far	20	22	22
Poor price	17	9	12
Don't provide transport	5	16	12
Prefer higglers	14	10	11
Don't buy crops farmer grows	2	6	4
Other	12	6	8
Not stated	5	1	2

[1]Totals equal more than 100 percent due to multiple answers.

Higglers

Numerous other studies have attempted to define and categorize types of higglers.[2] Our intention here is not to enter that debate, but rather to discuss patterns of private marketing in the watersheds. For our purposes, a higgler is someone (usually a woman) who sells crops or other goods on a small-scale. The crops can be bought from farmers or grown on the higgler's own farm. The buyer can be another higgler or the consumer. The marketing can be done locally, at a parish market, or in an urban area.

The first question that must be asked is: Who are these higglers? Our survey indicates that 18 percent of the households in both areas had at least one member who was a higgler, although the percentage of households was higher in Pindars River (21 percent) than in Two Meetings (14 percent). When correlated with land size, interesting patterns emerge concerning the type of person who becomes a higgler, and why. The percentages in Table 5.6 show the proportion of households within each land size category that contains a higgler.

Based on these data, and from our observations in the field, there are two types of higglers. For farm families with less than one acre, higglering provides an important means of supplementing household income. Crops are bought from farmers and sold at a small profit. That over half the households in this land size category are engaged in higglering indicates its importance as a source of income. Farmers with more than two acres, on the other hand, may produce a surplus, and unless there is sufficient quantity to warrant selling to the AMC (especially in Pindars River, where this takes some effort), higglering is the best means of disposing of this surplus. Further, many farmers in this land size category hire labor, thus freeing household members for

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[2]See for example, Margaret Katzin, "The Business of Higglering in Jamaica," Social and Economic Studies, 9,3, (1960), 297-331.

Table 5.6. Higglers and Land Size, Two Meetings and Pindars River

Land size (acres)	Percent of households that have a higgler		
	Two Meetings	Pindars River	Total
Less than 1	31%	75%	52%
1 to less than 2	5	7	6
2 to less than 5	17	25	24
5 to less than 10	11	24	18
10 to less than 20	18	27	24
Over 20	0	0	0
All sizes	14	21	18

marketing activity. Here, too, higglers may buy produce from other farmers to supplement their own stock of goods.

The low proportion of higglers in the "one to less than two acre" category is somewhat surprising, given the economics of farming in the watersheds. While people with this amount of land consume what they produce and have little left to market, one would assume that they have surplus family labor that could be devoted to higglering. (Twenty-four percent of households in this category had members who did some agricultural wage labor). Evidently, however, the labor demands of this size farm are sufficient to keep members from taking on such a time-consuming off-farm occupation as higglering.

Higglering then, in addition to the role it plays in the distribution of agricultural produce, performs two vital functions. For the smallest farmers, it is an important means of supplementing household income. In Pindars River, where incomes are lower, and off-farm employment opportunities more limited, this is particularly evident. For medium and larger farmers, higglering not only generates additional income, it also allows the farmer to dispose of surplus produce.

A second question that must be asked is: Who sells to higglers? Our survey shows that 91 percent of the farmers in Two Meetings, and 57 percent in Pindars River, sell to higglers. This should not be surprising, considering the greater production of vegetable and root crops in Two Meetings. An important question in terms of the development of marketing strategies concerns why people sell to higglers. Desire to dispose of surplus production and to get some cash are obvious answers, but when asked to explain why they sold to higglers instead of the AMC, farmers responded with more specific reasons. Table 5.7 shows the percentage of farmers citing each reason.

Two main reasons--that they come into the fields and help with the work, and the convenience and availability of higglers--are linked. By coming into the fields, the higgler saves the farmer from having to pick the produce, transport it, and find a market. This convenience factor cannot be overemphasized. For farmers who have a limited amount of time and labor, and a limited amount of produce to sell, the higgler offers a ready market for his crops. As Table 5.5 shows, many respondents do not sell to the AMC precisely because it is inconvenient--the AMC does not provide transport from the farmers' fields, and the depots are too far away. Whatever its inefficiencies at the national marketing level, the higgler system, from the farmers' point of view, is the most efficient and effective way to dispose of agricultural surplus. And, as any visitor to a parish market is aware, it is the most common means by which consumers get the produce they need.

Local Marketing Patterns

Despite outward behavioral similarities, the pattern of marketing is different in the two watersheds. Table 5.8, summarizes relevant information provided earlier. The variation is due to three inter-related factors— food crop production, infrastructure, and household income.

Table 5.7. Reasons for Selling to Higglers, Two Meetings and Pindars River[1]

Reason	Two Meetings (n=183)	Pindars River (n=119)	Total (n=302)
Convenience/ availability	22%	57%	20%
Better price	38	24	32
Come into fields/ help with work	29	7	20
Provide transport	1	20	9
Buy small amounts	5	9	7
More reliable	1	4	2
Higglers are friends or relatives	1	1	1
Other	9	22	14
Not stated	3	3	3

[1]Totals equal more than 100 percent due to multiple answers.

Table 5.8. Marketing Patterns in Two Meetings and Pindars River

	Two Meetings	Pindars River	Both Watersheds
Percent of households having higgler	14%	21%	18%
Percent of households selling to higglers	91	57	73
Percent of households selling to AMC	49	12	30

In Two Meetings, a larger proportion of people sell to both higglers and to the AMC than do farmers in Pindars River. This is attributable to two factors. First, there is a generally higher level of food crop production in Two Meetings, which results in more surplus to be marketed. More importantly, however, the relatively good road network ensures 1) that farmers can deliver their goods to the AMC (the Christiana depot being more accessible to farmers cannot be overlooked either), and 2) that higglers can get into these communities to buy produce directly from farmers.

In Pindars River, on the other hand, the amount of crops available for marketing is smaller; 56 percent of the respondents in Pindars River said that they do not sell to the AMC because they do not produce enough (compared with 30 percent in Two Meetings). Further, some areas are difficult, if not impossible, to reach by road, making it burdensome for farmers to get to the AMC depots and for higglers to get to the farmers. This accounts for the low percentage of farmers selling to higglers. (57 percent in Pindars River, compared to 91 percent in Two Meetings).

