

HILLSIDE UNITS, WAGE LABOR,
AND RURAL HAITIAN LAND TENURE:

A PROPOSAL FOR
THE ORGANIZATION OF EROSION CONTROL PROJECTS
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INTRODUCTION

This report is a companion report, highly applied in nature, to another report which the author has prepared discussing several general issues and ambiguities which have arisen concerning the dynamics of rural Haitian land tenure. In June of 1978, I had prepared a preliminary report on land tenure for USAID/Haiti. The materials for the present report were gathered during a visit to Aux Cayes, made with the intention of getting impressions on the land tenure situation in the region of PDAI activities, in particular the Acul River watershed. There I encountered several types of tenure relations not seen in earlier visits to the Thomazeau and Marigot project areas. Among these were enormous lowland holdings of several hundred carreaux owned by basically non-agrarian absentee landlords---shades of the Latin American latifundio. In addition, there were far-flung tracts of state land in the upper reaches of the watershed, leased for the most part in the upper reaches of the watershed, leased for the most part by absentee renters of substantial means, and subleased in turn (at substantially higher prices) to small holding cultivators who actually work the land. And finally, there were widespread patterns of a heretofore unencountered rotating occupancy, in which siblings, rather than subdivide a small plot, and rather than crop it in common, would take annual or semi-annual turns cropping the ground, an arrangement which leads to intra-familial conflict and mercilessly unceasing cropping of the plot.

But during the visit I had the good fortune of going beyond detached questioning of the local tenure situation and of observing firsthand the operation of USAID's erosion control activities in the Acul watershed. In the company of the PDAI (Projet Developpement Agricole Integre) Community Development coordinator, I stayed for overnight visits in the communities of Toro, in the eastern part of the watershed and Les Platons, in the western hills. In each place I assisted at community meetings, observed community projects and conversed with as many peasant cultivators as possible. My questioning touched not only on land tenure issues, but also on the communities' response to the various types of erosion control activities planned for the watershed. (These activities had begun in Toro.)

These observations provided a greatly expanded framework within which to view land tenure questions, a framework dominated by the reality of an ongoing action project. In this framework, land tenure must share center stage with at least two other issues: problems of devising appropriate organizational models and problems of eliciting and sustaining community motivation to carry out projects.

The theses of this report can be summed up in a series of linked propositions:

1. Externally initiated high-priority projects such as erosion control entail measures that are, in short term perspective, somewhat disadvantageous to hillside cultivators.
2. Barring coercion, such measures will be willingly undertaken only when financial support is provided to ease the community through the initial risk-taking years.
3. Erosion-control measures furthermore entail treatment of entire hillsides and sub-catchments as physical units.
4. The organizational model most appropriate to the task would be one in which the basic action group consists of all cultivators farming a given hillside, rather than the currently utilized sous-conseil, based on simple residence in a given community.
5. It is critical at this stage of USAID activities to devise a strategy for rendering compatible two apparently contradictory goals: the organization of community action groups and the provision of wages for project activities. A model will be proposed here in which intelligently managed wage labor, far from contaminating community spirit, will be used as the vehicle for creating active, self-policing community action groups who construct and maintain erosion control structures.

The presentation will proceed as follows: Some discussion will be given to the general issue of wage labor in rural Haiti and to the specific considerations which make wage formulas necessary in watershed projects. This will be followed by the discussion of a possible strategy for implementing and sustaining the project. Having presented this model, consideration will be given to several possible intrusions of land tenure dynamics into the progress of erosion control activities.

I am deeply indebted to Mike Stapleton for his assistance in Aux Cayes and for the insights which he provided; and to Gaspar Brice for the opportunity to accompany him into the watershed. The ideas for the organizational model emerged during nighttime discussions with Paul Derstine and William Sugrue, and were greatly amplified during discussions with Michael Benge, who is preparing a report which will discuss in more detail technical

matters that will be but lightly touched upon here. In the writing of this report, I have also benefitted from conversations with Al Bertrand, Lloyd Clyburn, Bill Garvey, Larry Harrison, Polly Harrison, Ira Lowenthal, Kevin Mullally, Lynn Pesson, Jim Purcell, Elias Tamari, and Diane Wolf. Joseph Thome earlier provided insights into legal aspects of land tenure. And special acknowledgement must finally go to Clarence Zuvekas, whose recent syntheses of existing information on rural Haitian economics have contributed much to sparking off policy interest in the question of land tenure. This report is, in short, dependent on ideas that have come from many sources.

The final responsibility for any errors or poor judgment must, however, rest on my own shoulders.

I. THE ISSUE OF WAGE LABOR

A. Wage Labor in the Traditional Economy of Rural Haiti

Analysts have disagreed on the relative importance of wage labor as opposed to exchange labor in the economy of the Haitian peasants. In communities that I have visited, questioning indicates that, though *lontan* ("in times past") few villagers paid for the cultivation of their fields, nonetheless cash disbursements have become a common occurrence in the cultivation of a garden.

Though quantitative data on the matter are generally lacking, three important generalizations appear to hold. Firstly, the vast majority of employers of agricultural wage labor are themselves peasants who perform agricultural work. Secondly, the majority of those who sell their labor are simultaneously cultivators of their own gardens and owners of at least part of the land on which their gardens are planted. Thirdly, only a minority of those who sell their labor will simultaneously employ wage labor on their own gardens.

To the degree that the above generalizations are valid, we are dealing with a society in which wage labor has worked its way into the fabric of traditional peasant life without necessarily (yet) being associated with radical landed/landless distinctions or with modernized productive technology—two frequent characteristics of other settings in which agricultural wage labor is a common practice. It is true that the non-agricultural absentee landlord is a figure to be reckoned with in at least some regions of Haiti (such as the plains around *Aux-Cayes*). But most purchasers and sellers of agricultural wage labor in Haiti are themselves smallholding peasants, the former having larger holdings than the latter. The important point from the perspective of watershed restoration projects is that wage labor is no longer an alien practice for the Haitian peasant, but is rather part and parcel of village life.

Of equal program importance is the manner in which this labor is mobilized. I have lived in a community where the individual contract—the peasant who hires one other villager for a day's labor—is a common occurrence. But the preferred arrangement in this village as well as throughout much of rural Haiti seems to be the hiring of an *escouad* or a *kolonn*, the earlier discussed rotating labor groups. As was pointed out above, these groups are a cornerstone of traditional economic organization, the major vehicle for the mobilization of exchange labor in which in *edé lôt* ("one guy helps another"). In fact, many developmental specialists have identified this traditional group as a possible cornerstone of developmental projects, as Haiti's own homegrown answer to the need for voluntary cooperation.

What has not generally been pointed out is that even this traditional group, operating in a traditional village setting, may spend about half of its time working for wages. Quantitative data are unfortunately lacking, but a substantial part of the labor of these rotating work groups is done on a hired-out basis, and the majority of peasants who sell labor

in their home villages. probably do so in the context of these squads. That is, even this most traditional of self-help arrangements is viewed by less well-off villagers as an important local source of cash. To view these squads as Haiti's "moneyless" model of voluntary labor is to partially misunderstand the manner in which they actually function in real life. From a program perspective, this means that the mobilization of community labor squads who work to the exotic sound of drums and bamboo trumpets may well evoke--to the chagrin of many developmental planners--simultaneous community expectations of eventual cash payment. The planner looking for traditional labor-mobilizing models untainted by cash considerations had best search in some other culture.

B. Wage Labor and Watershed Protection

These patterns have important implications for--but do not yet resolve--the question of whether the erosion control measures to be implemented in project watersheds should rely more heavily on voluntary or remunerated labor. The PDAI Project Paper proposes that watershed activities be carried out applying a national minimum wage formula for three days of work a week, a fourth day's wages being contributed to a community fund, and a fifth day being volunteered freely. As far as I could determine, no final decision has been taken on whether to proceed on a large scale with this formula, though some preliminary erosion control activities have been carried out in the Acul watershed using the formula.

Some concerned individuals within USAID continue to have misgivings about this use of wage labor as being destructive of community structure and as militating against the goal of building local community groups, without which the structures built will not be maintained. In the course of my investigations, I have become more firmly convinced of the basic wisdom of the decision to use some sort of wage labor and will present evidence which will hopefully support this point of view. In addition, an organizational model will be presented which could succeed in reducing the incompatibility between organization building and wage labor, which could in fact make the latter a vehicle for achieving the former. I do not believe that the specific wage formula proposed in the Project Paper is feasible and will propose another. But the basic decision to pay some wages is totally justified and sound for reasons such as those to be discussed.

1. External genesis of the entire project

Notions of voluntary labor are particularly appropriate when program objectives have been decided on by the community or communities involved. Most of the elements in the Integrated Agricultural Development Project--including the irrigation rehabilitation and soil conservation activities of the Acul Watershed--have been decided upon outside of the communities affected. Though efforts will be made to create community understanding of the program's objectives and community participation in the program's activities, these will come after the fact. This entire multi-million dollar project is a product of decision from above. The decision has been motivated by accurate perception of critical national needs, and if there is an important place for locally

initiated community development projects, there is an equally important place for decisive institutional interventions of the type envisioned in these projects. But it is naive to expect a spontaneous community rush to volunteer free labor in the execution of these designs. Even for those projects that are in the farmers' immediate short-run interest (and, as will be argued below, it is not at all clear that many of the projected watershed soil conservation measures fall into this category) the external genesis of the projects decreases the likelihood of widespread voluntary cooperation.

