OBSTACLES TO THE INTEGRATION OF LOCAL WOMEN IN DEVELOPMENT PROJECTS

by

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Purpose of Field Research

My general approach to field study in Upper Volta was to analyze socio-economic and historical data in order to identify societal changes and learn the evolutionary direction of the society; I also wished to find out from villagers the ways in which they perceived their developmentsl needs, given the direction in which their society is evolving. This second aspect of my work is rare in the literature of development and, I believe, offers an important dimension.

During 30 months of field research, I conducts three studies, each encompassing several issues related to development. The first eighteen montsh of research were financed by a grant from African American Scholar's Council.

As part of a team working in four countries within the Sahel, my task was to identify the adaptive strategies of the local population afflicted by drought. I began by focusing on adaptation to ecological crisis and discovered that international intervention in the form of aid programs generated many of the recent socio-economic transformations of the region. Therefore, I ended with a study of the impact of international intervention on the local village economy -- specifically, on its effects on the units of production and therefore on the division of labor within these units.

The stcond study, requested by the Office of Rural Development, dealt with the attitudes of villagers toward urban centers and

their services, which include development projects. The study consisted of a thorough exploration of villagers' attitudes toward these projects, their structure and weaknesses, as well as villagers' suggestions as to the manner in which the services may be improved.

The third and final study was a base line socio-economic study conducted in a village before the installation of a mill and pump powered by solar energy.[1] In addition to studies of local water use and food processing, a method of managing the mill was devised, based on the village women's recommendations. Its primary purposes were to insure equitable distribution of the services of the mill and pump and provide a means of increasing the developmental potentials within the community. I also explored the wider socio-economic implications of this type of technology transfer.

Choice of Location

The field research was conducted in three villages. Although all were located in the department of the east, they are in two different regions several hundred kilometers apart.

The first two villages, Piela and Kouri, were chosen for the study on adaptive strategies to the drought. Both villages, locatd in the canton of Piela, were chosen primarily because of their geographic location. They border the most severely drought-stricken region, the Sahel. Piela, rather than the Sahel, was

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1. Detailed case studies and socio-economic data will be in my forthcoming doctoral dissertation to be submitted to Yale University, New Haven, Connecticut.

chosen because it would afford observation of communities stricken by the drought to varying degrees, and thus provide a balanced perspective on the effects of the drought. These villages housed migrants from severely afflicted areas, and had themselves witnessed a decline in rainfall and moderate to heavy crop failure. In addition, the area is peopled with a variety of ethnic groups which, though small in number, provided the basis for the comparative analysis of various types of adaptive strategies developed by societies exploiting the eco-system in different ways. Lastly, the area has been isolated in post-colonial times. There were few roads. few government services and very little migration. Hence, transformation related to the integration of the villages into the more modern sectors of the society were more recent. (Villagers could remember the period of influx of manufactured goods, for instance.)

The third village, Tangaye, had been previously selected by A.I.D. and NASA to house the experimental photovoltaic system. The village was chosen primarily on the basis of its location. Tangaye is located on a main road, thus providing easy access for monitoring. As a site, Tangaye proved to be an excellent choice for the purpose of comparative studies since, unlike Piela and Kouri, it was not isolated. It was located in a high population density zone, peopled by a different ethinc group, and was known to have high incidences of seasonal migration. In addition this area had had a longer history of participation in developmental programs.

Finally, members of all the communities showed a willingness to participate in the studies and were interested in the subject matters, as well as in the possibility of having their opinions expresssed in the study.

I first established contact with C.V.R.S., the Voltaic social science research center, in Ougagougou. They selected that I conduct the study in Boganell. Prior to selecting the first two field sites, I presented myself to the local authorities in the region. I was able to conduct a number of informal interviews with them which proved quite informative. After these interviews I visited a number of villages within the area and spoke to village chiefs, school teachers, extension agents and some of the members of the community. The villages were selected on the basis of the population's willingness to take part in the study.

In Tangaye, I contacted the local authorities there and interviewed the chief of the village before embarking on the study itself.

In all cases the length of my residence permitted confidence to grow between the villagers and myself. Being a woman facilitated my contacts with women and helped me develop good relations with them. In addition, the duration of my stay enabled me to establish contacts with government workers, extension agents and teachers in the area. They spoke freely of the constraints as well as the advantages of working for the government and spoke at some length about issues related to development.

An important advantage was that my field assistants, in each case, were residents -- if not of the village, of neighboring villages. They had close ties with the community, knew the codes of behavior and transmitted much of this information to me. Their suggestions and elucidation of problems with questionnaires, the translation of certain concepts, among other things, were extremely helpful. I also spent time discussing their biases in relation to the problems on which the study was focused. This was very helpful in sharpening their skills in obtaining information for the people.

Information was gathered in several stages.

Stage I. Basic data on the communities came from general interviews, surveys, questionnaires, and participant observation. Members of the village of as many age categories as possible were interviewed for data on all aspects of social, political, and economic organization. Some of the areas in which information was gathered include: household composision: residential organization, marriage statistics, age categories of the population, kinship categories, networks, right and duties; economy: types of economic activity, degree of subsistence, technology, division of labor, farming, types of crops produced, land tenure, types of land resources, other economic resources, organization of labor, units of production, several and age bases for the division of labor, traditional and non-traditional marketing, household economic activities, craft production, migrant labor, and other categories of economic activity.

