

Lack of Time as an Obstacle to Women's Education: The Case of Upper Volta

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The neglected and disadvantaged position of rural girls and women has frequently been noted by scholars. The situation in Upper Volta is similar to that in the rest of sub-Saharan Africa. In 1974 only 10 percent of the eligible age group attended school at the primary level, 7.0 percent of the girls and 11.2 percent of the boys.¹ A great disparity existed between rural and urban areas, with 70 percent of the children in urban areas attending school in contrast to 9 percent of those in rural areas.

Governments of many Third World nations are concerned about inequalities in access to education similar to those noted above. In some cases the disparities have existed despite the absence of any articulated policy of discrimination against females. However, the formal education programs introduced with development have often failed to involve rural women in significant numbers. Thus, in recent years, increasing attention has been given to nonformal education programs which are tailored to address the practical needs of rural populations and to surmount the obstacles which prevent them from acquiring necessary skills.

In Upper Volta a major nonformal education program, the Project for the Equal Access of Women and Girls to Education (hereafter referred to as the project), was initiated in 1967. Its objectives, as stated in the plan of operations, included gathering data on impediments to the full access of girls and women to education and initiating experimental programs to overcome the identified obstacles.² The project addressed the issues of extensive work loads of women, poor health conditions, and low standards of living, which preliminary sociological studies had pinpointed as fundamental problems. Thus, the labor-saving technologies of mechanical grain mills, easily accessible water wells, and carts were introduced with the idea that the time saved by the use of these technologies could be devoted to literacy classes, training in the use of modern agricultural methods, health and civic education, and income-generating activities such as collective fields. The villagers themselves were requested to select women leaders from the village, who were then sent to special courses to enable them to be the disseminators of knowledge and agents of change at the local level.

The primary source of data for this article is Brenda Gael McSweeney, "The Negative Impact of Development on Women Reconsidered: A Study of the Women's Education Project in Upper Volta" (Ph.D. diss., Fletcher School of Law and Diplomacy, 1979). This research was made possible with backing from the United Nations Development Programme and the full support of the Voltaic authorities, notably, Ali Lankoande, Scholastique Kompoare, and Marcel Poussi. The valuable suggestions of Arpad von Lazar and Robert L. West are gratefully acknowledged.

¹ Data in this paragraph drawn from Republique de Haute-Volta, Ministere de l'education nationale et de la culture, *Reforme de l'education: Dossier initial* (Ouagadougou: Ministere de l'education nationale et de la culture, ca. 1975), p. II.

² Republique de Haute-Volta, "Plan d'operation: Projet experimental pour l'egalite d'accès des femmes a l'education," mimeographed (Paris: Unesco, 1968), pp. 1-2.

The project was one of the three major experimental programs to increase the access of women and girls to education undertaken in three continents with the assistance of the United Nations Educational, Scientific, and Cultural Organization (Unesco) during the decade 1965-75. The Upper Volta Project was exceptional in that its activities were multifaceted and planned from the outset to last for 10 years. As early as 1968, the United Nations Development Programme (UNDP) participated in the financing of the project, and many other donors were later to cooperate with the government in its extension. The plan of operations indicated that data were to be gathered in order to permit eventual utilization of the results by other countries.³

From 1976 to 1979 an evaluation of the project was undertaken. Given that the principle objective of the project was equalizing educational opportunities for women, the research purpose was to obtain maximum information on women's attitudes and time patterns with a view to determining whether time in fact constitutes a significant barrier to educational activities, whether the available technologies are effective in diminishing the time barrier, and whether the project increased the participation of women and girls in education programs. This article will discuss the findings about rural women's time use and analyze the impact of the various labor-saving technologies on rural women's work loads. Participation in the educational activities introduced by the project will be assessed, including the women's perception of benefits. Suggestions will be presented as to the types of interventions and methods of approach which might best enhance the access of women and girls to education and to the benefits of participation in rural development.

Data Collection: Strategy and Sample

Research resources for the evaluation of the project were allocated to a combination of overview and intensive survey techniques. Four project and comparable control villages were selected in each of the three geo- graphical zones reached by the project, regions which differed in their level of economic prosperity, climatic conditions, and ethnic composition. In all, 12 villages were included in the survey, eight of which were project villages. Information was gathered from all women in each of these 12 survey villages, and more detailed data was sought from a random sample in each village of 30 women and their husbands and from women leaders. The questions focused on daily activities, time utilization, impact of technologies, and women's participation in and attitudes toward project-sponsored activities (project villages) or eventual interest in such activities (control villages).