Thus, two factors - surplus production and road network - serve to enhance the role of higglers and the AMC in Two Meetings. Given this situation, one might have expected a greater proportion of households in Two Meetings to have a higgler. As Table 5.8 shows, however, such is not the case. Fewer households in Two Meetings have a higgler, and this is due to two factors. First, because higglers cannot get into some areas of the Pindars River watershed very easily, the farmer himself or his wife has to market the produce. This would result in a greater number of higglers. Second, income levels in Pindars River are considerably lower than in Two Meetings, resulting in a greater incentive to turn to higglering as a means of gaining a livelihood. It will be recalled, for instance, that in Pindars River 75 percent of households operating less than one acre have a higgler

(compared with 31 percent in Two Meetings). In Two Meetings, alternative sources of income for small farmers may deter some people from becoming higglers.

Marketing in the two watersheds thus falls under two different patterns. In Two Meetings, higher production, better infrastructure, and higher incomes all serve to increase the number of people selling crops to higglers, to decrease the number of higglers, and to make higglering less of an economic necessity. In Pindars River, on the other hand, lower production, poor road networks, and lower incomes conspire to make higglering a more deeply-ingrained component of agricultural distribution and to make it a more important source of income.

The Prospects for Group Marketing

There does seem to be scope for making the marketing system more efficient through use of farmers' organizations, which could enable farmers to economize on transport, increase the volume of deliveries, and retain some of the profit taken by middlemen. Such an approach has proven workable with the major export crops, and for food crops a preliminary step in this direction has already been taken in the formation of JAS/AMC marketing groups.

There are, however, three factors which may limit the effectiveness of an organizational method of food marketing. 1) The fact that food crops often have a lower value per unit weight than some export crops may raise handling and storage costs, while the fact that intermediate processing is not usually needed may deter farmers from using group facilities. This could threaten the economic viability of an organizational approach to food marketing. 2) Such a system may be less flexible than private selling. Many farmers like to be able to dispose of small amounts of produce at a time, both to maintain a regular flow of income and to permit adjustments in the allocation of labor time. 3) Group marketing could further disadvantage the rural poor, who provide many of the local higglers. Indeed, the prevalence of higglering means that

many farm households are retailers as well as producers. For these people the appeal of group marketing is limited, as they already retain much of the value added to a crop when it is taken to market. None of these problems is fatal to new approaches for improving the existing marketing system. They do mean, however, that the success of group marketing is contingent upon a simultaneous increase in the volume of production.

AGRICULTURAL INPUTS AND ADVICE

One function of farmers' organizations such as JAS, is to help farmers obtain inputs, such as tools or fertilizer, and advice on farming techniques. Even when these groups are not suppliers themselves, they are supposed to be able to help their members acquire inputs and services from agencies that are. In general, however, they are not performing these functions to the satisfaction of watershed residents.

Farm Tools

Farm tools are critically scarce in Jamaica. Even machetes, the most basic tool in Jamaican agriculture, are unavailable for many farmers, with grave implications for agricultural production. The seriousness of the problem is indicated by the Ministry of Agriculture's distribution effort in Clarendon Parish (which covers most of the two watersheds). In the twelve months prior to April 1979, the Ministry had distributed only 861 machetes, 250 forks, 105 shovels, and 2500 files. In a parish of some 24,000 farms, this represents only a small proportion of the needed tools. The limited amount the Ministry of Agriculture can supply is also reflected in our survey data. Only seven (2 percent) of our 415 respondents claimed that they got farm tools from this source.

The majority of farmers (84 percent) got their tools from commercial stores located in the watersheds. This is not to say, however, that these

stores always have sufficient supplies. Many of the outlets we checked--including the JAS retail store in Christiana--had no machetes for sale. Some of the tools that were available were of inferior quality, and farmers were unwilling to buy. Nine percent of the sample said they get their tools from JAS stores, when they can get them at all. An additional five percent got their tools from other sources--from friends, from neighbors, or from deceased relatives who left their tools behind.

Fertilizer

Fertilizer is another input difficult for farmers to obtain. It can be had from a variety of sources, but most farmers in the two watersheds said they get theirs either from commercial stores or from commodity associations. One-fifth of the farmers reported getting their fertilizer from the Ministry of Agriculture.

One interesting pattern that emerged from our survey was the different use of fertilizer in the two watersheds. In Two Meetings, almost everyone used it--only four percent of farmers stated they did not. In Pindars River, however, only 69 percent of farmers said they use fertilizer. This discrepancy can be attributed to three factors. 1) In Pindars River, there is a lower level of farm income; many farmers just cannot not afford to buy fertilizer. 2) Some districts in Pindars River are inaccessible by road, and thus there is no means by which farmers can transport the needed amounts of fertilizer to their fields. 3) Many farmers in Pindars River are not convinced of its value. This is tied in with the fact that some farmers in that area are more traditional and have not had extensive experience with fertilizer. In one district, a farmer stated that he does not use it "because whenever I eat the food that grew with the fertilizer I get sick, so I don't

worry about it." Others have decided it is not beneficial for the crop itself; one stopped using fertilizer because it "bloated up the crop".[3]

Clearly, there is much need, especially in Pindars River, for an education program about the need for and uses of fertilizer, including possible contra-indications. This program must not only be directed at farmers, but also at persons attempting to encourage fertilizer use, who must be familiar with any negative experiences people have had with this input. All of this, of course, will not be of much use without a program for expanded fertilizer supply. This could be accomplished by establishing group buying clubs--perhaps based on JAS branches--which could place bulk orders, and thus reduce the cost to each farmer and ease the task of distribution for the agencies responsible. These clubs could, of course, also purchase tools, planting material and other necessary inputs.

Agricultural Extension

Given the need to educate farmers about crop production, maintenance, and diseases, we were curious about how many farmers were receiving help from their Ministry of Agriculture extension officer. Thus, two questions on our survey were directed toward finding out how often farmers consulted with their agents, and how helpful these agents were in solving the farmers' problems.

A majority of farmers in both watersheds said they had never been contacted by an extension agent. The proportion was somewhat higher in Pindars River (63 percent), with its poorer roads and lower population density, than in

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[3]This view parallels some of the criticism of chemical fertilizers made by advocates of organic gardening. How valid it is is itself debatable, but these farmers' views are based on their experience without influence of outside information. So perhaps some investigation may be warranted to establish the effects of inorganic fertilizer under certain field conditions and for certain crops, so that extension advice can be empirically justified.

Two Meetings (54 percent), which is an easier area for extension agents to get around. Of the remaining people who had been contacted, about half were visited less than once per year. Indeed, of all the farmers surveyed, only about one in five met with their extension agent more than once per year, if at all.