Since one of the primary objects of the research was to record changes in economic and social organization, it was necessary to gather information on the pre-colonial and colonial past known to the areas. Aside from life history of the villagers of each generation and government archives, two main sources served as guides. These were the major work on the pre-colonial political organization of the Gourma, by Georges Madiega, and the studies of Michel Cartry. Life history of the villagers provided information on the generational changes in economic activity, particularly and most dramatically for women.

Other technical aids was enlisted in the form of a map. A cartographer mapped all the fields in the villages indicating water resources, fruit trees, soil types, elevation, etc.

Stage II. After the basic data was recorded, farmers were asked their attitudes toward urban centers, and the reasons for their opinions. They replied to questionnaires and in informal interviews. Responses were categorized according to whether they came from people who had or had not visited urban centers and according to sex. There were significant differences in opinion among the four categories.

Stage III. Daily observations on women's activities were recorded early in the field period and refined as more detailed information became available on the community. My assistants and I spent more than 500 days observing and recording the daily activities of men and women chosen on the basis of age, status

(i.e. head of household, first, second, third wife, widow, etc.), marital status, number of children, number of people within the household, number of assistants to the person within a given day's activity, numbers and sexes of members within the subject's unit of consumption and production, degree of access to labor, and other varioables. Each individual was observed for entire days, and his or her activities recorded and timed. The observation days span the entire year. This data have been processed to find out the amount of time men and women of various stauses and ages spend in all forms of agricultural, non-agricultural and household activities. There are significant differences according to the status, sex, age and the size of the unit of production within which he or she operates.

During the field period I formally interviewed more than 982 people. Formal and informal interviews varied in length from 25 minutes to three hours, depending on the inclination of the informant.

History and Description of the Region

Colonial History

The area was colonized by the French at the turn of the century (1895), a period marked by radical changes in the village's economic and political organization. These changes were generated by the necessity to pay taxes to the colonial government and to supply forced labor and surplus food to the colonial administration.

Forced labor persisted until Upper Volta gained independence in 1960.

The traditional political structure is fairly similar in all three villages. Piela and Kouri have the same political history as they were once part of the kingdom of Piela, which was a member of the federation of kingdoms in the north of the Gourma region. The village was at the base of the traditional political structure. Groups of villages composed a larger political unit known as the Kuamba, and later known to the colonial government as a canton.

Tangaye has a more complex political history because of its political association with both the hierarchical Mossi kingdoms as well as the Gourma kingdoms.

At present the resident population is organized on the basis of membership to patrilineal descent groups which gives individuals exclusive title to land and certain types of traditional religious and political offices. The villages are still administered by the traditional chiefs.

The country is divided into administrative units known as departments. Within each department is an organization of rural development known as the O.R.D. which is directly linked to the ministry of agriculture. All rural development programs are administered by agents of the O.R.D. The administrative center for this region is in a semi-urban center known as Fäda N'Gourma. Rural development projects are administered from this center where the headquarters for the organization of regional development is located. Extension agents and others are trained and given

their assignments from there.

All villages are located in the department of the East. According to the most recent population statistics provided in the Recensement Générale de la Population (Institut National de la Statistique et de la Demographie, 1975), the population of this department is approximately 413,146 or 6.9% of the population of Upper Volta. The entire region is sparsely populated. Average population density varies from 15 to 30 inhabited per square kilometer. The population of Tangaye and Piela numbers 2,000 and 3,000 inhabitants respectively, while Kouri numbers slightly over 600 inhabitants.

Soil conditions are quite varied in this department. Kouri is noted for its relatively rich farmland while farmers of Piela must purchase food to supplement their produce. (This is one of the reasons given for the high incidence of migration.) Villagers seek labor in order to earn cash with which to purchase grain.

Isolation is a problem in Kouri and Piela where the principal roads are cut off during the rainy season. A road and bridge linking the region to several administrative centers were built with forced labor during colonial times. After independence, the Voltaic government, left with few resources and no longer relying on forced labor for the upkeep of roads, was unable to maintain them. The roads quickly fell into disrepair and the region reverted to its present geographical isolation. In contrast, Tangaye is located on a major international road and is easily accessible all year.

Ethnic composition of the area is richly varied. The Gourma predominate, but there are numerous Mossi, Fulani and Zaose settlements as well as a smattering of other societies. All are organized on the basis of membership in a patrilineal descent group.

Village Economy

Farming is the principal activity. Roughly speaking, there are two seasons: the rainy season, from late April to late September, and the dry season, from October to April. Soils are prepared in late April and May. Seed is planted in June and July and the harvest extends from late September to late December. The rainy season is devoted exclusively to farming and the dry season to craft manufacture and commercial activities.

Villagers cultivate subsistence crops, sorghum and millet, and a minor one, maize, in addition to a variety of other vegatables and cereals. The major cash crop is peanut, and small quantities of sesame and cotton are also produced for sale. Colonization, which increasingly integrated villages into the cash economy, had the effect of radically changing the varieties and quantities of crops grown in the region. As a result, in the past 30 years there has been great increases in the production of sorghum and also of the short cycle peanut. Both are sold on the national market.