2. Principal beneficiaries live outside of the community

Not only have the projects been designed from above. In addition there appears little doubt that the principal beneficiaries of the projects are landowners on the plain beneath the watershed. The principal objective of the soil conservation and reforestation measures is to prevent damage to the lowland irrigation systems in the process of rehabilitation. The Integrated Agricultural Project envisions no hillside interventions in areas that will not benefit important irrigation systems. The upland farmer is in short being requested to substantially modify his own behavior as part of a project whose principal effect may be a dramatic increase in the income generated by the plots of those lowland farmers serviced by a restored and protected irrigation system.

3. Benefits to the upland farmers are less immediate

The project proposal specifies a number of benefits which will come to those hillside farmers whose lands have been terraced and intercropped with trees. But technicians generally admit that these benefits are for the most part long range and entail a number of short range risks and sacrifices which the peasant will be justifiably reluctant to undertake. Contrast this to the condition of the farmer of the plains, for whom irrigation is a spontaneous felt need. The hillside farmers have thus not only inherited the "worse land" from the point of view of productivity, they are also getting the shorter end of the Integrated Agricultural Development Project.

In the following section I will discuss in more detail why trees are not viewed by the farmer as being in his best interest. The general considerations discussed here, however, lead us to some programmatically critical conclusions which must immediately feed into the planning activities currently being undertaken in the realm of community development.

a. Development projects critically needed from a national point of view may not be in the best short term interest of the peasant, may in fact result in temporary losses and hardships, and in any case, will certainly introduce new risks on his horizon which his precarious economic condition makes him justifiably reluctant to face if he can avoid them.

b. These development projects cannot be undertaken in a classic community development framework, in which the local community decides on its own objectives. These projects must be initiated from above and thus constitute a subset of projects apart from those which can be pursued in a conventional community development framework.

c. This externally initiated subset may, in Haitian context, be more pressing than the smaller local self-help projects feasibly undertaken in traditional community development style. That is, we should not write off these externally initiated projects as a minor nuisance which should be quickly disposed of while we go about the "real" task of helping the community decide its own objectives. The externally decided subset may outweigh the other subset in contemporary Haiti.

d. Though individual USAID personnel may adhere to a traditional self-help view of development, the agency as a whole has recognized the priority of externally decided projects by earmarking millions of dollars for specific interventions. The project goals specified in the PDAI Project Paper were most emphatically not drafted after relaxed chats with peasants in their homes and fields.

e. USAID community-organization models should be made consonant with the reality of decision procedures. I have sensed an uncomfortable attempt to carry out externally decided projects in a pure self-help fashion by "educating" the people to see the need of these larger projects and to carry them out willingly and voluntarily. This is both manipulative and unrealistic.

f. What is needed is an organizational model which achieves the critical goal of strengthening local groups despite the dual presence of externally decided objectives and the corroborant need to devise remuneration strategies. We need, in short, an organizational model in which cash inflow is used to create and strengthen local community decision making power. The model to be presented here is a first step in that direction.

II. THE ACUL WATERSHED PROJECT

A. Objectives

These abstract considerations can be made much more concrete through examination of one of the major types of projects earmarked for funding under the PDAI charter: erosion control measures to be applied in watershed areas surrounding rivers which supply irrigation systems. The watershed projects, as discussed in the Project Paper, have as their principal objectives the protection of the irrigation systems that are to be rehabilitated in the project areas. But though ancillary to irrigation projects, the watershed projects have a special importance in Haitian context that goes beyond the protection they afford to lowland agriculture. The majority of the rural Haitian population lives in non-irrigated upland settings. A successful intervention program in watershed areas would provide models that could eventually be used in the protection and at least partial restoration of other denuded, eroded areas that do not happen to be above important rivers.

Because deforestation and erosion are such central problems in rural Haiti, the implementation of successful interventions in these domains would probably be one of the most important breakthroughs that any donor agency could wish to help the Government of Haiti make.

The major technical objectives of the watershed program are fairly straightforward. The initial construction of penetration roads will be followed by erosion control measures of two sorts. The first measure entails the construction of terraces and retaining walls; the second entails the intercropping of selected fruit and forest trees in a manner that permits continued cultivation of the traditional crops grown by the upland population. "Agroforestation" is the new term increasingly being used. In addition, the hill dwellers will, if the program is successful, be beneficiaries of more general types of interventions applicable in other settings as well--extension services, use of high yield varieties, learning of new technologies, and others.

But it is felt that the technical objectives cannot be met unless a number of social objectives are also pursued simultaneously. The major social objective, from the erosion control point of view, is the creation and motivation of effective community action groups who will construct the terraces and walls, plant the trees, and--most importantly--maintain them in place.

B. Achievements

At the time of my visit, the program in the Acul Watershed had made several advances far beyond the planning stage. A tree nursery with different species was in an advanced state at the government farm in Levy, and a smaller nursery had been planted in the watershed community of Toro. More than 100,000 trees had been sown, some 30,000 of which were ready for

transplanting onto hillside plots. A road, passable to vehicles, had been constructed up into Toro, on the eastern flank of the watershed. A similar road was being constructed along the bottom section of the western bank of the Acul River and had almost reached the community of Les Pretres. At the same time, a Haitian technician was assisting upland villagers in the staking out of a road which for the first time would make the mountain community of Les Platons accessible to motor vehicles.

Several important organizational objectives had also been partially met. There was an active Community Council functioning in Toro. The farmers of the region had been organized into a number of relatively small residentially based subcouncils, which were the actual operational units of the activities being undertaken. The leaders (responsab) of these subcouncils formed the central committee of the Grand Council. On the other side of the river, similar organizational efforts had been made following slightly different organizational models. The subgroupings that were building the road toward Les Pretres were organized principally on the basis of religious affiliation. Though a relatively small community, Les Pretres has the unusual distinction of being the locale of five protestant churches. The members of these churches had affiliated themselves into one brigade and constituted a separate action unit from the Catholics, who formed another brigade. I observed these groups in action on the road building project. Both groups were in fact working together, and there were neither external signs nor verbal reports of conflict between the two groups.

Organizational activities were much less advanced in the mountain community of Les Platons. No Community Council had ever been formed in the region. But in the months preceding my visit, a community groupman had been formed, led by the sacristan of the Catholic chapel in the community, who was simultaneously the local representative of a town notary and who also assured me that he would be the person chosen as the Agent de Sante when this program reached Les Platons. (The local marechal, the Chef de Section's assistant, had already requested of us that one of his sons should be kept in mind for this as-of-yet nonexistent position.) The groupman that had been formed in Les Platons had worked on repairing parts of the traditional foot-path that leads from the valley up into the community.

In short, there was a great deal of activity. During my visit to the region in the company of the PDAI Chef d'Activites:Developpement Communautaire, two meetings were held. The meeting in Toro—the organizationally most advanced Council in the watershed—proceeded smoothly, if somewhat mechanically. The meeting of the groupman in Platon, in contrast, dissolved into an angry shouting match and participants simply departed, leaving an angry marechal muttering about how impossible it was to unite people in the hills. But this small outside meeting (some 15 men came to sit in the dark) was the first one of its sort that had ever been held in the community. Meetings are being held, roads built, paths are being improved, retaining walls are being constructed on hillsides, and—in the near future—some trees may be actually planted. I had done extended research in a community where no such activities took place, and even a brief visit to the Acul Watershed indicated that in this region, something was clearly in movement.

C. Program Constraints

The signs of movement, however, are in themselves no guarantee that significant changes are coming into the watershed. The impression that emerges, based both on direct questioning and on listening to what villagers said to each other and to the visiting Chef, is that some of the activities are in fact surface responses to outside inducements, that there is a great deal of external compliance to program guidelines with substantially less determined commitment to program objectives, and that the goal of mobilizing community groups to protect the watershed is in danger of failure unless certain modifications--some of them immediate and urgent--are made in the implementation of the program.

As an illustration of the types of problems being encountered by the project, we can examine the manner in which watershed farmers have failed to respond in predicted fashion to the offer of trees. After preliminary sounding out of community preferences, project-related technicians organized the planting of a nursery in Toro itself containing some 4,000 seedlings, most of which were avocado. The community was asked to tend the nursery until the trees were ready for transplanting, at which time the technicians would return, instruct in techniques of proper transplanting, and assist in the transplanting itself.

When the technicians returned, however, the nursery had been completely neglected. To demonstrate community sentiment more clearly, only some 10 farmers out of a conseil membership of 300 attended the meeting at which transplanting techniques were taught. As a last resort, the technicians informed those present that they and their neighbors were now free to take as many of the trees as they desired. During my visit I accompanied one of the technicians to the community to see if the trees had been taken. They had not.

Brief inquiries which I made of the farmers brought up several reasons for lack of interest in the trees.

1. The trees make it difficult to graze animals. Most plots are extremely small. Trees are more likely to be planted when there are no other crops on the field. But it is precisely during these (generally brief) fallow periods that the plots are used to graze animals. Either the animals would kill the trees or the farmer would have to restrict grazing to a degree that would cause disruption of the traditional cycle.

2. The young trees would eventually be intercropped with traditional cultivates. But the farmers believe that the trees would give serious competition for moisture, a frequently scarce commodity in these non-irrigated upland regions.

3. People already had avocado trees in the community and could quite easily obtain seedlings without project assistance if they so desired. As

one technician eventually put it, to offer them avocado seedlings had been somewhat similar to offering a gift of sand to beach dwellers.