Among those who did have contact with an officer, only one-third said they found the agents helpful in dealing with their farm problems; half said they found them not helpful; and 14 percent had no opinion. These data make clear that present arrangements for extending agricultural advice and information are woefully inadequate. Dealing with farmers on a one-to-one basis is not effectively meeting the needs of the majority of farmers. Unfortunately, more efficient methods of contacting larger numbers, such as group extension through JAS branches, have not been actively pursued. The field demonstrations that are conducted tend to be attended by a relative handful of farmers, many of whom probably receive regular visits from their extension agents anyway.

INTEGRATED RURAL DEVELOPMENT

A final matter of vital concern to farmers in the watersheds is the Integrated Rural Development Project. The crucial variable in the success of the Project will be the willingness of farmers to participate in its activities, and in particular to adopt the recommended soil conservation practices. This, of course, means that individuals will have to alter familiar work routines, and adopt new methods of planting, tending, and harvesting their crops.

But how familiar are farmers with the Project? Do they understand its methods and goals? In our sample of 415 people, 267 (65 percent) were aware that the IRD Project existed. The level of awareness in both watersheds was roughly the same--66 percent in Two Meetings and 64 percent in Pindars River. These figures may be inflated, however, for two reasons.

(1) Many respondents had not heard of the "Integrated Rural Development Project". When the question was rephrased in terms of the "Two Meetings (or Pindars River) scheme" or "the soil conservation project", more people were able to say that they had heard about it. Some respondents, after listening to the list of alternative names, said "Oh, you mean the farming business. I've heard of it". Some people may have answered "yes" just to avoid seeming ignorant.

(2) The "farming business" of which some farmers spoke may not have been the IRD Project. In Pindars River, some farmers confused it with the Bullhead Reforestation Project. In Two Meetings, many farmers could not distinguish between the IRD Project and the earlier Christiana Area Land Authority. Their confusion was understandable, for the Authority also promoted soil conservation and was located in the same building now occupied by IRD staff.

We found that the proportion of people who were aware of the Project was considerably higher in those districts closest to Project headquarters and demonstration centers. Conversely, people in more remote areas were less aware of the Project's existence. The correlation between accessibility and awareness suggests that the data have some validity and is not surprising. But it highlights the fact that in some districts, the Project has much extension and communication work to do.[4]

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[4]Two areas deserve special note. One is the town of Christiana, where a high degree of off-farm employment led to relatively low awareness of the project, despite the town's proximity to the main Project office. The fact that Christiana's JAS branch is not currently operative also contributed to this problem. The other is the community of Diamond, in Pindars River. All of the respondents from that district had heard of the Project. There, an active project officer both lives in the area and is on the executive committee of the local JAS branch; the president of that branch is also one of the most dynamic local leaders in the watershed.

Another way to assess farmers' level of involvement in the IRD Project is to examine the number who have been contacted by an officer from the Project. Here two caveats are in order. First, "contact" can mean anything from a single introductory farm visit, to the drawing up of a farm plan. Second, some farmers confuse Project officers with extension officers from the Ministry of Agriculture. This, too, may have led to inflated figures.

Of the farmers in Two Meetings who had heard of the Project, 31 percent said they had been contacted by an IRD officer; 17 percent could give the name of a field officer. In Pindars River, 48 percent of the farmers knowing of the Project had had a personal contact, and 32 percent could name the officer. Table 5.9 summarizes these data. These figures are not as high as one might like, but for 15 percent of all farmers to know the name of a Project officer is actually quite encouraging.

Attitudes Toward the Project

One question on our survey, asked of farmers who had heard of the IRD Project, attempted to gauge farmers' acceptance of its soil conservation activities. While only seven percent of respondents said they were implementing soil conservation practices at the time of their interview, 70 percent in both watersheds claimed that they wanted their land treated. Only three percent said they would not participate. These figures are encouraging. Most farmers would probably not share the enthusiasm of a farmer in Pindars River, who called the IRD Project "the best thing that's happened to Jamaica", but they do indicate that a large proportion of the farmers are sympathetic to Project goals. There are, however, several problem areas.

(1) Many of the farmers we interviewed had only a rudimentary understanding of how the Project operates, what its goals are, what the conditions of participation are, and what the farmer himself has to contribute. "What is the Project all about, anyway?" became one of the standard questions we had to

Table 5.9. Level of Awareness of the Integrated Rural Development Project, Two Meetings and Pindars River

	Two Meetings		Pindars River		Both Areas	
	#	%	#	%	#	%
A) Farmers expressing knowledge of Project	131	66%	136	64%	267	64%
B) Farmers contacted by officers:	41		65		106	
- as % of (A)		31		48		40
- as % of total sample		20		30		25
C) Farmers knowing name of officer:	22		43		65	
- as % of (B)		54		66		61
- as % of total sample		11		10		15

answer when talking with farmers. Thus, although many farmers accept the IRD Project in principle, their knowledge of the mechanics and conditions of the Project is often hazy, if not nonexistent.

(2) It is easy for a farmer to say that he would like to participate in the Project; answering "yes" to an enumerator commits him to nothing. When faced with a completed farm plan and a pen, however, some farmers would think twice before signing. This is especially true since many farmers view participation in the IRD Project simply as another way to get cash or other resources from the government. A lot of them, for instance, do not realize the farmer has to bear 25 percent of the cost of most engineering works, or that he may have to commit himself to repaying a loan.

(3) Many of the farmers we spoke with were skeptical about the Project. They had seen other government programs initiated, only to have little or nothing accomplished. People are not likely to become enthusiastic until they see positive benefits accruing from Project activities. This is, of course, a vicious circle - farmers do not get involved until there are demonstrated successes, and there can be few successes until farmers get involved. One farmer summed up the attitude of many when he said, "We hear lots about the Project, but we don't feel it, we don't see it".

(4) Some JAS leaders were bitter about experiences they had with Project personnel. Their complaints fell into two general categories. First, some claimed that they had invited Project officers to JAS meetings, but that these officers had not turned up. They were particularly upset because they had gone to the trouble of rounding up people for the meeting (not an easy task) and then looked foolish when no one appeared. (In other cases, however, it was the JAS members, and not the IRD officer, who failed to show up for a meeting.) Needless to say, incidents such as these do little to enhance the stature of the IRD Project, or to publicize its programs and activities.