Crop rotation, as such, is not practiced by the farmers. Generally, sorghum or millet is sown in the same fields until the soil is exhausted. The field is then sown with peanut, and after

a number of years it is abandoned.

Land is owned and controlled through the patrilineal lineage segments residents of the village. All individuals have access to land owned by the patrilineage. Women who marry away from their natal villages and their families have access to the land controlled by their husband's patrilineage. Division of labour is based on sex and age and is characterized by a great degree of interdependence at all levels of production between men and women. This is especially true of farming. The task of soil preparation is generally allotted to young men. Planting and weeding is done by women. At harvest time men fell the stalks of millet while women remove the ears. It is generally known that though a man may cultivate millet he is not able to sell it until the seeds are removed from the stalk. This is a woman's job.

Land, though abundant, is far from fertile. Farming technology consists of a few manual tools: short handled hoes for tilling the soil and weeding, simple scythes for clearing the land of shrubs and for harvesting. The limiting factor of production is labor and in this region the labor supply per unit of production is low. Most farming units number four people or less, composed of a man, his wife, and his two children. This contrasts sharply with the units of production known to the region even as recently as the last generation. Units of production were composed of larger, multigenerational groups of people who also shared residences, and formed part of a single unit of consumption.

(See, for example, the work of Madiega 1978, and Cartry, 1966).

At present each family works on a large plot producing the staples millet and sorghum, providing the primary food supply of the household. The fruits of this plot are controlled by the male head of household whose duty it is to feed the family. Nearly all the members of the family cultivate small fields of peanuts, cotton, or garden products. The produce from these plots are individually controlled by the producers and are either sold to merchants or processed and marketed locally.

In the recent past, according to informants, heads of households rarely cultivated cash crops. They devoted their energies entirely to the family plot. At present male heads of households are dividing their time between the family plot and the individually controlled fields of cash crops. This means that if production in the family plot is to be kept constant, women must reallocate their time, thus increasing the amount of time spent in the family field. Women face the greatest time constraints in this crucial season. They must divide their labor among the various activities of farming in two plots as well as taking care of household chores. In the recent study that I conducted in the village I found that young married women spend more than 75% of their farming time in the family field. The women of the last generation unanimously assert that this was not the case in the past when the units of production were larger and men depended on their sons and collateral kin for most of their labor supply.

The lack of time to devote to their private plots severely limits the amount of land women may cultivate and consequently the amount of produce they have at their disposal. In addition, their fields are more vulnerable (to pests, for instance), thus limiting their potential productivity even further. This directly limits their private marketing ventures (often based on selling processed foods) and their access to personal cash which is usually acquired through the sale of cash crops.

One may ask why heads of households have begun cultivating private fields of peanuts and other cash crops. The answer is not altogether simple. Since colonial times (i.e. the early 1900s onward) the villagers have been pushed further and further into a cash economy. At first the villagers earned only the necessary amount to pay their taxes. Most of their needs were met by their own systems of production. Gradually products produced in the village were replaced with manufactured goods originating outside the village. Originally, the social relations of production within the village were such that villagers had access to all goods produced within the village without paying for them. As the villagers' products were increasingly replaced by goods produced outside the village, farmers found themselves buying more and more of the goods which they once produced. Their only access to cash was either through employment or the sale of cash crops. Because of inflation the sale of cash crops is less and less profitable. In a recent work, Franke and Chasin showed that at the outset of peanut production in the late 1930s,

100 units of peanuts could purchase 100 units of manufactured goods. At present, 100 units of peanuts purchases 37 units of manufactured goods. Hence in order to meet their need, farmers have had to step up their production of cash crops drastically. Given the size of the units of production, the level of farming technology and the low yields of the land, increase in production places great burdens on all members of the unit of production.

Since 1973, inflation is also such that sometimes farmers find that they cannot feed their families once they had sold their crops. As a result, women have to help to feed the family with their private grain reserves. This usually occurs during the farming season when granaries are virtually empty and human energy expenditures are at their highest.

The low labor supply within the units of production contribute to the great interdependence of all members of these fragile units. In addition, the interdependence of men and woman as a result of the division of labor is intensified when there are fewer men and women amongst which to divide the work.

Not only has women's work in the fields increased, but with the decrease in size of residential units, much of the household work falls to her, with few people to assist her. Thus the rainy season is a period of increasing strain on the farmers, but even more so on the women.

Following the farming and harvest seasons, late December to January, dry season economic activity centers on marketing

processed foods and manufacturing and selling crafts. Women are the principal participants in the traditional market. Initial investments in marketing are made with the cash or the raw goods produced during the farming season. The time pressure characteristic of the agricultural season is eased at this time. Womeh have time to process foods, produce crafts and be with their families. (My fieldwork showed that women devote four times the number of daily hours to their children in the dry season as in the farming season.)

Although women have more time at their disposal, the resources they need, such as water and wood, are less conveniently located in the dry season than in the rainy season when they establish temporary residences in the fields, close to wood and water sites. Because women have to walk further for supplies, they are forced to devote a greater number of hours in the preparatory stages of food processing.