³Ibid.

Time budgets were used to obtain more precise time-allocation information. Three cross-seasonal time budgets were prepared for all of the women in the random sample and for women leaders based on observation of their daily activities for 14 waking hours, from the time they arose until evening. These women were then questioned about activities conducted after nightfall when they were no longer observed. Data gathered in this way were recorded without time values. The time budgets recorded the time the activity began and ended and described each activity, the technique or technology used, and any assistance the woman had in carrying it out. To compare the work loads of men and women, three time budgets were prepared for five men from each of the four survey villages in the Kongoussi zone. Five boys and five girls from each Kongoussi zone village were each observed once to furnish indications of the significance of the work contribution made by children.

This article will present material based on advanced processing of data gathered from the sample of 30 women in one project village, Zimtenga, and the sample in one control village, Bayend-Foulgo, in the Kongoussi zone of Upper Volta. The data on women's work loads are derived from time budgets for a minisample of five women and five men from the project village of Zimtenga. The time-budget data on children's work loads are based on an age-stratified sample of 20 children, five from each of the four survey villages in the Kongoussi zone in north-central Upper Volta. The Kongoussi zone is populated by the Mossi, the major ethnic group, and thus may afford the most generalizable data.

Women's Work Loads

The women in Zimtenga spent many more hours working than their husbands did, as evidenced in the analysis of time budgets for the minisample of five women and their husbands. Table 1 indicates the average time allocated to each category/activity in minutes.⁴ Figure 1 summarizes the comparative work loads of men and women according to categories.

⁴ Table adapted from Brenda Gael McSweeney, "Collection and Analysis of Rural Women's Time Use," *Studies in Family Planning* 10, nos. 11-12 (November-December 1979): 379-83. It is based on an expansion of a framework of informal employment indicators designed by the African Training and Research Centre for Women of the UN Economic Commission for Africa to quantify the sexual division of labor in rural areas (see UN Economic Commission for Africa, *The New International Economic Order: What Roles for Women?* E/CN.14/ATRCW/77/WD3 [August 31, 1977]).

TABLE 1
RURAL ACTIVITIES, KONGOUSSI ZONE: COMPARISON OF TIME ALLOCATIONS BY SEX

	Average Time per Category or Activity (Min)	
	Women	Men
A. Production, supply, and distribution:	367	202
Food and cash crop production:	178	186
Sowing	69	4
Weeding, tilling	35	108
Harvesting	39	6
Travel between fields	30	19
Gathering wild crops	4	2
Other crop production activities	1	47
Domestic food storage	4	1
Food processing:	132	10
Grinding, pounding grain	108	0
Winnowing	8	0
Threshing	4	0
Other processing activities	12	10
Animal husbandry	4	3
Marketing	4	0
Brewing	1	0
Water supply	38	0
Fuel supply	6	2
B. Crafts and other professions:	45	156
Straw work	0	111
Spinning cotton	2	10
Sewing	2	10
Midwifery	41	0
Other crafts/professions (e.g., metal work, pottery, weaving cloth, bee keeping)	0	35
C. Community:	27	91
Community projects	27	0
Other community obligations	0	91
D. Household:	148	4
Rearing, initial care of children	18	0
Cooking, cleaning, washing	130	1
House building	0	0
House repair	0	3
E. Personal needs:	158	269
Rest, relaxing	117	233
Meals	21	29
Personal hygiene and other personal needs (including medical)	20	7
F. Free time:	77	118
Religion	2	6
Educational activities (learning to read, attend- a Unesco meeting or class)	17	4
Media (radio, reading a book)	0	14
Conversation	14	69
Going visiting (including such social obliga- tions as funerals)	43	19
Errands (including going to purchase personal consumption goods, such as kola, next door)	1	6
G. Not specified*	18	0
Total work (A, B, C, D)	587	453
Total personal needs and free time (E, F)	235	387

* When observation did not last the full 14 hours.