4. The absence of easy access to markets means that people are already selling as much fruit as they conveniently can. Most of it is carried down on female heads to the market at Ducis and at least some farmers feel that they already have all the fruit that they can conveniently market.

5. The trees would simply compete for space that could be given to other cultivates. This means that we must interpret with caution the remarks of the farmer who told me that perhaps people in Toro would respond more positively to a certain variety of mango which grows at high altitudes. At most, what he means is that people may be willing to plant one tree on a given plot. This does not refer to acquiescence to intercrop large number of trees, as is called for by project plans.

Some people with whom I have discussed these matters respond by saying that more community education had been needed before attempting to plant the trees. Farmers had to be first convinced of the need of the trees and gradually organized in such a manner that they would plant and maintain them as a community. This view misses the point. It is probably more accurate to say that project planners needed education, education into the short-range cost/benefit calculations that peasants must continually make as a matter of survival. It had been simply assumed by many planners that the trees were not only good for the nation, but good for the individual peasant as well, especially if they could be obtained for free.

There are other problems encountered in the project as well. The common logistical problem of vehicle breakdown in Aux Cayes restricted the mobility of PDAI personnel. They were forced to rely on sporadic lifts they could get up into the watershed. Institutional ambiguities in the relationship between Haitian and foreign technicians led to independent, uncoordinated decisions. There was internal disagreement not only concerning technical decisions with respect to erosion control, but also administrative ambiguity with respect to the financial arrangements governing peasant labor on the retaining walls. (These latter problems, I have been told, have since been resolved.)

But such logistical and administrative glitches plague any project and should not be blown out of proportion. There is one central problem which seriously jeopardizes the success of the entire project and for which specific planning has not yet been made: that of motivating the peasants to participate over an extended period of time in a project that they know is not of itself in their short-term interests. The road building project has proceeded on the basis of volunteer labor. But the only way PDAI personnel could get cooperation on erosion control projects was to unilaterally decide to proceed with the wage formula outlined in the Project Paper.

Because wages are now being paid, the project is progressing. But the decision to use wages was almost in the nature of a panic reaction by PDAI personnel to initiate movement. The organizational arrangement under which I observed the retaining walls being built entailed bringing in people who had no stake in the land being walled. The size of the individual Sub-Councils was too large (over 50 members each) to permit individual participation in decision making. And most seriously no provision is being made for the maintenance of the structures.

The project is underway, walls are being built, and cash has begun to flow into the community. But I am convinced that an immediate mid-course correction is needed to execute the project in a manner that truly functional local groups will be created who will participate in decisions as to erosion control measures on their own plots, who will take collective responsibility for the handling of funds, and who--most importantly--will be so organized and motivated as to ensure maintenance of the structures that are now being built. The model to be proposed here is an attempt to extend organizational planning into domains that have up until now been ignored.

III. THE HILLSIDE UNIT: KEY TO EROSION CONTROL?

There are at least two problems with the currently constituted Sous-Conseils that are carrying out the wall-building. They are too large, and most of the people working on a field are not associated with the field, may not even have fields in the vicinity.

With respect to the first problem large groups militate against involvement of members in decision making. The most successful groups in Haitian context have generally been small, a generalization that applies to traditional as well as formally organized groups. With respect to traditional groups, the escouad and kolonn succeed in achieving their purposes: collective labor in the field. The peasants spontaneously choose groups that generally have no more than a dozen members. As for formal groups, the Societe de Credit Agricole (SAC), a small group of farmers who borrow from the Bureau de Credit Agricole, has been found to have an exceptionally high (ca. 85%) repayment rate. The members police each other. Different as they are, the success of these groups--the traditional labor groups and the SAC-- appears to stem from a combination of small size, shared decision making power, and shared responsibility for the behavior of its members. It is my belief that the difficulties that the Acul Watershed project is currently facing can be best remedied, and the project most rapidly and effectively advanced, if attention is given to the creation of small and stable units.

A. Principle of Garden Propinquity

The question then becomes: on what basis do the units get constituted? The composition of the individual units must be based on natural dynamics; the lumping together of individuals with nothing in common will probably lead to the result of achieving nothing in common as well. But there appear to be a variety of alternative grouping principles. The composition of the Sub-Councils, as presently constituted in PDAI projects, is based on the principle of residential propinquity. Members of the same residential area are presumed to have common problems, and they are joined in the same subcouncil. We have seen that in Les Pretres, a further subdivisional principal was that of religious affiliation. The intracommunity subgroups split along religious lines.

It may be extremely useful at this point in the life of AID activities to reexamine and question the common-sense tendency to use residential propinquity as the major criterion for constituting communal groups and for organizing communal activities. Once again we must raise the distinction between classical self-help projects on the one hand, and externally motivated macrostructural projects such as watershed protection on the other. In these latter there are a series of specific technical tasks to be achieved: the reforestation and terracing of eroded hillsides is not a mere

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The SAC has been successful in terms of repayment rates, but has had serious problems in other domains.

A. continued

program vehicle for creating community groups. Rather these are high priority national projects with critical value in their own right. In the presence of such projects, a much more effective principal for organizing project activities may be that of agricultural, rather than residential, propinquity. Those who crop contiguous gardens may end up forming the most cohesive action groups. Many irrigation projects have used this principle; owners of neighboring fields receiving water from the same canals and ditches are united into functional action groups responsible for the cleaning and maintenance of the system. To my knowledge, the same principle has not yet been applied to problem of terracing and agro-forestation. Yet it may be precisely this concept which, when applied to the tasks of terracing and agroforestry denuded hillsides, may provide the needed-grass-roots functional unit which most effectively organizes truly communal construction and maintenance of erosion control measures. Perhaps a direct route to genuine community participation may be the creation of action groups consisting of those whose hillside fields are contiguous and who will therefore best coordinate their erosion control activities.

Under this model, then, we might choose the sub-catchment as the unit of action. Most of the sub-catchments in the Acul Watershed consist entirely of lands owned by local farmers. Land tenure dynamics can create certain complications, as when a hillside is owned either by the state or the absentee private owner. These will be discussed below. For present discussion, however, we shall propose a model to be applied in the case of plots owned by local farmers themselves. It is this tenure mode which appears to cover most of the plots in the region.

B. Preliminary Educational Message

The following constitutes one possible strategy. It will be important to clarify to local residents from the outset that the watershed project is of critical national importance and has been decided upon by the Government of Haiti. The message might be constructed conceptually somewhat as follows. (The concepts will, of course, have to be concretized).

You and your ancestors have been living in a region whose hills are too steep to tolerate the type of cultivation currently practiced there. The result has been deforestation, serious erosion. This erosion has not only hurt your own land, but has also clogged the rivers and damaged the irrigation systems that thousands of families in the lowlands depend upon. Before it is too late, the government wants to halt this process.

"In some countries, people have been removed from hills. This will not be done in Haiti; it would hurt all of the people in the

hills. The government is instead ready to reach a "compromise" with you. You will be permitted to stay on your land, but you will be asked to cooperate with a number of projects. We will ask you to construct certain types of walls and terraces on all fields in the watershed, and to plant a certain number of trees. You may continue cultivating your traditional crops, but it must be done in the context of these soil-protecting devices.

"We will try to implement these projects in a way that interferes as little as possible with your yearly cycle and in a way that brings several economic benefits. First, we will select trees that may be of some economic use to you. We will ask you what kinds of fruit trees you could use to grow for market, and will plant also certain forest trees whose wood you may eventually use under supervision as long as the tree is replanted. Secondly, the government will help finance the construction of walls and terraces. We will not pay an individual farmer to terrace his own land. He will be asked to contribute his own labor. But the government will give him a chance to work for pay in helping to construct walls and terraces on the fields of his neighbors. Thirdly we will try to ensure that any wages spent will go to the people of the particular hillside that is being protected. We will not import laborers, but will pay local people.

"The government is willing to pump this money into your community simply because in the beginning the work may interfere with your own normal schedule and the benefits of the project may not be felt by you for several years. We will ask everyone in the watershed to cooperate. All of this should have been done years ago, but it is still not too late to protect Haiti's mountains and rivers."

An introductory message such as this establishes that the project is in fact necessary and has in fact been decided upon from above. It indicates that cooperation is expected, but that the government will do everything possible--especially in the form of cash disbursements--to soften the initial deleterious impact of all of these activities.

Organization of the groups

The next task will be to carry out a plot-by-plot analysis of every hillside in every sub-catchment, determining who is (or are) the owner(s) of the plot and what would be the most appropriate type of erosion control structure for that particular hillside. All of the owners of plots in a given sub-catchment will then be united into hillside units perhaps called Erosion Control Brigades or some term translatable into succinct Creole. (The term "hillside unit" will be used through the remainder of this report.)

It will be very important to leave several decisions in the hands of the individual hillside units. The entire project has

been decided upon by government decision, and technical decisions as to terrace construction and tree spacing will be made by competent specialists. But the hillside units themselves will make a number of important operational decisions. They can decide the order in which plots are handled. If certain plots have crops, they may begin with other plots lying fallow where terracing activities will not harm crops. The hillside units, in conjunction with individual members' preference, may decide on the varieties of trees that will be planted. The hillside units will be responsible for allocating work schedules to the different members of the unit, determining who will work on what day. In other words the execution of the project in a given sub-catchment will be the task of a small hillside unit or a small number of such units.

To increase participation even more, it will be possible and highly desirable to involve women in this entire process-- either in their capacity as landowners themselves (as many are) or as spouses of landowners. Many physically less strenuous tasks can be carried out by the females. (Women were observed carrying rocks in a road-building project in the watershed.)