The dry season is also a time of large cash expenditures, particularly for social purposes. Although there are funerals at other times, more money is spent on them now; there are also more marriages. This places a burden on women, since this is the only period of the year that they can build their cash reserves. Women here identify building independent financial resources as a primary need. Husbands and wives do not share incomes; nor do wives depend on husbands to support their personal needs and the women often take partial responsibility for providing such material needs as clothes and transportation for their children.

They are also responsible for providing their own support in old age.

Field Observations

The examples in this section provide descriptions of development efforts in the field and obstacles to implementing them within the following areas: 1) extension agents, instruction and farming cooperatives; 2) credit; 3) access to land and water; 4) marketing; and 5) non-agricultural employment. The presentation of case studies will be followed by recommendations.

In light of the recent drought, there has been concern with increasing cereal production, storing cereal in order to build a reserve of millet in case of famine, and providing cash crops. To do this, the government of Upper Volta has launched an extensive campaign in agricultural development. Agricultural extension agents are the principal implementors within this campaign. They are trained to provide instruction in new and more effective methods of farming and to help organize farming cooperatives. A great majority of those trained to become agricultural extension agents are men. The Organization of Regional Development of the East said that there were few women among them because most women in Upper Volta lack the necessary education. The O.R.D. of the East has made an effort to increase the number of extension agents in the region, but they have recruited very few women.

Farming cooperatives are composed of small groups of villagers, divided according to sex. The reason for this division is not clear, although it is clear that the villagers did not insist on this. In fact it is not clear which development organization designed the present cooperative system. There are a few women's farming cooperatives in Tangaye. In the other few villages, however, all the groups were composed of men.

Members are usually chosen from among young people who join the groups voluntarily. The group works on a communal field about three times per week. The harvest is marketed through the Organization of Regional Development and the profits are distributed among the members at the end of the harvest. The villagers are encouraged to invest their profits in buying equipment for farming (ploughs and animals) and new seed. The equipment and the seed becomes the property of the group.

One of the major obstacles of this system lies in the sex segregation of the cooperatives. In the traditional sex division of labor for farming, women and men collaborate. Women plant seeds, men clear fields, and so on. The cooperatives, by virtue of the requirements for membership, disrupts the traditional division of labor characterized by interdependence and cooperation between men and women. In addition, since most of the extension workers are men, there were fewer women's cooperatives formed because of the difficulties of establishing contacts between men foreign to the villages and the resident women. The composition

of the group and therefore the relationship between group members provided additional obstacles. Members of the group were admitted on a first come, first served individual basis which threatened the cohesion and solidarity of the group. The villagers are familiar with many forms of traditional farming cooperatives; however, these are based on kinship, friendship, or ritual ties. In addition, these associations are based on traditional values; their rules serve to minimize internal conflicts and to promote group solidarity as well as commitments to the goals of the productive unit.

Many villagers mentioned that the basis of selection of members was alienating. Inasmuch as traditional rules for cooperation in agricultural production are not respected, even those who want to join cooperatives find that they have to alter drastically their customary patterns of production in order to take part in group activities. This often poses too great a risk for the villagers. As a result, these groups often appeal to a younger, somewhat marginal set of village residents, who may be motivated by the possibility of receiving credit and of making money as quickly as possible. As the extension agents have noted, many are not fully committed to the programs. Consequently there are frequent conflicts related to unequal labor investments of members, distribution of profits, and leadership within the group.

There are additional problems created by the feeble numbers

of extension agents, their unfamiliarity with the local cultures, the manner of instructing, or the structure for communications. Instructors are recruited from all over the country and can be assigned to any area within the department of the east. Some effort is made to assign instructors to areas where they are best suited. For the most part, however, bureaucratic needs take precedence. Thus in the areas of the present case studies, many of the instructors are unfamiliar with the region, and often need time to develop the local language skills. Although this factor is not very serious in itself, it is aggravated by the continued low numbers of extension agents per population. So lack of communications skills adds to the problem of ineccessibility to the local population of the training provided by the agents.

The bulk of communication occurs in group meetings which generally take place in a classroom setting. The extension agent plays the role of teacher. There is very little room for an equal and free interchange of ideas between extension agent and group participants. Communication is rendered difficult and members of the group often misunderstand much of the information presented to them. The following is an example of the extent of miscommunication possible in such settings. I was interviewing villagers on their attitudes toward governmental services available in the village. Many villagers mentioned that they had their money "stolen" by the O.R.D. Knowing the agents personally, I was surprised by these statements. The villagers explained that

they had joined the cooperative in order to receive credit. They believed that they had only to pay 500 CFA ($2.00) and this would entitle them to animals, ploughs, and other tools. A few received credit, but most had waited for more than a year and so far had received nothing. Their money had never been returned. I then spoke to the agricultural extension agent who told me a completely different story. The 500 CFA was a group membership fee used for various group-related activities. Credit simply meant credit for tools and animals. Many of the farmer did not realize that credit meant they could borrow money to buy tools and animals and would have to repay the money. They also did not realize that group membership did not guarantee access to credit. Worse, the extension agents were totally unaware of the lack of comprehension among the villagers. They were shocked at being accused of thievery.