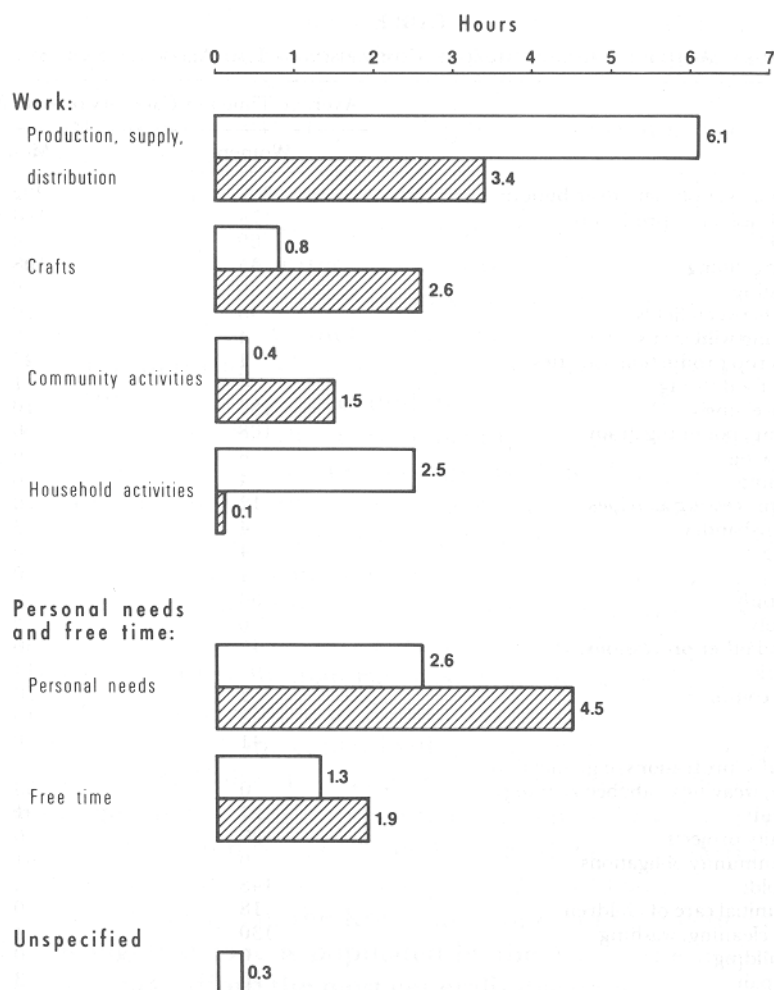


FIG. 1.—Comparison of time allocated by Voltaiacs, Kongoussi zone, by sex to various types of activities in the first 14 waking hours of the day. Open bar = women, striped bar = men. "Unspecified" = when observation did not last the full 14 hours.

Examination of the data reveals that this sample of women averaged over twice as much time on the production-supply-distribution (including food-processing) tasks as did men, and twice as much time on these activities as on the household tasks of cooking, cleaning, and washing, in addition to child care. The two women with small infants averaged only 45 min per day on child care, although society did seem to make certain allowances for new mothers, as their overall work loads were the lightest and they were the only women with *any* time for conversation and visiting as a primary activity. The free time for women in this sample averages only 1.3 hours per observation, and it is unlikely that increasing the length of the observation would uncover substantial amounts of additional free time, given the meal-preparation tasks which remain. Szalai, based on the findings of the Multinational Time-Budget Project, notes that women dispose of between 2.5 (employed women) and 4 (housewives) hours of free time during the week, 6 hours on days off (employed women), and 6.3 hours on Sundays (housewives). He states that "the

inordinately small amount of free time at the disposal of employed women and the constraints put on housewives are two factors that bear a heavy responsibility for women's reduced participation in civic life, professional training, and education."⁵ Should the processing of the larger data set corroborate the findings of the minisample that Mossi women dispose of only 1.3 hours of free time in the first 14 waking hours, it is little wonder that the sociologists and other members of the project team put an accent on the introduction of work-load-lightening technologies affecting the processing and portage tasks in an attempt to create time in which women might benefit from the educational opportunities sponsored by the project and so they might be more disposed to allow their young female helpers to attend school.