Second, many leaders were upset that the JAS was not more involved in Project activities. As officers in the local organization that is concerned with all aspects of agriculture, many felt they should have been contacted directly by Project personnel, that they should have been given some responsibility for educating farmers about the Project, and that JAS members should have been given priority for soil treatment. The first two of these arguments certainly have some merit. The JAS does play a role at the local level (however weakened that role has become), and its leaders do have influence in the community. The Project can ill afford to antagonize any prospective participant, least of all those who claim to represent all farmers in the area.

CONCLUSIONS

We have investigated in this chapter four critical agricultural services--credit, marketing, farm inputs, and extension. All these services are available through government agencies such as the PC Banks, the AMC, and the Ministry of Agriculture. Our research shows, however, that the level of services is currently inadequate. Only a minority benefit from them, and thus have much opportunity to adopt improved farming techniques and raise their incomes. The small farmers suffer in particular,for they lack alternative commercial sources of credit, fertilizer, or other items that may be needed to farm more productively.

Under these circumstances, many have to rely on non-formal,but not very dynamic, forms of social interaction--borrowing money from relatives, selling crops to higglers, buying planting material from neighbors, or getting farming advice from neighbors. Other farmers try to be as self-reliant as possible, by financing their operations from their own earnings, taking their own crops to market, and producing their own planting material. Probably most farmers adopt

a mixture of strategies, getting what they can from government agencies, turning to friends at times, and trying to provide what they can for themselves. None of these types of behavior, however, provide the basis for sustained increases in agricultural output and rural welfare.

The IRD Project, as an agency with substantial funds, expertise and staff, has the potential to help farmers break out of the cycle of low productivity, underemployment, and poverty. Our research indicates that the Project has made a promising start in contacting farmers and building good-will, although it probably could have moved more quickly by establishing better linkages with local organizations. This good-will, however, is likely to turn into indifference or mistrust if the Project does not move soon to provide more of the services farmers need.

To this end it is important to consider why the agricultural services channeled through established public agencies are inadequate. A primary reason, of course, is the government's shortage of financial resources, but there are two other important factors. The first is that the agencies responsible focus primarily on the individual farmer, and hence incur high implementation costs. This is particularly true of the extension service and the AMC, both of which try to serve a large number of low-volume producers on a one-by-one basis. The second reason is that farmers themselves have little control over these agencies. Because extension agents, AMC buyers, and ACB officers are not responsible to their clients, they lack incentives to provide the level and quality of services needed for prolonged rural development. More active and responsive local organizations are one means to remedy these problems and provide agricultural services that are more cost-effective, timely, and relevant to people's needs. We discuss how the IRD Project might foster such organizations in the next chapter.

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CHAPTER SIX

IMPLICATIONS FOR RURAL DEVELOPMENT

Our research in Two Meetings and Pindars River reveals that participation in local organizations is limited at present. The non-agricultural bodies, like community councils, have very small followings; the agriculturally-oriented groups, while laying claim to larger membership, have not gotten many residents to participate in organizational meetings, to cooperate with each other beyond the use of common marketing depots, or to join in self-help projects to improve local conditions. For most farmers in the watersheds, participation is merely a matter of using the agricultural services, such as market facilities or credit, that are available only to organizational members.

How to engage these farmers more fully in local organizations, and thus facilitate the spread of new technologies and more productive forms of cooperation, is a major question for the IRD Project, and for future projects elsewhere in Jamaica. Our study provides no shopping list of interventions to increase participation and build stronger local organizations. What we do find, however, are several issues that must be considered by any rural development project that desires local input and support. These provide a framework for participation; the content of participation must be left to the farmers themselves. These major issues, and their implications for the IRD Project are discussed below.

BUILD ON EXISTING ORGANIZATIONS

A controversial issue in rural development theory is whether participatory strategies fare better when they are based on indigenous

organizational forms, or on newly created ones.[1] There is probably no "right" solution to this controversy, for the appropriate strategy would seem to be highly variable, and dependent on the social, economic, and political characteristics of the rural area in question. In Two Meetings and Pindars River, the evidence suggests the more promising approach would be to build upon existing organizational structures.

Many organizations already exist in the watersheds, perhaps too many for all to be effective, and it seems unwise to create additional ones solely to serve the IRD Project. Rather, some of the established groups should be encouraged to take on new functions and embark on more vigorous development work. By using these groups, rather than trying to set up new ones, the Project could contact the target population more quickly, reduce the time needed to commence group development activities, and arouse less suspicion in the process. Moreover, because these groups existed prior to implementation of the IRD Project, and have outside institutional linkages, they are more likely to continue serving and organizing farmers after the Project expires. Finally, adding to the number of existing organizations would likely confuse farmers, lead to duplication of agricultural services, and reduce the effectiveness of all the groups. It is unrealistic to expect a majority of residents to take active part in several local organizations.

Clear also is that the IRD Project would have difficulty establishing separate lines of contact with each of the branches of all the agricultural organizations in the watersheds. It simply does not have the staff to do so. Nor, in fact, are such linkages essential. In the first place, leadership in these organizations overlaps, so it is unnecessary

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[1] This issue is discussed in Norman T. Uphoff, John M. Cohen and Arthur A. Goldsmith, Feasibility and Application of Rural Development Participation: A State-of-the-Art Paper (Ithaca: Cornell University Rural Development Committee, 1979), pp. 33-58.

to contact the holder of every office in each organization. Second, most of the organizations in question are single-function, with responsibility for providing one specialized agricultural service. Consequently, they are structured to play only a very limited role in the multi-faceted program for integrated development sponsored by the IRD Project. It is less important, in other words, for the Project to work with producers of particular commodities than with farmers, who each produce many crops and have complex needs.

Of all the groups studied, the JAS offers the greatest potential as a vehicle for integrated development. There are several reasons for this. One is its multi-functionality. Unlike the commodity organizations and PC Banks, JAS is concerned with the broad range of farmers' problems, and indeed has sometimes initiated actions not directly related to agriculture. Another important factor is that JAS branches are located in most communities in the study area, and even villages without their "own" branch have access to JAS in adjoining settlements. Thus, JAS not only affords opportunities to contact farmers throughout the two watersheds, but could serve as a platform for initiating activities that serve the specific needs of each local community.