Because of the setting and the form of instruction, i.e. lack of dialogue between farmers and extension agents, instructors often do not realize that group members have totally misunderstood the goals and purposes, and sometimes even simple instruction.

Time

Frequently the programs are insensitive to the time constraints of the people, particularly women. In the first place, membership in the cooperative requires spending additional time in another unit of production. This is highly impractical for people responsible for producing subsistence as well as cash crops.

Time constraints are particularly significant for young married women. For women who consented to join the cooperatives, time constraints accounted for the great irregularity of attendence characteristic of the cooperatives.

Time constraints also limit access to training for large groups of villagers and especially women. In summary the structure, organization and training methods seem to conflict with traditional systems of the same order, thus requiring participants to alter much of their customary behavior patterns in order to take part in the training programs. Time, places and patterns of instruction are ridigly set; as a result, women frequently cannot participate. Of the few farming cooperatives in which women do participate, the characteristic nonadaptation to women's schedules results in irregular attendance and lack of motivation.

Credit

Surveys conducted in both areas show that there is a greater demand for agricultural credit than is in fact available. The increased demand for credit seems to stem from the growing concern with the prospect of famine. Villagers have witnessed a disastrous long-term drought in the last decade which severely the soil. Yields are extremely low and farmers find that they must cultivate increasingly larger surfaces in order to satisfy their food needs.

In Tangaye the villagers find that they cannot satisfy their

food needs by farming. More than 80% of the villagers reported having to purchase millet in early August, before the first fruits of the harvest in late September.

Since technology remains simple and the quality of the soil has deteriorated, farmers find that they must increase the area of land cultivated in order to increase their production. To do that, they need new tools which they can buy only if they get credit. There are many obstacles to their getting credit, however.

In some areas credit is available only to members of an agricultural cooperative. Thus, heads of families who want ploughs but who do not want to work within the cooperative structures are not given credit. In the areas where credit is available to individual families for ploughs and animals to draw them, it is unavailable to women, and even if it were available it would not suit their needs. It has been stated that farming with ploughs requires a minimum labor force. In most areas it is known that women tend to their plots alone or with the help of small children. Animal-drawn ploughs requiring a substantial amount of labour seem not to be the answer here. Women need access to credit for more appropriate technology. One must bear in mind that women in general tend to have relatively little access to surplus labor, and even less to capital. The issue of the relative inapprorpriateness of technology goes beyond the question of women. It affects all members of the village community. Farmers have frequently mentioned the problems they face with

imported tools that are not adapted to the local soil. They are fragile and break down frequently, sometimes at crucial times during the farming season. Repairs are virtually out of the question, particularly during the rainy season when repairmen and replacement parts are unavailable. Villagers also mention that tools are too often delivered piecemeal, which means that a farmer may be able to seed large surfaces but lacks the weeding attachments. In addition, foreign tools are expensive and may require extraordinary outlays for the purchase of animals with which to draw them. In certain areas the farmers are not familiar with animal husbandry and find it difficult to train and keep animals. These farmers may own livestock but the livestock is often placed in the care of the neighboring pastoral group.

The expense involved in the purchase of these tools returns us to credit. The manner in which credit id dispensed requires careful consideration when planning. Flooding the community with money from outside sources can have disastrous effects on the fragile village economy. For example, it was announced that the government was extending credit to farmers who wanted to buy animals for use in animal-drawn ploughs. Almost overnight the price of animals doubled. The farmers who were able to take advantage of the credit found themselves deeper in debt than they had expected to be. The rest of the villagers were squeezed out of the animal market because of the inflated prices.

The introduction of large, easily available sums of cash is

not the answser. Cash outlay, without an understanding of the impact locally, may be destructive; in addition, it may exclude women more fully from participation in and the benefits of local food production.

Access to Land and Water

Access to land for production is not itself a problem for women; traditionally, they have access to land through their patrilineal descent group. There are, however, other factors that indirectly affect women's access to land. The three most important are: the time she is required to spend in her husband's field; the proximity of her land to her husband's field; and her personal access to other labor.

The division of time and labor is such in the contemporary unit of production that women are the most pressed for time of all the members of the family. In the past, units of production were larger: several generation of agnates worked the same communal plot. There was less pressure to produce surplus because the village was still a self-sufficient economic unit. Women gardened and tended private plots of peanuts and millet, the fruits of which were marketed. Since farming groups were larger and fields smaller, women had more time to devote to their own fields. In addition, they seem to have had more access to labor than now, particularly the labor of the children of their natal family. In the smaller units of production predominant in the traditional economic sector of the village, women, their husbands

and their children, shoulder the burden of farming larger surfaces than ever before, partly because of the need for surplus millets or peanuts for sale, and partly because the new unit of production is unigenerational. Responses to my interviews indicated that a woman now spends twice as many hours in her husband's or the communal fields as she once did. Therefore the time she can spend in her own field is greatly reduced. Time constraints determine the location of her fields. She must have a field close to her husband's and thus the choice of land available to her is severely limited.