Technologies and Time Use

The three major technologies introduced by the project were mechanical mills for grinding grain, accessible water wells, and carts. Of the food-processing activities, the grinding-pounding activity absorbs the greatest portion of time -84 percent of total food-processing time, an average of more than 13/4 hours a day. Thus the choice of the introduction of mechanical mills by the project is understandable. Of the women in the minisample, three indicated that they used the mechanical mill (although they do not have the means to go regularly) and did so for the following reasons: to have more time, to diminish suffering, and for ease. Two never used the mill owing to lack of money. Questionnaire response from the full sample of 30 women in Zimtenga indicated that 14 of the 30 used a mill to grind grain. Of the mill users, seven gave as an explanation reasons relating to saving energy, and three women spoke of gaining time. Lack of money was the most frequent reason for not using a mill. The project team also identified water portage as a time-absorbing activity, particularly in the dry season. Women then had to travel up to 4 km to fetch a jug of muddy swamp water. In the rainy season, pits near the compound retained rain runoffs.⁶ Women in the minisample accorded only about 40 min per observation (in the period June to

⁵ Alexander Szalai, *The Situation of Women in the Light of Contemporary Time-Budget Research* E/CONF.66/BP/6 (New York: United Nations, April 15, 1975), pp. 8,10.

⁶ Oulimata Fall-Ba, *Projet experimental d'egalite d'acces des femmes et des jeunes filles a l'education: Juillet 1967 -Juillet 1971* (Paris: Unesco, 1972), p. 39; and Suzanne Lallemand, *Projet d'acces des femmes a l'education* (Paris: Unesco, 1971), p. 8.

December) to water portage; this figure could be expected to increase substantially as the dry season progressed. The head of the women's group pointed out in an interview during the dry season that in Zimtenga, the cemented well was so crowded that it was almost dry, and the swamp lacked water. She continued, "Water has its priority, especially in our surroundings. Lack of money, and of food, come after the need for water. Water is the first element of life."⁷ The well-digging program sponsored by the project aimed both at saving time and at furnishing more potable water. Wells yielded water from 1 to 7 or 8 months a year. In certain villages, the period just before the rains was reserved for stocking wood for fuel for the duration of the rainy season. Fuel portage absorbed little of the time, on the average, of the women in the minisample. Three women who were never observed fetching wood stated in questionnaire responses that they used a cart. Of the two who were observed fetching wood, one stated that she had no money to pay for the use of technologies, and the other was from a quarter without a cart. More than one-half of the women in the full Zimtenga sample use a cart. Most often the women spoke of its energy-saving advantages, stating that it was easier or they suffered less. Four respondents focused on the time-saving aspects: The cart was faster and held a larger supply. The nonusers usually mentioned lack of money.

When the technology users in the Zimtenga sample were asked about the uses of time saved, one-half of them indicated that time saved was devoted to other household activities (one specifically mentioned water portage). About one-quarter of the women utilized the time saved to spin cotton, which could be for household consumption or for sale. Two women used the newfound time to rest.

Szalai and his colleagues, concerned with the unequal burden placed on women by household responsibilities, have rejected the argument that technological development will "soon liberate women from household chores." Their findings show that time devoted to housework does not seem to depend on the level of the available technology.⁸ It seems that clothes may be washed more often or meals prepared with more variety, but the overall burdens of housework have not been lowered.

Overall inspection of the Upper Volta data suggests that a similar phenomenon may appear. A song composed by blind minstrels from a project village concerning a mill acquired by the women on credit from the project serves to illustrate this: "The women of Magniassin have understood that Unity is Strength. They now have their collective field.

⁷ Habibou Ouedraogo, head of the women's group of the village of Zimtenga, interview, March 1, 1978 (translated from Moore to French by Jean-Christophe Bunkungu, Voltaic Scientific Research Center).

⁸ Szalai, p. 12.

