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TANZANIA SPECIAL PUBLIC WORKS PROGRAMME:

WOMEN AND SPECIAL PUBLIC WORKS PROGRAMMES:

A case study of the Mto wa Mbu irrigation (ARUSHA)
and the water supply (RUKWA) projects - Tanzania

by

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in collaboration with

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PREFACE

This report contains the results of a case-study on the role and participation of women in the Tanzania Special Public Works Programme (SPWP). It was carried out by an ILO Headquarters consultant, in close collaboration with a group of officials designated by the competent national authorities, and with an expert of the UNDP/ILO project URT/77/033 (which provides technical support to the Tanzania SPWP). This case study on Tanzania follows an earlier study carried out on similar lines in the context of the Burkina Faso SPWP¹.

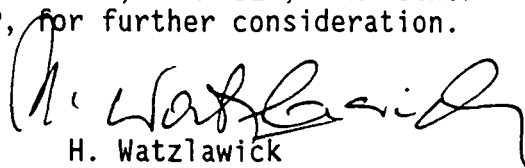
The study is based on the results of the surveys undertaken in the Arusha and Rukwa regions of Tanzania in May and October 1986 respectively. Similar questionnaires were used in both regions. It is hoped that the findings of surveys will be used for the future planning of SPWP activities in Tanzania as well as in other countries in order to take better account of women's needs and aspirations in such programmes.

The Tanzania SPWP has been selected for this case-study since it has been in operation for a relatively long period (since 1979) and therefore permits analysis not only of the participation of women on work sites but also of the impact of certain projects, upon completion, on women's activities and welfare. Irrigation and water supply components of the programme were selected for this analysis because of their relevance to women's traditional activities. Special attention was also paid to variations in the participation pattern among women by type and location of projects.

The report comprises two parts: the first briefly introduces the Tanzania SPWP and provides basic data on the projects in Arusha and Rukwa regions; the second presents and discusses extensively the results of the two surveys. Finally a series of practical recommendations are presented by the authors with a view to improving women's participation in such works programmes and to ensuring greater equity in the distribution of project benefits.

¹p. Van den Oever-Pereira, Programmes de travaux publics et distribution de temps de travail des femmes: le cas du Burkina Faso, International Labour Office, Geneva, September 1984.

The report does not constitute a formal ILO document; it is a working paper reflecting the findings and recommendations of the authors which are addressed to the Government, the ILO, and other agencies concerned with the Tanzania SPWP, for further consideration.



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Acknowledgement

The authors are indebted to Mr. Kanyasi, Programme Director (LIPWP), the Prime Minister's Office, the United Republic of Tanzania, and Mr. Hussain, Project Coordinator, URT/77/033, Dar es Salaam, for their support in making our survey work in Mto-wa-Mbu and Rukwa, Tanzania possible. Thanks are also due to Messrs. Gaude and Miller and Mmes. Phan-Thuy and Ughetto-Monfrini of the ILO Headquarters for their help in improving this report. Needless to say, the support of other officials in the Tanzanian Government, especially in the Prime Minister's Office and the Ministry of Community Development, Culture, Youth and Sports, in arranging the recruitment of enumerators in two regions has been very much appreciated. Last, but not least, many thanks are due to the regional, district and village authorities for their support and cooperation throughout our data collection operations.