Working with JAS members would also enable the IRD Project to contact more farmers than could be reached through any other agricultural organization. JAS membership is not only the largest, it is also the most representative of the landless laborers and small peasants. Women appear to be quite involved as well, as do farmers from various age groups. Because JAS leaders and members often belong to additional agricultural organizations, they could help spread information about the IRD Project to people who are not in JAS, but who are affiliated with other organizations.

Another important consideration is leadership. For any organization

to perform well, it must have leaders who can mobilize support for common goals and group activities. Most JAS officers do not now provide the dynamic and far-sighted leadership that is required. This is due partly to the personalities involved, to the higher socio-economic status of many leaders, and to the lack of effective grass-root participation in the selection process. We feel, however, that the most significant constraint on JAS leadership is that the organization has few functions to perform, and even fewer resources with which to perform them. (This is similarly true of all the local organizations studied.) Should the JAS become more active through an infusion of project support, there might be demand for and emergence of younger and more interested leaders who could be more capable of carrying out Project and community programs.

In any event, the IRD Project would not be able to tap new sources of local leadership by dealing with groups other than JAS, or by creating new base-level organizations. People who are JAS leaders, it will be recalled, dominate leadership positions in all the agricultural groups studied. This same elite would likely emerge in any Project-sponsored committee or group, as well. There is no easy solution to the weakness of local leadership in Two Meetings and Pindars River. The best hope for attracting new leaders, or making existing ones more competent, is to provide resources they can work with.

Our survey also gives us reason to believe that JAS could attract more members than it has at present. We asked non-members why they had not joined the organization. Most farmers were familiar with JAS, so lack of information was not the overwhelming reason people failed to be involved--only about one-quarter of non-members (and 17 percent of all respondents) gave this explanation. (See Table 6.1.) In Pindars River, a more significant cause of non-membership was the fact that JAS chapters did not exist

Table 6.1. Non-members Attitudes Toward JAS, Two Meetings and Pindars River

Reasons given for not joining JAS	Percent of JAS non-members[1]	
	Two Meetings	Pindars River
Not informed	29%	26%
No branch in district	0	34
No benefits	8	3
Not interested	23	10
Other	36	28
Not stated	4	2

[1]Totals may equal more than 100 percent because some respondents gave more than one answer.

in all districts. Thirty-four percent of non-members said this was the reason they had not joined. (In Two Meetings, because of the greater density of branches, no farmers gave this response.) Relatively few people--3 percent in Two Meetings and 8 percent in Pindars River--said they stayed out of JAS because the organization offered no benefits; but a higher proportion--10 and 23 percent respectively--said simply they were uninterested in JAS. Undoubtedly, many of these people lacked interest because they perceived few tangible benefits resulting from membership. Most frequent were "other" responses, such as being too old or young to join, not being a full-time farmer, or simply living too far a walk from the district meeting site.

It is significant, however, that few non-members were opposed to JAS in principle. Non-membership arises less from open hostility or opposition to JAS, than from disinterest, apathy, or awareness of the organization's past failures. This suggests that were JAS branches to become more active, and clear benefits provided to members, more local residents would be attracted.

PROVIDE BENEFITS

One reason for farmers' unwillingness to become actively involved in JAS, and indeed in the other farmers' groups studied, is the limited benefits accruing to members. While these organizations do provide a few services, they do not provide the level or range of assistance farmers need to raise significantly their output and incomes. For service-oriented organizations such failings can be fatal. Few farmers will choose to participate, except in the most minimal way in groups that deliver little.

That JAS membership, in particular, offers few direct material advantages to farmers was evident in our survey. When asked what the greatest benefit of JAS was, two-thirds of JAS members in Two Meetings, and three-quarters in Pindars River, said there were no benefits. (See Table 6.2.)

Table 6.2. Members' Perceptions of JAS Benefits and Problems, Two Meetings and Pindars River

	Percent of JAS Members[1]	
	Two Meetings	Pindars River
Major Benefit of JAS		
No benefit	64%	76%
Advice	14	12
Planting material	12	8
Other/Not stated	10	7
Major Problem with JAS		
No benefits	24	25
Lack of cooperation	21	40
Poor attendance	24	16
Other/Not stated	33	36

[1]Totals may equal more than 100 percent because some respondents gave more than one answer.

Not surprisingly, when asked what were the major problems with JAS, a quarter of members in both watersheds again said there were no benefits. One farmer complained of "too many false promises". Another stated "JAS was very much stronger, but now...they are not really progressive." And the president of one branch claimed that: "The only benefit I get is hungry." Two other frequently cited problems--lack of cooperation and poor attendance--are closely related to the absence of benefits.

Thus, while JAS has some potential to become a more active agent for rural change, it needs to gain access to a greater volume of external resources. These could attract more participants than currently possible, and might serve as a catalyst for people to contribute more effort and time to organizational affairs, and perhaps to cooperate in group development schemes. While such activities are difficult to promote under any circumstances, they are highly unlikely without greater support from the IRD Project, or some other external agency. Certainly, the JAS branches cannot be expected to help implement IRD unless they receive an infusion of resources, technical support, and training.

We do not mean to suggest that fertilizer, tools, planting material or other resources ought to be distributed gratis to JAS members. Efforts must be made to avoid creating a dependent or clientelistic relationship between farmers and the IRD Project. What could prove useful, however, is "seed capital" to enable local farmers to help themselves, and each other.

MEET LOCAL NEEDS

While it is clear that the JAS branches and the IRD Project must provide tangible benefits to stimulate wider participation, there is no single package of benefits that can be applied to all locations in the watersheds. The reason is that many rural problems are specific to particular locations.

Two Meetings and Pindars River are not homogeneous areas, and farmers in different districts often have different priorities. Important, therefore, is that the IRD Project tailor its programs to meet the expressed needs of every locality within the two watersheds. This could be done by allowing the JAS branches to decide what efforts they want to undertake, and what resources they require to do so.

The variability of local problems was indicated by our survey, which included two open-ended questions, asking farmers to state their greatest farm needs, and their community's greatest needs. No suggestions of possible answers were offered. The responses reflected what the farmer perceived to be the major problems at that time, and it is likely that if presented with a list of items, he would have checked off more than he stated.