Proximity to her husband's field permits her some degr-e of pest control over her own field. (She can spot birds and animals entering the field before they do great damage.) If she can secure the help of a child she has a little more freedom in the choice of terrain. Proximity to her husband's field also insures that she has more time to spend in her own field as she does not have to travel long distances. She must acquire a plot of land that does not require excessive preliminary preparation, such as clearing heavy trees, as she has limited access to labor for her personal fields. Plots of land that have already been cleared have already been cultivated, and usually depleted through repeated sowing of millet. Thus women often have to settle for the most undesirable plots of land.

Development projects in this region have created imbalances in a number of ways, particularly by providing opportunities for

employment for men and not for women outside traditional production. For example, by employing men in construction, particularly during the rainy season, by forming sexually segregated farming cooperatives which draw men away from their personal farms, and by providing technology which addresses itself only to the needs of men, development projects remove men from farming at crucial periods in the agricultural cycle, thus increasing the burden of women in the family fields and leaving them with less time to produce in their own.

Access to Water

Irrigation is a classic example of uneven development practices that create imbalances in the distribution of services in a once carefully balanced working community. Catholic Relief Services prepared an irrigation site. Since a limited number of irrigated parcels were available, villagers were told that only those who worked on the project would be given a parcel once the land was distributed. Needless to say, only young men worked on the project. They were selected by project directors who felt that heavy construction work should be left to young men. As a result, the parcels are worked almost exclusively by young men. They grow large amounts of onions, rice, and vegetables off season, which they sell in international and local markets. There are no women taking part in this lucrative off-season farming. Because of the way in which the project was conceptualized from the very beginning, what seemed to be an impartial and fair requirement resulted in the exclusion of women.

Markets

Many women have access to cash income only through marketing agricultural produce. They use the money to buy all needed goods, including clothing and medical attention. In the past, women had greater access to goods produced within the village through the reciprocity in social relations of productions. The decline of production of village crafts has deepened the villagers' dependence on items produced outside. Since the price of manufactured goods has risen out of proportion to villagers' incomes, women are placed in an increasingly difficult position since their access to money is even more limited than men's. As we have seen, men may earn wages for their labour outside village communities, but women are rarely hired outside the communities and must remain home to fill in the gaps created by the absence of male labor.

Obstacles

There is growing evidence to show that marketing foodstuffs is increasingly inadequate as a means of providing for non-nutritive needs. Though manufactured goods are growing in cost, statistics show that the exchange value of goods sold by peanuts is declining. Therefore real income of the peanuts is decreasing. Government statistics show that 80% of the agricultural products marketed in Upper Volta by villagers are sold below established government prices. The reasons for this vary. In this area most of the people who sell below minimum established prices do so because they have

mortgaged their crop before it has even been harvested. Hence if a farmer has emergency expenses during the rainy season, such as a funeral or illness, he or she has to borrow from merchants at a tate of 100% interests. Thus if millet is sold at 500 CFA per tin at harvest time, the farmer sells it to his or her debtor at 250 CFA per tin. In other words, the creditor will ask two tins of millet in return for the loan of 500 CFA.

Efforts to assist farmers market their goods is staunchly resisted by private merchants who are firmly entrenched because of the credit systems established within the villages, and who can afford to purchase grain at higher prices. Consequently, very few goods are marketed through government agents. In Kouri, villagers have not sold to the government since 1973.

Women in Kouri are responsible for the bulk of the cash crop peanuts. They produced roughtly 80% of 60 tons of peanuts sold in the village in 1977. Yet the marketing of these products is completely out of their hands. They must rely on middlemen who sell to large merchants in the area.

Women have often expressed the desire either to have personal access to market and thus eliminate the middlemen, or to be able to sell such by-products as peanut oil. It has been shown that a tin of peanuts that sells for 500 CFA/can, when converted to oil and other by-products can bring in as much as 1,500 CFA on the traditional market. Thus the material advantage of bypassing middlemen is great; however, women's produce lacks market outlets as the traditional market circuit is quite limited.

Non-Agricultural Employment

In this area most women's non-agricultural employment consists of marketing goods produced in the village by themselves or others. Women market pottery made by themselves and men, beer (made from millet or red sorghum), processed foods like peanut oil, shea butter (beurre du karite), millet cakes or flour cakes; they also market tobacco and kola nuts. Women are also employed as healers of children, hairdressers, caretakers, seamstresses, and such.

Although there is some non-food related employment, the farming season is crucial for women of this area. It is at this time that they grow the crops which provide both revenue and the raw material from which food and crafts and processed. A poor harvest thus has the immediate effect of reducing women's ability to engage in non-agricultural employment.

Non-agricultural employment during the dry season often follows a pattern. A woman starts the season by investing the money she earned selling peanuts in other types of good which she then processes. Perhaps she buys rice with her cash. Through a lengthy manual process she dehulls the rice and resells it at a higher price. She then invests her earnings in flour and makes fried cakes to sell in the market. Her profits from these are invested in tobacco and kola nuts which can be stored and sold during the rainy season.