The women can also be employed in certain desirable food-related activities. In addition to wage payments (to be discussed below), I strongly recommend that a daily meal arrangement be instituted as well. Traditional food-for-work schemes involving the importation of foreign foods defeat their own developmental purposes. If the imported foods are locally grown, local markets are depressed. If the imported foods are alien to the region, then recipients will merely sell them, turning the entire arrangement into an underpaid wage-labor scheme.

It is a long-standing rural Haitian tradition for the employer of field labor to furnish food to his laborers. If the employer is paying wages, such food is generally not necessary, but some employers give food anyway to improve the productivity of those working. In this project the State would be the payer of the laborers, and there is nothing preventing the State from simultaneously providing a meal. But in doing this it is better to rely on the purchase of locally consumed foods in local markets (at local prices). Women involved in a particular hillside unit could be charged with the purchase, preparation, and distribution of this food to the workers in their unit.

The implementation of this daily-meal scheme could be done in such a way as to give the hillside units training in collective management of funds. A monthly quota could be given to the units. From this they must budget daily food purchases. It is up to the group to make the budget last the entire month. This would entail management of modest funds but could possibly serve as training for the eventual manipulation of larger amounts of money.

To sum up: what is being recommended is the creation of small units of cultivators who, under technical supervision and

financial support from the government, would at last undertake the terracing and agroforestation that has occasionally been tried (and has generally failed) in rural Haiti.

C. The Problem of Maintenance: Non-Viable Solutions

With the payment of wages one can expect rather swift construction of the terraces and planting of trees. Persons directing this sort of work in Toro have had to turn away workers; demand for participation has been heavier than the capacity of the project to absorb in its initial stages. But though the problem of construction can be resolved by wage labor, the problem of maintenance will be somewhat trickier. If this were a classical self-help project decided upon by the community, the structures might stand a better chance of being spontaneously maintained and repaired by the community.

We have seen that this is a different type of project, however, and the problem of maintenance is at center-stage for many concerned planners. There are several possible approaches to the problem, some of them less realistic than others.

1. The structures and trees will prove so profitable that farmers will be motivated to maintain them voluntarily in their own self interest.

This outcome is highly unlikely. The terraces by themselves can only prevent deterioration; they cannot by themselves lead to dramatic increases in crop yields on a short term basis. On the contrary some technicians feel that, because of the space that terraces and retaining walls occupy, the actual yields from a plot might decrease, all other things being equal. There are constraints, clearly recognized by the hillside farmers, on the amount of fruit they can plant on their plots. Not only do fruit trees take up space. In addition the absence of easy access to markets limits the quantity of fruit that can be sold. Some farmers were actually heard to say that they have all the work they can handle lugging down the fruits that are already planted on their gardens.

What about the introduction of higher yield seed varieties and improved technology? Would this not increase yields and income? In the first place, this is unlikely to occur with any dramatic rapidity given other constraints facing the project. Secondly, if such improvements come, they have little to do with the trees. That is, at least in short term basis, the use of high yield maize seed the introduction of new cash crops, and the use of improved technology might cause the farmer to want more land on which to crop. Such an awakened desire would bode ill for the newly planted trees. At any rate there is no airtight logical connection between increased agricultural output and the preservation of trees or perhaps even retaining walls.

2. Through gradual education the farmers will come to see the value of the erosion control structures and intercropped trees.

It is absolutely essential that, as the construction of erosion control devices proceeds, there be a series of constant educational inputs explaining the short and long term rationale of such activities, not only in terms of the local farmers self-interest, but also in terms of general national interest. Could not such educational inputs effect a change of attitude that would result in the voluntary preservation of the structures, even though they were first constructed with the aid of wage labor?

I must admit to skepticism with respect to this particular hope. Even were each of the plots being cultivated by a clear decided single owner, such an objective would present problems. Farmers justifiably make decisions in terms of short run interests and, as has been argued above, the benefits accruing to the mountain farmer from the erosion control measures are minuscule in comparison to those accruing to his lowland counterpart who now enjoys a restored and protected irrigation system. But when to these less than favorable economic calculations are added the complexities of the non-proprietary tenure relationships that cover so much of the mountain land--rental, sharecropping, undivided family land--the motivations for spontaneous maintenance of these structures becomes even weaker, even with intensive educational inputs during the period of construction. Education is essential; but it is simply not enough.

3. Have the army and/or rural police enforce maintenance of the walls and trees. The process of deforestation in the Dominican Republic has been radically curtailed by the passage of laws and--especially--by the vigilance of ubiquitous forest rangers. Would it not be possible to charge rural Haitian authorities with this same task? Indeed, the Code Rural Francois Duvalier already prohibits the cutting of trees without proper permission. Could not enforcement of this law solve many of the problems, at least with respect to the trees?

It will eventually be critical to involve public authorities in the protection of natural resources. However there is tradition in Haiti of public interference in the process of deforestation. On the contrary, more than one observer has commented on the involvement of rural police in lucrative lumber extraction activities.

One technician expressed the conviction that the penetration roads currently being cut into the watershed with AID help will almost certainly result in an increase of lumbering off of state land unless steps are taken to the contrary. With respect to policing the maintenance of trees and terrace on private land owned by small proprietors, the likelihood is less than hopeful. I have seen very little interference by the rural police in the agricultural activities of farmers on their own land. Barring unusually strong directives from above, it is unlikely that the rural marshalls will extend their activities into this domain.

There are certain additional features of the position of the ordinary rural police assistant (marechal, adjoint, or aide de

section) which make it unlikely that he will serve as an enforcement agent. In the first place, he is generally a small cultivator himself, in the same position as that of his fellow villagers, with the same incentive to cut down trees and the same disincentive to maintain complicated walls or terraces. Secondly, perhaps more importantly, the marechal's tenure in office tends to be short lived in many cases. He is a local farmer who knows he will in all probability revert to the status of ordinary farmer. In such a position, he would be wise not to be too vigorous in imposing his will and forcing his neighbors to toe lines which they dislike. When his badge is taken away, he may have to pay the social consequences of any ill will he has created during his term of office. He knows this and in general behaves accordingly. In short, the rural Haitian police are poor candidates for maintainers of the trees and terraces.

Could not a separate forestry service be created, analogous to that which, for example, has put an effective brake on the deforestation that had been occurring in the neighboring Dominican Republic? This is a cumbersome solution, one that is likely to backfire. And it raises the general issue of whether USAID wishes to become involved overseas in the strengthening of local institutions of coercion. Whether warranted or not, a bitter complaint which citizens of more than one country level against the U.S. is that the local military and police forces which the U.S. has helped create and train, perhaps with one set of positive intentions, has subsequently been used in less positive ways. Whether the charge applies locally or not, the entire strategy of extending the role of enforcers--be they rural police or forest rangers, as per the present discussion--is one which USAID would probably want to avoid. The maintenance of erosion control structures is a high priority need, one which can scarcely be done through simple education. But enforcement can be done with carrots as well as clubs. In the sociopolitical context of contemporary Haiti, USAID should opt for solutions which depend more heavily on the former.

4. Payment for restoration of damaged walls and missing or dead trees.

If the task is to devise appropriate positive incentives, it would appear that the same type of cash outlay which will presumably create the erosion control structures can also be used to maintain them. A straight forward model of this type would simply pay laborers for whatever wall restoration and tree replanting should prove necessary.

There is a serious danger in such a scheme. I suspect that cash inputs made into the region during the construction stage will be the most attractive element of the program from the point of view of the participating farmers and that the completion of a watershed will be the occasion of sadness, rather than triumph,

for the participating hillside unit. To continue a direct payment strategy during the post-construction stage would merely make it in the best interests of the farmers to secretly knock down walls or cut trees. Whether the repair work is done on a piecework basis or a daily wage basis, the more damage that occurs, the more cash earning opportunities that will be provided. If the author himself were a hill farmer he would behave accordingly. Under such an arrangement we could predict with reasonable certitude a chronic epidemic of cut trees and damaged terraces.

This does not mean that cash incentives cannot be used in the maintenance stage of the project; it merely means that the conditions of their disbursement must be somewhat altered. During stage one, a reward is introduced and paid when certain erosion control measures are constructed. During stage two, in contrast, a smaller but still significant incentive flow is kept constant but withdrawn in the case of those hillside units whose members fail to maintain what was constructed in stage one. A possible model of this will now be presented.

D. Suggested Strategy for Maintaining Walls, Terraces, And Trees.

The maintenance scheme to be proposed here will entail cash outlays, but of a somewhat different type from those made during the construction stage of the watershed project. Even those planners willing to concede the necessity of paying for the construction may still feel uncomfortable with the thought of payment for maintenance purposes. Is there no point at which the community will take the responsibility on itself, without wishing to be paid? The answer is: yes, just as soon as the restored hillsides are seen as manifestly more profitable than the denuded ones for the individual farmer. And that will take some time. Several background reminders are in order.

1. The trees have to be planted rapidly, the erosion control structures built quickly. But their profitability will take a great deal of time to become manifest to the hillside cultivators.
2. Patterns of erosion control maintenance will be learned over a long time. Hopefully generations of farmers will come for whom such maintenance is the normal way of life. But such a new generation will come only if a system is "primed" with the current generation. This generation has not, however, learned this as a normal practice, and any incentive system should be seen as a device for working in the needed erosion control practices.
3. Even in the maintenance phase, watershed farmers are in fact being asked to shoulder a burden that their upland counterparts on non-watershed hillsides are not being faced with. In principle compensation is not out of order. In practice it may in fact be necessary. The task is to devise

a strategy that is both effective and financially feasible.