Table 6.3 summarizes the major farm needs in the two watersheds. For some, such as labor or tools, there was no difference in the concern expressed in each watershed. For others, however, responses diverged widely. In Pindars River, seven times as many respondents stated they needed roads. Farmers in Pindars River were also much more concerned about fertilizer, planting material, prices of crops, and marketing. These needs are related. Many areas of Pindars River are not served by a road, and the resulting inacessibility creates problems for the delivery of inputs and the marketing of crops. Other significant differences included problems of credit (50 percent higher in Two Meetings than in Pindars River); water (in terms of both drought and water control, higher in Pindars River); and plant disease and pests (mentioned more frequently in Pindars River).

When asked to identify their community's greatest needs, respondents offered ten general problem areas. The greatest community needs were for

Table 6.3. Farm Needs and Community Needs, Two Meetings and Pindars River

Farm Problem Area	Percent of Respondents[1] Two Meetings	Pindars River
Credit/Money	66%	44%
Tools	36	40
Roads	5	36
Poor/too little land	20	23
Labor	20	22
Advice	21	15
Fertilizer	8	21
Planting material	3	19
Water	1	19
Marketing	1	15
Price of Crop	1	7
Disease and pests	-	7
Other	7	4
Community Problem Area		
Roads	35	56
Water	9	50
Community center/training center	42	28
Electricity	8	31
Clinic	4	26
Schools	3	22
Cooperation in community	5	11
Housing	1	12
Employment	2	11
Activities for youth	-	4
Other	12	9

[1]Totals may not equal 100 percent because some respondents gave more than one answer.

community centers, roads, water, and electricity. But as Table 6.3 shows, a greater porportion of respondents in Pindars River stated they needed roads, water, electricity, schools, medical facilities, houses, and employment. This is because of the relative lack of basic service and infrastructure in that watersheds. In Two Meetings, on the other hand, a greater proportion of people expressed a desire for community and training centers.

Farmers in the two watersheds obviously do not face identical problems. They have access to a different infrastructure, follow different cropping patterns, and have different needs. Even within a watershed farmers in separate districts cited varying needs. In Pindars River, for example, 13 of 14 people in Simond said they needed roads; in Reckford, only one in eight cited roads as a problem. Similarly, eight of ten people in Lemon Hall wanted electricity brought to their district; no one in Sandy River stated that was a need. While our sample does not enable us to state with confidence the particular needs of any single district, it does suggest that these needs differ.

One special problem posed for the IRD Project is that very few farmers stated that soil erosion was a major problem. Although about one fifth did express dissatisfaction with the size or quality of their holding, not many explicity linked these problems to erosion. The Project, however, proposes to spend half of its funds on soil conservation. Should the bulk of resources provided to local organizations be earmarked for this purpose, many farmers would likely decline to participate.

This is not to say that farmers would not benefit from soil conservation, or that they would not agree that erosion was a problem if explicitly asked. Undoubtedly an education program could increase awareness of deteriorating land quality and raise the demand for effective restorative measures. The

point is, rather, that the Project must emphasize the "integrated" facets of its program to win the support of farmers and their organizations. Because most people express an interest in improved infrastructure, opportunities exist to involve them in self-help construction projects. These might range from the building of a new school or meeting center, to the cutting of new feeder tracks to ease farmers' access to main roads. Obviously, the Project has limited funds available for such activities, but it could provide resources (such as the use of a bulldozer) and technical assistance, even if it cannot make available all the materials needed. Some of the activities and projects chosen by local people would probably be unrelated to the specific goals established by the Project. They should be encouraged anyway; the resulting good will and community involvement would, in the long run, help the Project meet its own objectives.

ENSURE LOCAL CONTROL

At present, farmers are not encouraged to play an active role in organizational decision-making. The powerlessness and bureaucratic domination of the farmers' organizations are disincentives for members to take part in meetings, elections and local office, not withstanding the democratic structure at the local level. Thus, no matter what organization the IRD Project might choose to work with, it must refrain from exercising, or appearing to exercise, too much control from the top. Only if local leaders and organization members have some authority over decisions will they be likely to provide the input and support the IRD Project requires to succeed. This is not to argue that Project staff should have no control over the purposes for which IRD funds are used. But their power should be restricted to laying down general guidelines, in order that local people may have some say in their community's improvement.

While the preservation of autonomous local organizations seems beneficial in principle, it poses three practical problems for the IRD Project. First is the question of Project boundaries. Many of the JAS branches in the IRD area do not fall entirely within official watershed borders. If a rigid distinction is maintained between those farmers inside and those outside of the Project area, the branches will have difficulty mobilizing community support and capitalizing on the existing network of social relationships. The Project boundaries, however useful they may be for administrative purposes, mean little to farmers whose communities are defined in other ways. Thus, while it may be necessary to "draw the line" for some activities, such as the construction of bench terraces, others should be open to all members of the district, even if they live and farm on the "wrong" side of the road.

The second problem relates to Project planning and the coordination of its various programs and activities. Obviously, allowing local residents to play a major role in the design and implementation of plans will create some administrative headaches. These are worth the price, however, if the result is that farmers in the watersheds actively support the IRD Project. As the Project gets underway, it may prove impossible to provide help for all the proposals made, or to distribute resources as quickly as people desire. Strenuous efforts will be required to avoid raising false hopes and reneging on prior agreements. Fortunately, involving people in IRD planning can serve to build up their trust in the Project, and familiarize them with the genuine difficulties of implementing and coordinating activities at the local level.

The third problem is the period of gestation required for development of more participatory local organizations. Whether the IRD Project chooses to initiate new organizations, or work through the established JAS branches, it will take time before these groups are able to generate their own local

projects. In the meantime IRD staff will have to organize some activities. Among these could be:

(1) Group trips to Project demonstration farms.

(2) Field days on the cultivation of important crops.

(3) Labor files--given the need to retrain workers every time a new farm plan is implemented the JAS could keep a file of laborers who have had experience building terraces or hillside ditches, and who would be willing to work on other farms.

(4) Files of participating farmers--JAS branches could keep a record of all farmers in the district who have had their land treated. This could be cross-referenced by degree of slope, major crops, and soil type. Thus, interested farmers could be directed toward a finished farm which closely resembles his own. Every treated farm could become a demonstration farm.

(5) Buying and selling clubs--such clubs would not only be to the economic advantage of farmers, but would also promote a spirit of community cooperation.

Some or all of these activities may prove impractical or of little interest to farmers in a particular area. The task of building more viable and participatory local organizations is difficult, and is unlikely that the IRD Project will be able to foster active participation in all districts. But the advantages of working with affective organizations in even a few communities make the effort worthwhile. To achieve even this minimal goal, however, will require patient and flexible planning and, above all, substantial commitments of staff time and physical resources.