And they now have their millet mill. So that when we come late from the fields, we can now eat. And even the bachelors no longer have to beg the women to grind their flour .⁹ The frequency with which women indicated that they used the mill when tired or sick leads one to believe that the minstrel's point -that the mill permits meals which otherwise would have been forgone -represents a pattern. If the women had intended to prepare a meal in the evening in any case, their work loads were thus lightened; if not, their tasks were in fact increased, as cooking time will still be 1-2 hours. Thus, the eventual impact of the mill would have to be sought, not in time savings but, rather, in improved nutrition, increased productivity of the work force, and the like, reflecting Szalai's findings that with the development of household technologies come rising "popular demands on the quality and quantity of household services."¹⁰

A similar pattern may be discerned with regard to the proximity of water. If the woman has access to a nearby well, she may spend the same amount of time to fetch extra water for personal hygiene or laundry. Accessible water may also facilitate use of a water filter, a specific health education activity introduced by the project. The link between the availability of water and filtering was implied by one old man from Zimtenga in a group interview: "I've been digging a well, you can see that my hands are wounded, it was in trying to reach water. The advice of the project could be carried out if we had a good number of wells. The women would filter water correctly."¹¹

Technologies improved the quality and quantity of services, but a definitive judgment about their impact on reducing women's work loads is difficult to make. The introduction of carts was clearly an aid; they saved time and energy. Observations in other villages indicated that the carts may also have led to a redistribution of tasks which were formerly carried out only by women. A man, who, owing to tradition, could not typically carry water, wood, or the harvest on his head, is not adverse to transporting these commodities by bike or cart. The mills seem to have reduced the time spent in pounding and grinding activities, although the time thus freed was used in other household tasks which presumably improved the quality of life. The effect of the wells in reducing work loads is not so clear, given that they were often low during the dry season when women would have had to travel farthest to fetch water. Nonetheless, wells encouraged the adoption of health-related advice.

⁹ Minstrels from the village of Magniassin (translated from Kassena to French by Gerard Adouabou, Po regional director of the Women's Education Project).

¹⁰ Szalai, p. 12.

¹¹ Interview, population of the village of Zimtenga, January 5, 1978 (translated from Moore to French by Jean-Christophe Bunkungu).

Technologies and the Work Loads of Girls

Children, and particularly girls, provide important assistance in daily tasks. In order to increase the willingness of parents to send the children to school, and to send girls in equal numbers to boys, it is vital to reduce the work loads of the women who are the main beneficiaries of the assistance of children. It is also important to examine the work loads of girls to evaluate the opportunity costs to mothers of sending the girls to school. The assumption is that if the time it takes to perform those tasks usually carried out or assisted by girls can be significantly reduced, parents would be more willing to assume the tasks themselves and to grant the girls time for schooling.

Children begin working at an early age. Data on children's work loads collected from a single observation of an age-stratified sample of girls and boys ages 7 -15 in four Kongoussi zone villages is presented in table 2. Observations were undertaken during the dry season, which the school year totally encompasses, but neither girls nor boys in the sample attended primary school. In one village, two boys were observed reading the Koran.

The data suggest that from ages 7 to 11, girls contribute several hours of work a day, and their contribution is more than twice that of their male counterparts. At age 13, the work load almost evens out, but by age 15 girls are again working twice as many hours as boys. Depending on the age group observed, from 25 percent to 55 percent of a girl's time may be spent in the activities of hauling water, grinding grain, and transport. Other work activities include spinning cotton, doing laundry and dishes, cooking, and fishing. In terms of their capacity to reduce the number of hours needed to accomplish the girls' tasks, the technologies of carts, wells, and mills introduced by the project reflect judicious choices.

TABLE 2
COMPARISON OF PHASING INTO WORK LOADS, KONGOUSSI ZONE, BY SEX

Age	Average Hours of Work Daily	
	Girls	Boys
7	5.3 (2.0)	.7
9	7.4 (3.3)	2.8
11	8.5 (2.1)	3.2
13	6.0 (3.3)	5.2
15	8.8 (3.8)	4.4

NOTE. —Numbers in parentheses indicate hours girls spent hauling water, grinding grain, and transporting.

Participation in Educational Activities

Labor-saving technologies were intended to increase the time available for education. The hypothesis being tested is that the project had a positive impact and that measurable differences would be noted between project and control villages in attitudes and behavior toward sending girls to school and the participation of women in nonformal education programs. The education programs introduced by the project were functional literacy classes, a radio program offering advice to the villagers about daily living, and health-education activities, such as instruction about water filtering and latrine use.

The data analysis in this section concentrates on survey results from the sample of 30 women in two villages in the Kongoussi zone- Zimtenga, a village reached by the project, and Bayend-Foulgo, a neighboring control village. The two villages are ethnically homogeneous, all of the women in the sample being Mossi. In Zimtenga, however, there is more Moslem influence than in Bayend-Foulgo.