The use of cash outlays during the maintenance stage of the project could easily raise total costs to impractically high levels. In an appendix to the report, I give reasons that justify the employment of a more modest wage scale, one that is based on current wages paid by small farmers themselves. For purposes of the following discussion it will be assumed that

1. a total budget for construction and maintenance of the watershed has been drawn up to include cash payments for labor in the project, and that this budget has been found feasible;
2. the available funds have been spread out over a long period of time (seven years might be a reasonable compromise).
3. a substantial portion of the labor funds are allocated for the construction stage of the project.
4. enough of the money earmarked for labor payments is reserved for the maintenance stage of the project so as to prolong at least a modest cash inflow to be used in the manner suggested below.

The funds earmarked for maintenance would be disbursed somewhat differently from those paid during the construction stage. It will be recalled that during construction stage, the farmers were paid for working on the fields of their neighbors. I.e. on the days that their own fields were being terraced or planted, they volunteered their labor. In maintenance stage, it will be explained, the procedure will change. Each landowner will now be expected to spend some time maintaining the terraces and trees on his own land. It will be explained that, because he will lose some time in these activities, and because the benefits of the terraces and trees may not come for a few years, the government will give a modest cash payment to the landowner four times a year. (The level of this payment can be as high as funding permits, but must be at least high enough so that withdrawal will constitute a true penalty. It will of course not be as high as the income generated by daily wages during construction stage.)

The sanction for failing to maintain the structures and trees would, of course, be withholding of the quarterly payment. It would be possible to do this on an individual basis, penalizing only the farmer who is negligent in this respect. But project objectives, it will be recalled, go beyond technical protection of the hillsides into the more elusive goal of creating and strengthening active units of local farmers who take collective responsibility for certain important projects. A more effective procedure, then, would be that of involving the entire group of which the farmer was a member during construction stage.

This could be achieved by making the hillside unit both the surveillance unit and the quarterly payment unit. That is, every three months the hillside unit (or a delegated committee thereof) would examine each of the fields on which it constructed walls or planted trees. It will of course be necessary to have outside

surveillance as well, carried out perhaps by PDAI. But this should be construed as a secondary check-up on the main quarterly surveillance which will be the responsibility of the same hillside unit which constructed and planted the sub-catchment. This would, in short, create a sense of collective responsibility for the maintenance of the project works.

The sense of collective responsibility will be buttressed by an arrangement of collective sanction if the works are not maintained. If one of the farmers in the group has allowed a terrace to fall or an animal to destroy a tree, it will be the responsibility of the group to repair it. If the damage is not restored, then the quarterly payment for the entire unit will be withheld until the reparations are made. Under these conditions, we can expect great social pressure to be placed on individuals by their siblings, cousins, and neighbors who crop the same hillside and those who would suffer a substantial collective loss through failure of one individual to comply to maintenance norms. If the individual fails to maintain the terrace or the trees, the entire group would have to the right to undertake the repair and assess the delinquent, perhaps pocketing his payment for that particular quarter. This type of cash arrangement, far from being destructive of local organization, buttresses it and gives it a clout that it rarely has in development projects.

It is some such model I maintain, which will achieve the simultaneous objectives of:

1. protecting now endangered hillsides:
2. maintaining project structures without programmed dependence on enforcement by the army or rural police; and
3. creating local groups with true stakes in ongoing projects and true realms of important decision making, and providing much needed (if modest) cash inflows into upland regions most in need of such inputs.

IV ENTER LAND TENURE: NEEDED PROJECT ADJUSTMENTS

There are a number of constraints which could easily impede the smooth flow of the project as envisioned above. Some of the constraints are technical, others logistical, and others organizational. The following section of this report will concern itself exclusively with complications introduced by the particular type of land tenure situation which appears to prevail in the watershed region visited by the author.

A simple type of land tenure situation would greatly simplify the organization of the project along lines suggested above. If for example the holding of every farmer consisted of a single plot of clearly titled land in one of the sub-catchments, and every farmer had the same amount of land, and all of the land in the watershed were held under such tenancy, then the hillside units proposed earlier would be easy to constitute. Instead, however, we have holdings dispersed into a number of plots, important differences in the size of the holdings of different farmers, various forms of tenure ambiguity created by informal subdivisions and patterns of rotating occupancy, and a variety of complicated tenancy relationships to boot. All of these complicate not only the organization of the project itself, but also the equitable distribution of benefits that will come from the project.

A. Deedlessness and Tenure Insecurity.

Plots that have been purchased are generally held with a reasonable degree of security. The purchaser in some cases will actually bring in a surveyor and take out a separate deed. More frequently nowadays, however, the purchaser will content himself with the notarized record of the transaction, delaying actual surveying until some future date. Even siblings buying land from each other secure a notarized declaration, in order that the children of the seller can never claim to the children of the buyer that their father only rented, rather than sold, the plot. These notarized declarations provide functional security for purchasers of land.

The inheritor of land may not be in quite as strong a position. Every rural person or town notable questioned by the author on this matter insist that there are valid deeds covering such private, inherited land. (State land is another matter to be discussed below.) Even though siblings divide parental land informally and do not go through the expense of taking out separate deeds, the land is covered by a piece of paper, either an old deed covering the entire inheritance bloc, or a notary's declaration covering a plot purchased by one's parent.

There are two separate questions here. First, to what degree is the land in fact covered by deeds? Might not such claims be collective fictions? Secondly, what is the legal status of undi-

A. continued

vided land that is covered by an old deed? The two questions can be answered indirectly by looking at land purchasing patterns. As for the second question, legally deeded land that is informally subdivided into discrete plots is treated as though it were the private possession of the individual, even to the degree of selling the informally created subplot. The willingness of a purchaser to lay out money is an indication of relative security in the system.

The same land transaction process gives us indirect evidence into the first question: do these large family deeds really exist, or are they collective fictions? They probably exist. When land is sold, the buyer brings money to the notary's office, the seller brings the old deed covering the large bloc of land of which the transacted plot is a part. Farmers as a rule will not buy land that does not have its own deed or is not part of a bloc covered by a large deed. Yet land is being transacted in all parts of the watershed. This author is inclined to take the word of those numerous individuals who claim firmly that there are deeds covering most of the land.

Should the Watershed Project become involved in the question of land tenure? As part of project services, it might be possible to give validated copies of these large deeds to those kin groups whose deed is physically decomposing or has been totally destroyed. Such a movement would strengthen a sense of collective family rights in the region. It would furthermore allay any fears as to secret plans to evict the people from the watershed once the terraces are constructed and the trees planted. (I have heard no such fears expressed.)

There is a danger, however, that these plans to strengthen the tenure situation of the mountain dwellers may backfire in several ways. Dormant land conflicts may be suddenly resurrected when the news comes that tenure in the region is to be finalized. There is little danger that outsiders will suddenly start maneuvering en masse to stake claims. As was suggested above, the mountain land is not yet valuable enough nor is it likely to become so even with terraces and trees. But the entire process could trigger off intrafamilial disputes.

Furthermore I recommend against plans to give a separate, validated deed for every single plot of ground created by the informal subdivision process. If anything, what should be validated are the old deeds covering the entire bloc of family land. Informally subdivided plots are not insecurely held as long as the master deed is in the hands of some family member. If anything it is these protective master deeds which should be the object of project intervention. It would be too costly to measure off and title every single tiny parcel created by an informal subdivision. And in the Acul region, where such informal subdivisions appear to be more loosely carried out than in other regions known to the

A. continued

author, attempts at such precision could give rise to conflicts.

A further consideration in this regard. What happens if, the course of project enquiry, it turns out that an entire kin group in the watershed gets exposed as being totally deedless squatters? This is highly unlikely. If it should occur, it will be because the kin group has been in the region for generations. In this case it would be possible to reactivate now inactive proscription laws which would in fact endow this kin group with a valid title for the land which they have been occupying.

One final consideration of this topic. If some genuine conflict arises, it might be possible to create a local Council of Arbitrators composed of local farmers whose task it will be to try to arbitrate in land disputes that arise as a result of project intervention. They can probably not be endowed with legal power. But the potential importance of community consensus and old community witnesses in deciding land disputes could conceivably make such a Council an effective safeguard against unintended project-generated inequities. This would be one more instance of creating a focus of local collective power and of further strengthening the organizational objectives of the entire project.

B. The issue of landlessness.

Encouraged by the winds of policy change from the north, there has been a recent flourish of concern in USAID missions with the "poorest of the poor." Programs must now deal with the task of incorporating formerly marginal groups. In many rural settings, the poorest of the poor are landless individuals who have no fields of their own and who live exclusively from the performance of wage labor in the fields of others.

The poorest of the poor also exist in Haiti. (Some feel that most of the population falls into that category.) But they are somewhat different from their Latin American counterparts.

1. There are very few totally landless people in rural Haiti. Most people have some sort of proprietary claim--even though it be undivided inheritance--to some agricultural real estate.
2. Those with little inherited land will, especially in the early stages of their economic career, plant gardens under a sharecropping or rental arrangement generally on the lands of their neighbors. I.e. the poorest of the poor in Haiti continue to be at least partially autonomous gardeners.
3. The principal badge of the poorest of the poor in rural Haiti appears to be the sale of labor to other community members. This has been discussed in an earlier section of the report. That is, they are wage laborers, as are their counterparts in Latin America. They simply do not (and probably could not) depend exclusively or even principally

B. continued

on this option.