APPENDIX

THE SURVEY SAMPLE AND METHODOLOGY

The authors of this study have backgrounds in two different academic disciplines: political science and anthropology. At the beginning of our research, we decided that we would each focus on a single watershed. While there would have been advantages to concentrating our resources on one watershed at a time, we felt that working in separate areas would have two advantages. First, it would allow each of us to make more, and more long-term, contacts with members of the local communities. More cursory contacts conducted over a shorter period would not have yielded the same quality or quantity of data afforded by the long-term, rapport-building approach. Second, we were afraid that working together too closely might lead to "ingrown" methods, outlook, and understanding. By working more independently, we were able to capitalize on our respective disciplinary approaches and develop different styles for handling research problems. Frequent contact between us, however, ensured the sharing of ideas and data.

Our methodology was based on three research techniques: participant-observation, interview, and a survey.

Participant-observation: Since we were living in the watersheds, we had the opportunity to participate in community affairs and to experience first-hand the daily lives of the people. Going to the bush with farmers, visiting rumshops, participating in meetings, attending church, and interacting continuously with friends and neighbors--all of these activities provided us with a valuable understanding of the attitudes, ideas, and needs of farmers in the research sites.

Interviews: Interviews were conducted with a wide range of people: leaders, members, and non-members of organizations; housewives; farm laborers; higglers; unemployed youths; large and small farmers; and government and IRD Project employees. Some interviews were conducted in one session, others over an extended

period of time. Some were formal, others informal; some were with individuals, others were with groups. We believe we spoke to a representative cross-section of the population, and that our data accurately reflect the range of knowledge, attitudes, and opinions in the watersheds.

Survey: Our survey covered a variety of issues--personal and household data, activity in local organizations, marketing behavior, credit use, labor allocation, agricultural services, and participation in the IRD Project. Eight enumerators (four in each watershed) were hired to administer the questionnaire. Four of them had had experience working on previous Ministry of Agriculture surveys; training of all eight ensured that the enumerators understood both the purpose and content of the questionnaire, as well as the interviewing techniques to be used. The questionnaire was pretested over two days and, as needed, revised. Throughout the three week survey period, the enumerators were closely supervised. This was done by going over the previous day's forms with them and periodically accompanying them on interviews.

THE SURVEY SAMPLE

We had hoped to draw a random sample frame from the Census conducted by the Ministry of Agriculture in 1977. The census data proved unavailable, however, so we decided upon a different sampling method. At the start of each day, the enumerators were driven out to a specific district and instructed to interview four farmers. Fifteen communities, or districts as they are called locally, were surveyed in Two Meetings, and 16 districts in Pindars River. A total of 415 people were interviewed--201 in Two Meetings and 214 in Pindars River. We imposed no categories on the people to be approached, i.e., there was no quota of old or young, men or women, small or large farmers.

Because our sample frame was non-random, in the sense that the enumerators, by the simple act of choosing which households to approach, could skew the

sample, our survey does not accurately represent all characteristics of the watersheds' population. This is particularly true of the data collected on sex, age, and household size, but applies to some other data as well. Where other information available to us suggests that our survey's findings were biased, we have noted the problem in our analysis.

We believe that despite some bias, the sample was sufficient to give us valid data on the issues with which we were concerned. There are four reasons for our confidence. First, the sample was relatively large, covering more than eight percent of approximately 5,000 farm families living in the research area. Second, our unit of analysis was not the individual respondent, but the household, so the age or sex of the respondent was not a key determinant of the response. Third, the majority of interviewees were either the head of the household or the spouse of the head, and were thus in a position to know the affairs of the entire household. Finally, as discussed more extensively below, our sample with regard to farm size was consistent with other data on land distribution in the two watersheds. Farm size, of course, has a major impact on the farmer's income, social status, and even opinions. It is thus *a priori* the most important variable by which to stratify the farming population. Because this distribution appears comparable with independently derived data, we have confidence in our other findings as well.

Sex of Respondents

A greater proportion of respondents were women in Two Meetings (45 percent) than in Pindars River (29 percent). The primary reason for this may have been that two of the enumerators working in Two Meetings were women, and thus felt more comfortable seeking out female respondents. All four of the enumerators in Pindars River were men. However, the data probably also reflect the fact that

more men in Two Meetings have jobs off their farms, and thus were less likely to be home when the enumerators made their visits.

Age of Respondents

Enumerators were instructed to interview the head, or the spouse of the head, of the household. In some cases, the respondent was an older child (often an adult) who would have knowledge of household matters. Table A.1 shows the percentage of respondents in each age category.

The mean age of respondents in Two Meetings was 41 years; in Pindars River it was 46 years. Given the way our sample was chosen, we cannot assert that the difference in age between the two samples is indicative of trends within the population of the two watersheds. It is nevertheless probable that Two Meetings, with greater employment opportunities, has retained a higher proportion of school leavers than has Pindars River. This would tend to reduce the average age in the former area.

Household size

While it is possible that enumerators were biased in choosing respondents according to their age or sex, it is unlikely that they picked their interviewees by the criterion of household size. Table A.2 presents data on the size of the respondents' households.

The average size in Two Meetings was 7.2 people; the comparable figure for Pindars River was 6.2. A 1977 UNDP/FAO report on the watersheds claimed that the average size of households in both areas was only five persons.[1]

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[1] Jamaica: Project for the Rehabilitation and Development of the Pindars River and Two Meetings Watersheds (Rome: United Nations Development Programme and Food and Agriculture Organization of the United Nations, 1977), p. 134.

Table A.1. Age of Respondents to Survey

Age (years)	Percent of Respondents		
	Two Meetings (n=201)	Pindars River (n=214)	Both areas (n=415)
Less than 20	0.5	1	1
20 to less than 30	17	10	14
30 to less than 40	18	17	16
40 to less than 50	20	17	19
50 to less than 60	21	22	21
60 to less than 70	16	24	20
70 and over	5.5	9	7
Not stated	2	-	1
Total	100	100	100

The difference between the two surveys may have been due to the sample used; the UNDP/FAO figure was based on interviews with only 112 persons--63 in Pindars River and 49 in Two Meetings. It is also possible that there has been a genuine increase in household size since 1970. We hypothesize that the proportionately greater increase in Two Meetings can be attributed to a "push-pull" effect. On the one hand, greater opportunities for non-agricultural employment in Two Meetings may have kept people in the area, but also have encouraged others to migrate to it. On the other hand, the relative lack of employment opportunities in Pindars River may have caused people, especially in the younger age categories, to leave for urban areas.