Schooling for Girls

The women in both the project and control villages were asked if they sent their girls to school and if not, why not; they were then asked the same questions about their boys. In Zimtenga, of the 22 women with girls, 15 sent them to the administration's primary school, and six sent the girls to Koranic school. One woman stated that she could not afford schooling. In the control village, of the 23 women with girls, 19 sent the girls to primary school, and 3 sent them to Koranic school. One woman stated that "the girls have to help with the work." With regard to the education of boys, the statistics were similar to those for girls, and the same reasons were given for not sending the boys to school. Interviews with the husbands yielded comparable results.

In both villages, virtually all of the children were sent to school. These particularly high attendance rates are not surprising in view of the location of a three-grade school in Zimtenga, which is only 6 km from the control village. The respondents in both villages commented on the necessity for education in this world.

To furnish additional information on obstacles to children's education as viewed by their parents, data were examined from the Banfora zone in southwestern Upper Volta, which has lower attendance rates. In the project village of Fabledougou, only one-fifth of the children are sent to school. The reason most commonly furnished for not sending girls to school was "farm work," followed by "not for me to decide," "too young," and "household work." The main reason for not sending boys was "too young," followed by "farm work," "not for me to decide," "only child," and "household work." In the control village of Mallon, more children are in fact sent to school than in the project village. For both of the villages under examination, the primary school to which the children are sent is not located in the village itself.

The hypothesis that more children, and particularly girls, would be sent to school in the project village than in the control village did not hold. An overview of the data indicates, however, that after the age factor, the fact that children helped with the work was cited as the most important obstacle to schooling, and it was cited more frequently with reference to girls than to boys. The work load factor can be expected to influence not only initial enrollment but also achievement for those sent to school.¹² Explanation of the variations between zones, controlling for the factor of school proximity, should be sought in the social and cultural impact of education, including its perceived effect on the marriage ability of daughters and the future employment of sons.

Functional Literacy

Functional literacy classes had been organized in 19 of the 24 project villages. In the Zimtenga sample, 15 of the 30 women indicated that they had some education or training. One woman had been to school for one year, while 14 women had attended literacy classes, six of them for up to 3 years and the other eight for more than 3 years. Of the women who had no education or training, 12 lived in outlying areas. In Bayend-Foulgo, the control village, only two of the women had received any training, namely, over three years of literacy training. Comparing the education of the men with that of their wives, four husbands in the project sample had some formal schooling, while only two husbands of women in the control group had been to school.

In a questionnaire response, 12 women from Zimtenga said that they were currently attending literacy courses, while 18 said that they were not. The 12 who attended said that they did so to learn to read and write. 60th women non attenders and their husbands were asked the reasons why they, the women, did not attend the courses. Their responses are summarized in table 3. After the reason of distance, or not introduced, which reflects the fact that the site of the classes was distant from some quarters and thus sometimes seen as not available, the factor most frequently cited by women and men was the lack of time. Two men indicated that a lack of understanding by the male village leaders hindered enrollment, and one said that he thought the classes were not beneficial so he would not let his wife enroll. However, other women insisted that the men supported their participation, even to the point of taking on some of the women's tasks. Thus the perceptions of both men and women of the

TABLE 3
FUNCTIONAL LITERACY: REASONS WOMEN DO NOT ATTEND COURSES (Project Village) OR ARE NOT INTERESTED IN ATTENDING (Control Village)

Reason Given	Project Village: Zimtenga		Control Village: Bayend-Foulgo	
	Women's Responses (N)	Husband's Responses (N)	Women's Responses (N)	Husband's Responses (N)
Distance/not introduced	9	3
Lack time	5	3	4	3
Age (too old)	3	2	4	1
Not beneficial	1	1
Attitudes of the village men	...	2
Not enrolled	...	1

¹² See John Simmons, *Towards a Technology of Education: Predicting School Achievement in Rural Africa*, Economic Development Report no. 212 (Cambridge, Mass.: Development Resources Group, Center for International Affairs, Harvard University, April 1972).