There are probably very few genuinely landless adults--i.e. persons having a spouse and children--in the watershed area. A literal following of the model presented earlier would tend to exclude them from the project. That is, the hillside units will be composed of the landowners of a particular subcatchment. A person owning no land would thus not be involved in any of the projects. Yet it is precisely the landless people who would be most in need of the wage labor.

This will entail a modification of the model. At least during the construction stage of the project, arrangements should be made to permit landless people to participate in the wage labor despite their absence of proprietary rights in the area. If such individuals constituted a majority of the population, the entire model would be inappropriate for the region, since it is centered on groups of landowners. Since present information indicated that most of the people own some land locally, however, the few landless can be incorporated via special provisions.

One strategy would be to do a preliminary listing of all individuals in the project area who will be involved in watershed reconstruction. If it turns out that some individuals in the watershed would be excluded, either because they own no land or because their plots are not in the watershed itself, each hillside unit could be instructed to include a specified number of such individuals in their own activities. This must be carefully controlled, however. The individuals must truly be residents of the community. It is quite probable that, when news of the project spreads, attempts will be made by individuals in distant communities to get in on the wage labor being made available. That is, though the project should make every effort to incorporate the poorest of the poor in the project region itself, care should be taken not to make this a general employment magnet for the entire region.

C. The problem of land differentials.

If outright landlessness is a minor issue in the region, the problem of holding differentials appears more serious. Some families own more land than others, and some children thus get a better start in life than many of their neighbors. In addition the process of continual land sale and land purchase which the author has seen elsewhere in Haiti appears to be equally strong in the Acul watershed region. Most of the land appears to be transacted among local people and the problem of intruding absentee owners does not

C. continued

yet appear to loom large. Yet even internal land purchase leads to local resource differentials. These could present problems in organizing the project.

A hypothetical example can illustrate. Let us suppose that in a given subcatchment Farmer A has a half carreau of land under cultivation next to Farmer B who has only an eighth of a carreau. During the maintenance stage, Farmer A could argue that, since he has to maintain four times as much linear terrace space and four times as many trees as Farmer B, his percentage of the quarterly payments made to the cell should be proportionately greater.

I recommend that right from the outset of the project the cards be stacked in favor of the underendowed. Recall: the most valued input will be the cash wages and in traditional Haiti the poorer people would be the ones to work for wage labor. They should continue to be favored since they will be lesser beneficiaries of the eventually restored hillsides.

For this reason I recommended above that during the construction stage people be made to voluntarily labor on their own land and get paid by the State only for working on the land of their neighbors. This means that Farmer A above would be excluded from wages for half a carreau of work, where as Farmer B would be excluded from only an eighth of a carreau. I.e. the larger landholder has to volunteer more labor in the restoration of the hillside. This builds in an automatic favoring mechanism for those who have less land. I expect that the community will readily accept this arrangement.

During the maintenance stage the underendowed will be favored by insuring that all members of a given action unit receive the same quarterly payment, no matter what the size of the plot. The larger landholders have more terracing to maintain, so they can scarcely be asked to accept a smaller quarterly payment than the underendowed. But they can be asked to split the quarterly payments on an equal basis. Once again I suspect that a firm stand on this issue from project organizers will elicit genuine agreement on the part of all farmers concerned.

D. Dispersed holdings and multiple membership.

Another feature of rural Haitian landholdings which appears to hold in the project region concerns the dispersal of holdings. People inherit and purchase plots that are quite distant from each other. I suspect that most farmers have in the watershed holdings that are on different hillsides, even in different subcatchments. The owner of a plot on a hillside in one community may actually live in

D. continued

another community. This creates problems in terms of the constitution of the hillside units.

One problem arises when an individual has plots in different parts of the watershed. This means that he will belong to two separate hillside units. This in itself creates no great problem from the point of view of participation and execution of the projects. But it does create an inequitable distribution of the wage benefits.

A hypothetical example can illustrate. Farmer X and Farmer Y both own half a carreau of land. Farmer X has his half carreau together in one subcatchment; Farmer Y's half carreau, in contrast, is split into two quarter carreau plots, each in a different subcatchment. This means that Farmer Y gets to participate in two units i.e. gets wages for work on two subcatchments by virtue of his dual membership. It also means that during the maintenance stage he gets two payments per quarter. This advantage comes to him via the accident of his dispersed holding. Such an arrangement actually encourages a holding dispersal that many observers feel is inimical to long range development.

One solution to this problem would be to make a farmer choose one unit, perhaps the unit in which his larger plot is located. This would cut off any maneuvers to lucrative multiple membership by farmers who see that more wage labor would be thus available to them.

E. Dispersed holdings and the issue of hostile neighbors.

The dispersed holdings not only lead to multiple membership. They may also lead to the presence on a hillside of farmers who may have had little to do with each other. In the case of large blocs of land that have been subdivided via the inheritance process, siblings and cousins will work in proximity to each other. But the process of land sale occasionally leads to the entry of other community members (generally not total outsiders) into the family holdings. This results in the presence on a given hillside of individuals whose only bond is this territorial one. Indeed minor boundary disputes may have led to antagonisms between garden neighbors. Is it natural to "force" such individuals into a single hillside unit, as envisioned by the model presented above? Would it not be better to adhere to a more traditional grouping principle, that of residential propinquity?

There is no simple answer to this or ganizational dilemma. It should be recalled that many traditional Sous-Conseils, based on residence in a given hamlet or locality, can be just as artificial-

E. continued

ly constituted of people who have little common sympathy. When all things are considered, it seems more natural for the watershed restoration project to utilize garden proximity as the criterion of common group membership. This is a special type of project that requires especially keen collaboration between individuals on the same hillside. The denuded and subsequently restored hillside constitutes a genuine underlying interest. It will be the task of group decision and group action to bring this interest to the surface and make it a focal point of group organization. It is in this sense that the project as outlined here may use cash inputs to create community groups; if handled properly wages need not destroy group structure.

There is an additional consideration that speaks in favor of the hillside as the unit of group structure. Many developmental experts recognize the long-term impracticality of scattered plots as the basis of a nation's agriculture. Many development projects have attempted to encourage collective farming as a road to increased output. The advocate of this strategy would view a Haitian hillside as a unit and would attempt to encourage the farmers to treat it as such.

The Haitian peasant is a long, long distance from this type of collective exploitation of contiguous plots. Even siblings, who might be expected to crop their patrimony in common, opt rather for clearly separated plots or--in the Acul watershed--for rotating occupancy. I feel strongly that it would be most unwise for USAID to link the watershed project at this stage to visions of collective farming.

Nonetheless the creation of functional units of terrace-builders and tree-planters is a first step in behaviorally validating the hillside as a functional unit. For the first time the internal boundaries artificially created by the historical accidents of inheritance and purchase will be exposed as such: artificial. And for the first time the farmers will behave as social units toward hillsides which in fact are natural physical units. This is one other feature which speaks strongly in favor of the use of the hillside as the guiding principle in forming action units. The dispersed-holding land tenure discussed here militates against this unity, it is true. But this is one instance in which the fragmenting dynamics of the contemporary system can be programmatically overruled in favor of a more unified land use model which may one day come to prevail.

F. Rented and sharecropped plots: the problem of tenants.

Yet another complexity is added to the matter by the apparently widespread presence of one or another form of tenancy in the project areas. For the most part this involves the leasing or sharing out of land by one community member to a lesser endowed relative or neighbor. If Farmer M, for example, is renting out a plot of ground to Farmer N, who gets to participate in the hillside unit responsible for the restoring of that subcatchment? To choose the tenant is a risky course of action. Tenancy may be ephemeral; I have found that in at least one community (elsewhere in Haiti) tenants did not stay for long on the plot. Is it wise to make them members of the hillside unit when, in a year or two, they may no longer have a stake on the hillside? Even more dangerously, decreeing tenants rather than landlords to be the members of the unit could result in eviction. Landlords are generally local farmers themselves and have small enough holdings to be eager to participate in this special type of wage labor. If only the tenant is allowed, the natural course is eviction, since the advantages from wage labor would quite probably be larger than the rent being collected from the tenant.

The opposite solution--that of making the landlord the member of the hillside unit and excluding the tenant--is equally counter-productive. Tenants of course tend to be less well off than landlords, even landlords who themselves are small farmers. To exclude them from the wage-earning opportunities is to go against the program objective of making special provisions for incorporating the poorer members of the community.

Obviously some sort of compromise must be programmed into the model. One possible solution comes from the presence of multi-plot holdings. That is, both tenant and landlord probably have stakes in other plots in the same or in other subcatchments. If the landlord is cropping as owner a plot elsewhere in the watershed, then he will be a member of that action cell and, since he can be a member of only one unit, he will lose nothing by permitting his tenant to be a member of a unit in another place. Likewise the tenant himself may have proprietary rights in a plot elsewhere in the watershed and will thus qualify for inclusion in a different hillside unit. Probably the most realistic strategy is to search for these compromises in such a manner that all residents of the watershed participate in one or another of the hillside units.