Processing: A significant fact to bear in mind is that women process all their raw materials, even the seasonings used in their cooking. Women have to spend time gathering shea nuts in order to make shea butter in which they generally fry foods. This

may take as much as two days per market day preparation. They also process peanut and sesame seed oil, which they use to fry cakes and make sauces. They must produce the flour from millet or sorghum; they must also produce the seasonings. In addition, they spend much time searching for wood and water to cook these foods. Production time is severely limited by these lengthy processes and is another limiting aspect of the customary non-agricultural employment.

Marketing: Women are particularly vulnerable to the changed market, since they often sell their goods through traditional circuits, and those are now being flooded with factory-made goods that replace many common village-made products. For example, distilled beer is replacing millet beer produced by the women, and manufactured fabrics are replacing cotton cloth.

This replacement of village goods by manufactured goods has serious repercussions on several of the productive systems in the village. For example, young men do not produce as much cotton as before, and weaving has declined considerably since the last generation. A survey taken in shows that there were 84 weavers in the last generation and 27 today. One result is that women have less access to cloth which provided one of their more important sources of stored wealth.

Expansion of Markets: While traditional markets are being flooded

with manufactured goods, rural products have few outlets. Women often mentioned their interest in having the opportunity to go to larger markets some distance from their village. It is ironic that though access to larger markets is easier in this area than it has been for a long time, roads have provided a means of bringing manufactured goods to the peasant but no means of providing a wider market for rurally produced goods, which are losing in the battle of competition with manufactured goods.

The obstacles may be summarized as:

1. Constraints on time women can devote to their own fields, and therefore insecurity of harvest, which is the basis of their initial investments.

2. Lengthy processing procedures impose constraints on production.

3. Severe competition from manufactured goods threaten women's primary source of revenue.

Recommendations

For development programs to be more successful, the indigenous population should be consulted. To date, the goals of planners and their ensuing strategies have often conflicted with the goals and approaches of the population earmarked to receive development projects. The population should also help determine the most appropriate structures for their training and learning.

Assessing needs is of course, but a genuine identification of needs must follow thorugh familiarization with a society, its resources and methods of operating. That familiarization must

include making contact with local women, many of whom are responsible for productioj in ways that westerners often overlook, to the detriment of the product. It is important for designers of development programs to be sensitive to customs which dictate that men make initial contact with foreigners, especially if those foreigners are men. Nevertheless, it is essential that local women contribute to the design of projects and planners need to make special efforts to incorporate local women.

Another aspect of assessing needs is determining the purpose and/or value of what may seem to be gratuitous methods. Two examples may suffice to suggest why improperly assessed needs and underestimated local methods cause development efforts to go awry.

During my field period I often asked villagers why they persist in farming in ways that specialists consider harmful to the soil. In particular, I asked why they burn the vegetation which local extension agents says depletes the soil and contributes to decreasing yields. The villagers explained that unless they burned the vegetation in the fields they could not till the soil at all. Their eco-system is such that they ahve absolutely no moisture during the dry season. Therefore, the remains of vegetable matter from previous harvests does not decompose. As a result, the dried stalks are swpt all over the fields during the rainy fields and form clumps of undecomposed matter too vast to be removed manually and impossible for farmers to till into the soil with their simple hoes.

I also questioned their using short-handled tools. When I told some of the women that the developmental literature suggests that long-handled hoes would make the work easier, they laughed. I was embarrased by their response and pointed out to them that people from their own society, the Gourma, used long-handled hoes in the south. The woman said that they knew that. They then asked me if I understood the differences in the soil in both areas. I had to admit that I did not, and that to my knowledge the literature had not made that distinction. They explained to me that the topsoil in the southern region was much thicker than in their region. A long-handled hoe, with its increased leverage, would be inappropriate for their soil.

To impose ostensible solution on these people without considering local ecological and technological resources will not ameliorate their problems.

Consulting the local population can illuminate various problems, for example those in regard to extension agents, instruction and farming cooperatives. It was local women who pointed out to me the connections between time constraints, age, and status. Those connections suggested a solution. Women in general lack time to attend classes like those organized by agricultural extension agents, yet since women do so much of the agricultural work it is imperative that they learn techniques for increasing productivity. Since older women (grandmothers) have the most available time, they can be trained as group leaders and can teach the other women in the village. Because of their

age and status, their leadership within certain sphere is rarely contested. Older women would also be able to reach a large number of women within the community, since they know them and are familiar with their schedules.

Training local women to be extension workers could solve many of the problems related to the inaccessibility of extension agents; it would provide a wider distribution of implementors, encourage individual follow-up and ease communication.

Even when positive solutions are suggested, the procedures for implementing them are often radically different from procedures known to and accepted by local population. The villager who is willing to accept technical training may find he or she has to learn a whole new pattern of work and social interactions. This unnecessarily lengthens mental absorption and limits adoption of innovations to a very narrow segment of the population, thereby contributing to the inequality of access to valued resources. As exemplified thorughout this paper, implementation strategies often require almost total revision of the population's customary behavior, organization of labor, time, and systems of communication.

Another important issue revolves around the means of production, i.e. technology. Women who need time- and labor-saving devices for farming, food processing activities, and household activities require appropriate technology.