Radio Programs

Sponsorship of radio programs and listening groups is another major component of the adult education program of the Women's Education Project. According to interview response in the village of Zimtenga, five-sixths of the women in the sample listen, either with the group or at home, to the program, "The Woman Is the Home," which gives advice on issues of concern to rural populations. Of the five nonlisteners, four said that they had no radio, although they all reside in neighborhoods where some of their neighbors do listen to the program. One woman stated that she had too much work to listen to the program. Three-quarters of those women who listened to the program stated that they did so for the advice. The others specified that they listened to be informed, for knowledge, because "it is of great interest," to aid the village, to create a good house- hold, and "to know one's role in the household and the nation."

In the control village, 17 women listened to the program while 13 did not. Of the nonlisteners, most gave as the reason not having a radio. Reasons for listening were similar to those noted above.

Health Education

The health education component of the project focused on environ- mental sanitation and preventive health measures. Specific themes included water purification and sanitary waste disposal. Of the 30 women in Zimtenga, one-half filter water during the rainy season and two-thirds filter during the dry season. Reasons given for filtering revealed the health-improvement message: to avoid sickness and microbes, to have good health ("clean water gives good health"), to remove the impurities from the water, "because the rains bring many diseases," and to have clean or potable water. The predominant reason for not filtering was no time (six respondents), followed by a lack of means (four respondents) and not knowing how to filter (three respondents). An additional respondent had no place for a filter, and another could no longer see due to age. The increase in water filtering in the dry season in comparison with the rainy season was attributed principally to the time factor: Women had less work and so had more time to filter water.

None of the women in the control village filtered water. Five-sixths of the women in the sample gave as a reason not knowing how to filter. Two stated that they had no filter, and two others that they had no money to pay for the materials. One woman stated that the water from the well in her village was clean.

The latrine program met with less success; only five women, one-sixth of the women in the project village sample, indicated latrine use. Four women gave health-related reasons for use of a latrine, namely, to avoid diseases. One respondent stated that the bush was far away. Of the 25 nonusers, 14 stated that the bush was nearby. Other reasons were lack of means, the husband had no strength to build a latrine, and it was up to the men to construct a latrine and was "not women's work." In the control village, no one used a latrine. Four-fifths of the women stated that the bush was nearby. Twelve project monitors stated that latrine building had only been adopted in four of the 22 villages they reached in the Kongoussi zone. An elder from the village of Loulouka offered an explanation in the form of a proverb: "If the head that you have in the pot is not well boiled, do not attempt to add the feet into this pot."¹³ This proverb was cited to indicate that the villagers do not have the financial means to possess latrines, for they do not even manage to resolve more pressing problems.

Assessments of Nonformal Education Activities

With regard to nonformal adult education, the proposition that the project would increase women's levels of training and alter their behavior was upheld. Significant differences were observed between project and control villages, as shown in figure 2. The radio program attracted the highest number of participants in both the project and control villages. There may be several explanations for this, including the fact that it was a passive activity and women could do other tasks, such as spinning cotton or processing condiments, while listening. Also, the program dealt with a broad range of subjects and thus offered something to interest everyone.

¹³ Interview, population of wulouka, January 6, 1978 (translated from Moore to French by Jean-Christophe Bunkungu).

TIME AS AN OBSTACLE

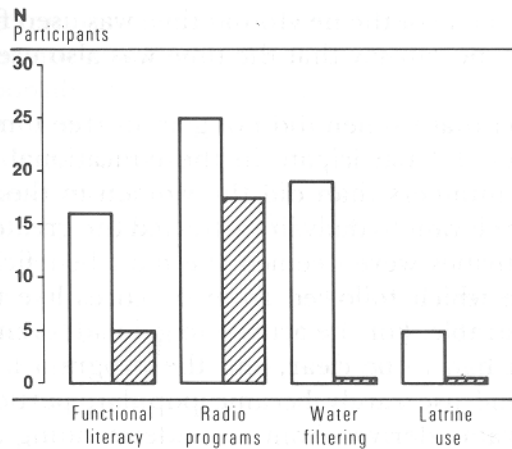


FIG. 2.—Comparison of participation, Kongoussi zone, in nonformal education. Open bar = project village, striped bar = control village. Total *N* in sample = 30.

An attempt was made in the survey to determine how the villagers felt about the relative usefulness or effectiveness of the various activities introduced by the project. In Zimtenga, 11 stated that they could not single out one activity as most beneficial because all were beneficial. Eight women, however, designated water filtering, and three, hygiene. Overall, 15 of the 16 indicated activities were in the area of health education, while one was an income-generating activity. Women leaders concurred in the designation of filtering and hygiene as most helpful.