G. Land Transactions and Group Turnover.

The sale and purchase of land appear to be central features of the peasant economy of rural Haiti. This phenomenon, which I encount-

G. continued

ered in a lowland community where I did extended research, appears to be equally strong in the region of the Acul watershed. As one walks through the hills and inquires casually about ownership patterns of this or that plot, in as many cases as not the owner of the land will be said to have purchased, rather than inherited, the plot. In questioning peasants about their long range economic plans, it is clear that the purchase of more land is viewed as the major road to economic success. Most of the sales appear to be made for ritual purposes (especially burial), through a growing number of plots in the Acul region are reportedly sold to finance emigration to New York. More importantly, the purchases tend to be made by local cultivators who have amassed livestock and cash with a view to the arrival of these land purchasing opportunities. Land transactions thus serve as a vehicle of economic advance and have long been a central element in Haitian peasant economic organization.

The watershed project should make no attempt to stifle this local process. If the project were to lead to encroachments by outsiders, this would be a matter of project concern. But such dangers are more likely to arise in the irrigated lowland sections where successful project implementation would drastically raise the value of land. The improvements to land contemplated by the watershed project, in contrast, will scarcely trigger off a sudden commercial interest in mountain real estate by outsiders.

Nonetheless two types of dynamics could set in. On the one hand the agroforestation of the hillsides, by making overshoot of land on a particular hillside the entry ticket into a cash earning hillside unit, could possibly act as a disincentive to sell a plot which, under ordinary circumstances, might have been sold on the occasion of some emergency. Most developmental planners would see this type of brake against land alienation as a positive element. The question then arises, however, as to the impact of this brake on those individuals, especially younger ones, who would have used land purchase as a vehicle to economic autonomy. The likelihood of this pattern occurring is probably remote enough as to not warrant detailed planning at this time, but the possibility of such a process should at least be recognized.

The opposite pattern may also occur, in which the process of land transacting could jeopardize the solidarity of an already constituted hillside unit. What happens, for example, if the purchaser of a terraced and agroforested plot is not a family member who already has proprietary rights on that hillside but (as frequently occurs) a non-kin-related villager who has not been part of the hillside unit that constructed the terraces and planted the trees?

G. continued

This could threaten the solidarity of the group and the effectiveness of group control over the maintenance of erosion control structure.

Such a danger could be avoided by decreeing that anybody who buys into a watershed hillside automatically becomes a member of the erosion control unit in charge of that particular zone, subject to the same rights and duties with respect to maintenance practices. One suspects that a small farmer buying into a hillside (and most buyers appear to be small farmers) will be more than willing to participate in view of the incentives being programmed. At any rate this group membership would now become a precondition of purchasing land in the particular region. It would be most unwise of planners to attempt to stop land transacting in rural Haiti, at least as it most frequently occurs. But its project effects can be anticipated and provided for in the manner suggested here.

H. The Problem of State Land.

Though precise figures are lacking, state land accounts for anywhere from 25 to 40 percent of the land in the Acul watershed. (It appears to be less of an issue in the watersheds of the other PDAI project regions.) There are four possible types of state land in terms of present occupancy status:

1. state land which nobody is currently renting and nobody is currently cropping.
2. state land which nobody is currently renting but which is being cropped by de-facto squatters.
3. state land rented out to small cultivators who are cropping it.
4. state land rented out to well-off absentees and subleased for higher rents to small cultivators.

It appears that most of the state land in the Acul watershed falls under the fourth type of occupancy. I was told that a small number of well-to-do townspeople and/or speculators have a virtual monopoly on the land in the region. They rent it from the state at an annual rate of US \$5.00 per carreau (whatever the quality of the land) and sublease it to small farmers at anywhere from US\$20.00 to US\$40.00 per carreau, depending on the quality of the land.

This inequitable arrangement complicates the organizational process in those regions but does not lessen the need to carry out the same type of protective erosion control on this land (which happens to be in the upper reaches of the watershed) as on subcatchments

H. continued

owned by small proprietors.

The problem would become somewhat simpler if land in category 4 could be turned into category 3 land (see above). One straightforward way of accomplishing this would be to oblige renters of state land to themselves finance the construction of terraces and planting of trees on the land. Since the wages expended by the absentees would greatly outweigh any profits they could make from the land during the construction phase, we could expect them to release the land with great haste once enforcement seems imminent. This would free the land for direct rental by the local residents who currently crop it at inflated rates.

The entire issue of state lands is one of the greatest mysteries of contemporary Haiti, a black box to which access is impeded by a complex of apparently powerful interests. Several 19th century Haitian governments generated enormous amounts of revenue via the sale of state lands, and many family holdings of today are descendants of blocs of land acquired by ancestors through this procedure. The contemporary strategy, however, is to generate revenue through the lease, sub-lease, and probably sub-sub-lease of state land. How much state land is there, how much revenue is generated from its rental, and where precisely this rental fee terminates are all questions which probably nobody knows--including, this author suspects, those in positions of public power. Rather, there are probably local clusters of interests each willing to look the other way and not ask questions of people in other regions as long as the local revenue flow is undisturbed.

Barring clear support from the highest levels of the Government of Haiti, it would probably be unwise for USAID to interest itself in the general question of state land in Haiti. What may be feasible, however, is to precipitate rearrangements in the specific regions where large inputs of USAID money are to be made, such as the Acul watershed. This would be facilitated by a high-level GOH executive order permitting transfer of these lands from the Tax Bureau to agencies working more closely with development projects, the elimination of absentee sub-lesors by a strategy such as that suggested above, and the eventual leasing of the land to small cultivators who would then be brought into the orbit of the watershed project.

For the construction stage of these projects, it would be desirable to organize renters in these subcatchments into the same types of hillside units and pay them the same wages as apply to cultivators in the privately owned lower subcatchments. Maintenance programs could also proceed in the same way. Cash inputs could

II. continued

probably be eliminated by lowering rents, continued tenancy then being made contingent on upkeep of the terraces and trees. It would probably be better, however, to maintain normal rents and give modest quarterly payments such as have been suggested for farmers in the privately owned subcatchments.

In addition, the permanence of maintenance arrangements would be facilitated by guaranteeing renters of state land continued access to their plots--i.e. by giving them in effect some sort of tenure security. Outright transfer might be one eventual option, though for project purposes it would probably be more desirable to maintain state authority over the land in the early years of erosion control activities.

V. SUMMARY OF MAJOR RECOMMENDATIONS

The preceding section discussed aspects of the land tenure situation which could impinge on project success and made possible recommendations as to how to deal with these problems as they arise. The purpose of this section is to recapitulate the major program recommendations implied in the hillside unit organizational model. Land tenure becomes an issue when the project begins succeeding. But there are preliminary organizational challenges to overcome before the activities reach a state where land tenure dynamics begin to exert their influence. Arranged sequentially, the program recommendations would go as follows:

1. Switch from a residential to a hillside grouping of farmers for purposes of erosion control activities. The functional unit should be farmers who own or crop contiguous plots.
2. Switch from large subcouncils of 50 or more men to smaller hillside units of 15-20 men. Involvement and decision making will be more evenly spread.
3. Charge groups with decisions concerning types of trees, order of terracing plots (taking current crops into account), seasonal scheduling of activities to mesh with their cropping cycle, daily scheduling of activity, and allocation of workdays to different members of the group.
4. Provide groups with a monthly advance of cash that will serve as the source of purchased food for meals during the month. They are responsible for making the fund last a month and will thus get training in common manipulation of cash.
5. Involve women not only in the acquisition, preparation, and distribution of food, but also in lighter terracing and planting tasks.
6. Involve poorer members of the community by making sure that every single individual is in one hillside unit, excluding no one because of lack of land in the region.
7. Tighten up technical control over the progress of the work. Avoid building of unnecessary walls, excessively steep roads, and the like.
8. Clarify relations, especially as to decision-making powers, between foreign and Haitian technicians.
9. On completion of a subcatchment, clarify to hillside units their new status as vigilance and maintenance units.
10. Have each hillside unit verify the maintenance of all terraces and trees in its orbit every three months. Repair damaged items, and report when the hillside is in order.

11. Send up a delegated Project agent, on notification from a hillside unit, to verify that the hillside is in fact in order.

12. Pay the stipulated sum to those units whose fields are in order. Withhold pay from a unit any of whose fields has been neglected.

13. Throughout the entire project, have meetings and educational sessions in which the consequences of erosion and the need for trees and terraces are clearly communicated.

There are many missing steps in the above plan, but the recommendations provide a fairly concrete blueprint of a scheme that might work. The success of any scheme must be gauged in terms of a number of objectives:

1. Constructing erosion control devices that will protect the environment.
2. Maintaining these devices.
3. Creating coherent social groups skilled in decision-making, manipulation of common resources, and self-vigilance.
4. Involving women in the process of development.
5. Involving the poorest of the poor; those groups which up until now have remained at the margin of development schemes.

I believe that the model proposed here may succeed in these objectives. Because it is basically an untested model, it is unlikely to succeed in its entirety, and specific recommendations will have to be abandoned as experience proves them unfeasible. Nonetheless, it provides something which up until now several involved USAID persons have felt was lacking: a step-by-step plan which provides for maintenance as well as for construction and which unites two objectives which have generally been felt as incompatible: the paying of wages and the strengthening of community groups.

VI. CONCLUSION

It is hopefully not trite to conclude with a general observation concerning the need for much more precise step-by-step planning of projects at ground level than currently appears to be the case. Perhaps because of an information gap, there have been very few precise formulations about how PDAI projects--in this case, erosion control projects--are supposed to work at ground level.