Size of Holding

Because we were studying the farm unit, rather than the individual farmer, the data on farm size were of greater importance than that on the interviewees' sex or age. Our non-random sampling procedures posed the obvious risk of skewing our data. We were especially concerned that they would be biased toward the larger farms, since these are often located close to roads, may have presented a more inviting appearance to the enumerators, and may have been run by individuals more willing to talk to outsiders.

It is possible to compare our results with land size data obtained by the Ministry of Agriculture, which conducted a survey in the watersheds using conventional random sampling techniques.[2] We regret the data in that survey were not disaggregated to show differences between the two watersheds. As shown in Table A.3, our sample tends to have slightly more larger farmers than

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[2] An Agro-Socio-Economic Survey--Pindars River and Two Meetings Area (Kingston: Government of Jamaica, Ministry of Agriculture, Data Bank and Evaluation Division, 1977), Table 1.

Table A.2. Size of Household of Respondents

Number of Household Members	Two Meetings (n=201)	Percent of Households Pindars River (n=214)	Both Areas (n=415)
1	3%	4%	3%
2	4	12	8
3	9	12	11
4	10	10	10
5	8	8	8
6	9	11	10
7	15	13	14
8	7	7	7
9	6	6	6
10	5	5	5
11-15	21	10	15
Over 15	3	2	2
Total	100	100	100

appeared in the sample chosen by the Ministry of Agriculture researchers. For instance, only six percent of the respondents to our questionnaire farmed less than one acre, compared to ten percent in the earlier survey. Similarly, we found that ten percent of the farms were between ten and twenty acres, while the Ministry's survey showed only seven percent in the same size group. On the whole, however, the differences were minor, and it appears that our sample was, indeed, representative of the land holding pattern of the areas' farmers.

Membership in Local Organizations

Regarding our findings about organizational membership, two caveats are in order. First, as stated in Chapter Four, when asking, say, a cane farmer about his membership in the AIFCA, he might answer "yes" even if he was not a member. This would be done to avoid appearing ignorant or uninvolved. Similarly, a farmer might be reluctant to admit that he had never attended a meeting of an organization of which he is a member. In many cases respondents' lacked a clear memory of when they had last gone to a meeting, and may have felt inclined to overestimate their frequency of attendance. Thus, the figures on farmer involvement in the organizations studied are probably somewhat inflated. The actual level of participation is likely somewhat lower than the data indicate, though the comparisons made in participation among organizations would not be particularly affected by this.

Second, as noted above, our sample appears to be slightly biased toward larger farmers. Because our figures indicate that landless and near landless farmers (i.e., those with less than two acres) participate in farmer organizations to a lesser extent than do small and larger farmers, there is again reason to believe that the overall level of participation and awareness is somewhat lower than the level found in our survey.

Table A.3. Comparison of Cornell and Ministry of Agriculture Data on Farm Size, Two Meetings and Pindars River

Size Category (acres)	Percent of Farms	
	Cornell Survey	MinAg Survey[1]
Less than 1	6%	10%
1 to less than 2	16	19
2 to less than 5	40	42
5 to less than 10	25	20
10 to less than 20	10	7
20 and over	2	2
Not stated	1	-

[1] An Agro-Socio-Economic Survey--Pindars River and Two Meetings Area (Kingston: Government of Jamaica, Ministry of Agriculture, Data Bank and Evaluation Division, 1977), Table 1.

It is difficult to compare our findings with other existing data on local farm organizations. The Ministry of Agriculture conducted a survey in 1977, but the data from the two watersheds were presented in aggregated form (Table A.4). The Ministry's survey, moreover, did not cover as many organizations as ours, and it is unclear whether their category "cooperatives" included the coffee and cocoa groups. We also do not know if their data took into account the problem of nominal membership that we observed. In any event, this earlier study shows slightly lower levels of membership for most organizations than we found. One exception is in the PC Banks, in which their survey found only half as many members. This very large difference between our findings and theirs is partly explained by expansion of the governments's crop lien program since 1977. Whether the overall variation between the two surveys is the result of our sample, of differences in the format and emphasis of questions, or of genuine changes among the watershed population, is difficult to say. Based on our understanding of the functioning of these organizations, however, and on our discussions with farmers and local leaders, we are confident that our findings are reasonably accurate.

An earlier study was done, under the auspices of UNDP and FAO, sometime prior to 1977.[3] This involved a very small sample of 112 farmers, and the data reported mention only JAS, the AIBGA, and the AICFA. These data suggest higher membership in JAS and the AICFA than reported by our respondents, and lower membership in the AIBGA (Table A.4). These discrepancies are probably due to the size of the UNDP/FAO sample, and to the fact that the survey was carried out by extension agents among farmers they knew. This latter fact would

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[3]UNDP/FAO, Project for Pindars River and Two Meetings, p. 140.

Table A.4. Participation in Farmers' Organizations in the IRD Project Area: Comparison with Other Surveys

Organization	% Farm Households in IRD Project Area	
	MinAg Survey[1]	Cornell Study
JAS	35%	41%
AIBGA	17	25
AICFA	13	17
Cooperative	15	20*
PC Bank	17	35

	UNDP/FAO Survey[2]		Cornell Study	
	Two Mtgs.	Pindars R.	Two Mtgs.	Pindars R.
JAS	50%	68%	31%	50%
AIBGA	20	n.a.	42	-
AICFA	n.a.	56	-	31

*Christiana Potato Growers Cooperative only.

[1] An Agro-Socio-Economic Survey--Pindars River and Two Meetings Area (Kingston: Government of Jamaica, Ministry of Agriculture, Data Bank and Evaluation Division, 1977), Table 98.

[2] Jamaica: Project for the Rehabilitation and Development of the Pindars River and Two Meetings Watersheds (Rome: United Nations Development Programme and Food and Agriculture Organization of the United Nations, 1977), p. 140.

have biased the survey toward the more "progressive", and probably more organizationally active segment of the farming population. The lower number for AIBGA membership found by the UNDP/FAO study (and the Ministry of Agriculture survey, too) may be due to the fact that, in the past two years (after these studies were completed), AIBGA staff has stepped up its recruitment effort in the watersheds.

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