When queried as to the least beneficial activity, 21 women said that they could not choose one, since all were good. Of the six who did single out activities, four named functional literacy, explaining that they did not understand its importance or benefit. Yet the testimony of those who have succeeded in the functional literacy courses seems somewhat different. In the words of one woman leader, "We are receiving an education (reading and writing), if among us several distinguish themselves, they will continue to teach the others, and so on."¹⁴

Conclusions and Implications for Planners

The analysis of time budgets indicates that rural women do have very little free time. This situation makes the introduction of labor-saving technologies a precondition for a broader education program. The technologies selected for introduction by the Women's Education Project did address themselves to the most time-consuming activities and did reduce the time needed to perform these tasks. However, rather than create free time, the time saved was used for other household tasks, such as the preparation of meals or spinning of cotton -activities which improved the nutrition of the family and upgraded the standard of living.

¹⁴ Interview, Mrs. Tidebamba, head of the women's group of the village of Doure, March 22, 1978 (independent translations from Moore to French by Brother Jean-Baptiste Bonkongou and Jean-Christophe Bunkungu).

To the extent that some of the newfound time was used for activities such as water filtering, one can say that the time was also used for functional education.

Despite the fact that women did not gain in free time, women in the the project villages did participate in the educational activities in significantly greater numbers than did the women in the control villages. Activities directly relevant to daily life attracted the greatest participation. Health-related activities were deemed the most beneficial, since the reduction in disease which followed from practices like the use of clean water was demonstrable. For the activity to gain adherents, the benefit to be gained from it had to be clear, and the program had to be easy to follow. Thus latrine use rarely became popular, particularly since the perception of its value derives from an understanding of the ecological chain, and the latrine required construction which some women could not or would not do themselves. Overall, the data show that although time is an obstacle, women will find the time for those activities which visibly improve their lives. To the extent that functional literacy is increasingly seen as a requisite for upgrading one's life and becoming part of the modern world, it, too, is valued,

The one area in which the project did not seem to make a difference was in increasing girls' formal school attendance. There were striking differences in attendance between two zones of the country but little difference between project and control villages within the same zone. Only tentative explanations for this finding can be offered at this time. One factor to be explored is school proximity since, in addition to reducing traveling time and thus reducing the time taken from work for education, the location of a school in or near a village may have a psychological impact on the community. Differences between zones in economic and social conditions, in the work loads of women and children, and in social and cultural mores need to be analyzed in order to determine why one zone where children are an important part of the work force chooses, nonetheless, to send virtually all of its children to school.

This study has several implications for policy makers and program planners. It supports the idea that educational programs should be presented as a package. The value of the reading and writing component of functional literacy courses is less easily perceived at first than the value of practical experience with health or income-related activities afforded by these same courses. Thus literacy classes should be integrated in a plan which introduces appropriate technologies, a dynamic functional learning program, and literacy as the means to improve one's life.

While the introduction of technologies was a sound policy and a key to change, the technologies also introduced problems. Planners must be certain that the technologies are simple, appropriate, adaptable to the conditions of the country, and easily repairable. Planners must ascertain that management questions regarding who is to own the technologies, who is to be responsible for them on a daily basis, who is to repair them, and on what terms others will be allowed to use them are addressed before the technologies are introduced into a village. In order to create a greater proprietary sense, some project staff felt that the villagers themselves should request the technologies and make a monetary contribution toward them. The commitment of the participants to the program is the key to its acceptance in a broader sense as well. Prior to inauguration of the Women's Education Project, missions were undertaken throughout the country to provide information on the project to local authorities and to study the situation of women in various regions of the country. Villages were kept abreast of project plans on an ongoing basis. Voltaics were trained for the management functions at the central administrative level and for the conduct of the project's multidisciplinary operations at the local level. Villagers chose the women whom they wanted to be trained as change agents. In conclusion, the success of the project in increasing participation in educational activities and access to the benefits of development is attributable to the commitment on the national level, to the sense of involvement by women and men in the participating villages, and to the careful choice of activities which addressed felt needs to such extent that women with virtually no free time nonetheless found the time to participate.