Although few disagree with this recommendation, the manner in

which technology is being introduced and its consequences must be discussed; there is room for revision here as well. The need for labor-saving devices must be considered concurrently with the need for inexpensive energy. The importance of low cost energy was dramatically illustrated in one of the villages. Most of the mills in the area are powered by diesel oil which is imported at constantly rising costs to the millers. When the cost of fuel rose 33% in 1976, the miller raised his fees 25%. As a result he lost so many customers that he was obliged to close the mill on all but the two market days each week. Previously the mill was open every day.

Accessibility to technology should also be considered. Important questions to ask when providing technical assistance are: Is the technology accessible locally? Does purchase of the equipment require large outlays of cash? Is credit necessary? Does upkeep require continuing expenditures of money? If so, what is the source of revenue to pay for purchase and upkeep? Tying the local population into a dependency structure that requires the constant outlay of cash for the purchase of resources outside their community is counter-development. These are issues that have been raised by others and since they are so important, though generally unheeded, bear repetition.

Farmers who have invested in ploughs often have to depend on outside help for repairs. All attachments have to be purchased elsewhere. If any of the equipment breaks down, the expense for

repairs is great and so is the delay because many of these areas are inaccessible. The same is true for milling facilities. The millers have mentioned the growing expenses of maintaining the mill. They have also said that the greatest reason for failure of this commercial enterprise has been the high cost of upkeep. Resources and expertise must be centered in the community. Programs should promote the manufacture of tools by local craftspeople. People in the village should be trained in crafts and repairs. Technology should be of the sort that can be constructed by the villagers and maintained with the taw material available to the villagers. Training in building and repair of equipment should be available to men and women in the community.

In addition, the problem of sexual imbalance in the distribution of technology has to be addressed. The traditional sexual division of labor should be thoroughly understood before making certain types of technology available. Studies have shown that often technology is available to men and not to women, with the result that men's burdens are lightened but women's labor in their husbands' fields is increased. The possible conseauences of modernization in whatever forms it takes, be it technology or development programs, must be assessed carefully in light of growing evidence of sexual imbalance in the distribution of developmental areas.

Credit systems designed to assist the local populations should be as independent of outside sources as possible. Whenever possible they should be based entirely on the resources available

within the community. These measures can help protect the community against inflation caused by the sudden influx of cash in the area.

With the emphasis on increased production the sale of goods is a growing problem, especially as farmers are more and more dependent on a cash economy. It is important to ensure the equitable prices of goods bought from the villagers. Measures must be taken to prevent abuses by private merchants who leave villagers of this area in perpetual debt and with few resources to withstand years of poor rainfall and insufficient crops.

Rural markets must be protected from invasion by manufactured goods. The market for rural goods should be expanded. In addition, rural industries based on traditional skills must be promoted. The availability of village-produced goods may offset the drain of cash reserves from the village.

Supportive infrastructures within the local government (e.g., taxation, laws against usury, etc.) should be developed in order to ensure adequate exchange value for agricultural produce.

Conclusion

In the process of implementing development programs, crucial issues pertaining to the effects of the program on the population become apparent. Among these are the benefits and inadequacies of the program, the population's response, the degree of sensitivity to the actual needs in the region and the deeper, long-range conseauences of development policy in the area. It is hoped that

policy makers will compare the stated goals of the policy and the actual consequences of implementation, and as a result suggest ways in which policy may be re-stated to facilitate desired goals and eliminate the possible negative effects of either omission, inconsistency or insensitivity.

As indicated in this paper, development programs often result in the gross inequality of the distribution of benefits, both on the level of the sexes and in the areas of the economically favored versus the economically disfavored -- thus leading to the disadvantage of the entire population.

Although this paper addresses itself to issues relating specifically to women, it is important to recall that the issues in development affect all members of rural society affected by development programs Programs that exclude women often exclude most men from the village. Many are excluded because of the structural incompatibility of the programs with their ways of life, or because the programs do not address themselves to their needs. Consequently programs often appeal to the relatively marginal members of village society.

Moreover, in a village society characterized by subsistence economy and low-level technology, and where society and nature are delicately balanced, cooperation among all members of society is essential. Men and women have closely interwoven socio-economic rules. Thus, imbalances -- which seemingly favor men -- are detrimental to both men and women.

I found that men in the village often remarked on the dearth of development programs available to women. They mentioned the absence of schools, training programs, and adequate transportation. (Women must use public transportation to gain access to markets or other areas; they do not genrally travel long distances on bicycles or mopeds, the way men do.)

Sexual balance in the development services is particularly crucial in light of the fact that the economic interdependence between men and women of the recently adult generation has increased in the last thirty years. This is so because of the breakdown in scale of the units of production. Units of production were once comprised of multi-generational households. Now they are comprised of single households where husband and wife bear the brunt of expanding agricultural production which must provide not only food but surplus to be exchanged for cash. Hence sexual imbalance in developmental assistance has immediate disastrous effects on the fragile units of production.

This paper also pointed out the problems created when programs are designed by people operating from structures quite dissimilar to those of the recipient population. Their designs are based on frameworks familiar to them. These rarely correspond with those known to the villagers for whom the projects are designed.

Each aspect of this study has pointed up the need for consulting with the population who will receive a program. Without that consultation, development programs are likely to fail.

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