When specific program objectives are absent--and by objectives, is here meant not only final outputs but also the intervening steps which lead there--they cannot be communicated to field personnel who in turn cannot communicate them to the peasant participants in the project. Spurious objectives then arise, and people begin going through compliant motions. For example, many apparently bizarre technical decisions have already been made in the soil erosion project. Retaining walls are built where they are really not needed (Toro now has a walled-in sinkhole), or where simple grass strips may be called for. And where the walls may be needed, they are built from bottom to top. Such technical decisions begin to make sense when one distinguishes between the stated objectives of the project and the actual objectives of project participants. There is a chain reaction which begins in Port-au-Prince and reaches down into project-involved villages. The prime motivation of the Toro participants is the receiving of wages. They do what they are told on the hillsides. For the most part, the walls have been constructed by people who neither work that hillside nor even live in that neighborhood. They are following orders, and their behavior makes perfect sense in view of the objective of collecting wages.

The meaning of not-grasped project objectives was dramatically illustrated on the morning that a road was being traced up into a mountain community. The purpose of these feeder roads is to facilitate erosion control and agro-forestation activities. As the planners of the road moved up the hillside, the group ran out of stakes to mark the eventual route. A peasant detached himself from the group, climbed up a mango tree, and slashed a half dozen large branches from this living tree to be used as stakes for the agro-forestation feeder road. When I remarked on this later to a PDAI supervisor, the response was that, after all, mango trees produce no fruit at that altitude. This demonstrates perhaps a short-term economic rationality on the part of the tree-slasher, but a failure to internalize long-range project objectives.

But such behavior is by no means restricted to the peasants. The behavior of the local PDAI supervisors themselves may also be governed by subsidiary objectives alien to the prime objectives of the project. They have been placed under pressure from Port-au-Prince to produce tangible results--were in fact criticized for falling behind. Their actual objective became that, then, of producing visible results. Their choice of technology--rock walls--was the one which permitted mobilization of the largest numbers of people and production of the most visible results. And their very

choice of hillside--including the sinkhole--appears to have been governed less by serious topographic considerations than by proximity to the road and subsequent visibility of the finished works to visiting supervisors. I was told that one of the local PDAI employees involved in the project stated clearly that the walls will fall down in a few years anyhow. If the leaders themselves are enmeshed in chain reactions and skeptical as to the validity of the project, the wage earning peasants can hardly be expected to identify more seriously with project objectives.

This chain of mechanical compliance, it should be said in passing, extends into research activities as well. A supervisor of PDAI's preliminary survey in the Cayes area told me quite frankly that he and his interviewers doubted the accuracy of the data and the basic validity of getting useful information with such survey techniques. Whether his general views on research are correct or not, it is important that he nonetheless went through the motions of sending out interviewers, who themselves went through the motions of questioning peasants, who in turn went through the motions of giving what were probably inaccurate answers. There are strategies of doing at least reasonably accurate rural economic research which involve going beyond conventional survey techniques to cross check the accuracy of data. But no such measures were attempted. Instead, a foreign-language (French) questionnaire was rustled up (I was told it was taken in full from some other survey that some groups had once done, though I don't know if this is actually so) and hastily constituted a research machine which went through the motions of "doing a survey". I have seen thousands of these filled questionnaires lying in scattered bundles in empty rooms in different parts of Haiti. As a perhaps fitting symbol, one visiting consultant to Jean Rabel area saw filled questionnaires being used as toilet paper in the outhouse of the local project office.

The slashed mango branches used in the Acul road construction and the questionnaires in the Jean Rabel outhouse are results not only of compartmentalization of objectives and lack of a total project vision at village level. In many important ways, project obstacles stem from a lack of on-going information on the part of office based planners in the capital city. My remarks here pertain principally to USAID personnel.

The problem of isolation from village realities is intimately linked to a controversial dichotomy frequently heard in development circles, the dichotomy which contrasts the task of "institution building" with that of "grass roots involvements". Advocates of the former point out correctly that the major problems in Third World countries are institutional in nature and that little development has occurred if grass-roots projects--roads, wells, or whatever--are finished but the capacity of host country institutions to maintain and duplicate the projects has not been strengthened. But though the objective of the "institution builders" is unassailable, there

is a frequently assumed programmatic correlate that is questionable: deal with host country bureaucracies and their employees, stay away from the peasants.

The unfortunate consequences of this unspoken but effectively enforced premise are to be measured not only in terms of alienation from important domains of host country reality. More importantly, they may result in lost developmental opportunities. The goal of institution building entails, it is true, exerting pressure from above. But would not an equally great institutional service be performed by encouraging the birth and survival of peasant groups who have the training and experience to exert pressure from below? This is not speculation. In some places where community groups have become strong, the power of traditional rural Haitian authority figures has begun to wane. In many communities near Cayes, it is the Community Council which now first intervenes in conflict. And in one of the project communities of that region, the current chef is a modest figure out swinging a hoe on terracing projects with the rest of the community. I was surprised to see a peasant openly defy a rural policeman's order to be silent during a meeting in the project region. Power from above remains strong; but there are interstitial zones where united peasants can make public servants --be they agronomes or marechal--toe lines which they have never toed before.

It was disappointing to see two PDAI technicians in a village playing cards on an early weekday afternoon. What is more likely to cut off such card games? A USAID memo from Port-au-Prince to Damien? Or an angry group of peasants that demands the presence of the card players at some project site? Institutions need shaping, but why not supplement pressure from above with direct efforts to train groups in exerting pressure from below? This entails a search by USAID for more direct routes to the villages themselves to have some sort of direct input into program events at that level.

I am convinced that any developmental model which relies on our card players to be the shapers of their own peasant challengers is unworkable and perhaps a little absurd.

The erosion control model presented in this report stands at least some chance of working. But though the organizational steps have been specified with some precision, the identity of the organizers themselves has been left purposefully open. USAID has an increasingly strong congressional mandate to make sure that assistance reaches the villages. This may entail exerting pressure on "normal channels". But it may also entail--rather, has to entail--the creation of slots whose incumbents, whatever their nationality, have the specific mandate to avoid normal channels and get directly to the villages.

APPENDIX:

EROSION CONTROL AND THE MINIMUM WAGE

The basic strategy that has been proposed here entails an extending of the direct cash flows into the community beyond the construction stage. To render this financially feasible, it will probably be necessary to rehash once again the entire issue of the national minimum wage. It should be clear by now that this author is firmly in favor of remunerating hillside farmers with direct cash payments. But whether the national minimum wage should be the criterion is another question entirely. There are at least six considerations which raise doubts.

1. Arbitrary origin. It is not clear by what criterion the \$1.60 level figure was chosen. Was there systematic calculation based on the Haitian reality? Or was it an arbitrary figure chosen because of its attractiveness in contrast to current going rates?

2. Applicability to industrial employers. Such a wage rate appears justified (somewhat low, some might say) in the case of reasonably well capitalized owners of profit-making enterprises. But except for a few areas of the country most of the hiring of rural laborers is done by small farmers for whom the rate of 8 gourdes would be prohibitively high. (Going rates appear to fluctuate between two and a half and four gourdes.)

3. Desirability of adhering to local rates. It could be argued that the Government of Haiti and USAID have sufficient funds to adhere to the fixed minimum wage (that, in fact, they may have no other option). A counter argument could be made, however, that such a policy rigidly applied to the rural areas would price labor out of the reach of the small farmer who currently needs it for parts of his agricultural cycle and might precipitate a mass rush to the status of wage laborer on the part of the individuals who up to now have lived basically from labor on their own gardens. Some cultivators could conceivably even stop farming, certainly not a program objective. Because of these considerations, it might not be unwise to take as a guideline the wages that are currently paid each other by small cultivators, taking the highest going rates and matching them.

4. Absence of eight hour day. The minimum wage is predicated further on an eight hour work day. Such a work day is rare for hired labor in the rural areas. Most wage labor arrangements which the author has seen in rural Haiti cover substantially shorter periods of time, most not extending over five hours.

5. Work performed on farmers' own land. If the model proposed earlier is followed, it would be clear to the farmers that the watershed project is first and foremost the government's service to the country. Nonetheless, the farmers will still be making improvements on their own land, improvements whose fruits may be delayed but which in the long range

will pay off. This consideration alone would justify shying away from the national minimum wage. Minimum wages are set in the context of workers whose labor is for the benefit of others and whose sole stake in the enterprise is the money received. The improvements being made on watershed land make this a somewhat different type of project, one to which minimum factory wage standards need not be mechanically applied.

6. Excessive cost. It is difficult to make statements about the eventual cost of the restoration of watersheds, simply because no precise calculations have yet been made on either the number of targeted hectares in a given watershed or the per-hectare cost of program intervention. When such calculations are made, it should be recalled that maintenance will also entail cash expenditure, albeit less than in the construction stage. Even in the absence of calculations, one can suspect that application of minimum wage laws throughout the duration of the project will raise costs above the level of feasibility. If this is so, then we do not even have the option of applying minimum wages. The choice will then be between not doing the project or doing it at going rural rates, at least during construction stage. Having heard of the \$1.60 rate, farmers would, of course, prefer to be paid at that level. But this author is convinced that a reasonable use of local going rates, explained as a matter of financial necessity, will be accepted and even enthusiastically received throughout the targeted watershed areas.

In sum, it is to be recommended that discussions of minimum wages for urban factory workers be disassociated from watershed protection designs to be carried out by farmers on their own lands. This well-intentioned proposal to raise wage levels could, in the rural areas, end up sabotaging efforts to protect watersheds and cut off completely any flow of public cash into the watershed areas.