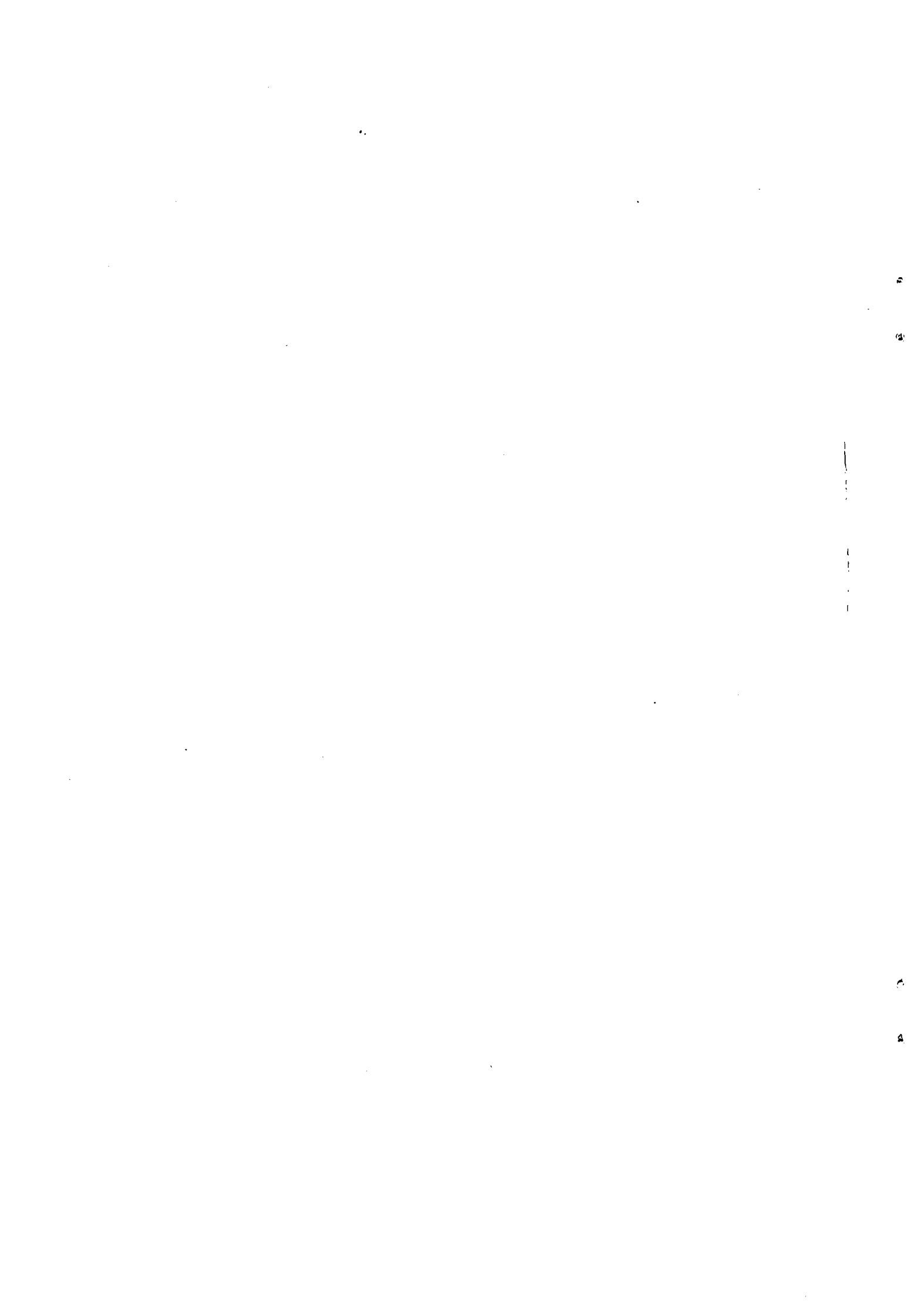


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List of Acronyms

DANIDA	Danish International Development Agency
EEC	European Economic Community
GDP	Gross Domestic Product
ILO	International Labour Office
LDC	Least Developed Country
LIPWP	Labour-Intensive Public Works Programme
MCDCYS	Ministry of Community Development, Culture, Youth and Sports
PMO	Prime Minister's Office
RADO	Regional Agricultural Development Office
RWD	Regional Water Department
SPWP	Special Public Works Programme
TAS	Tanzanian Shilling
UNDP	United Nations Development Programme
UVT	Umoja wa Vijana Tanzania, or Tanzania Youth Organisation
UWT	Umoja wa Wanawake Tanzania, or Tanzania Women's Organisation
WEP	World Employment Programme
WFP	World Food Programme



Executive Summary

This report is concerned with the role played by women in two SPWP (Special Public Works Programme) projects in Tanzania, namely, the flood control-cum-irrigation project in Mto-wa-Mbu, Arusha and the water supply project in the Kate and the Mwazye areas, Rukwa. It also discusses briefly some impact the projects have had or are expected to have on social, economic and health aspects in those communities.

The entire report is based primarily on the findings from a survey carried out in 1986 in the above-mentioned communities. Women who were involved in the projects as wage labourers, as well as those who were self-help workers or were never involved in, were randomly selected and interviewed (See the appendix for details of the methodology used.). In addition, supplementary information was obtained from project staff, the local, regional and national authorities and the local dispensaries in Rukwa.

The topics covered in this report includes, among others, the socio-economic and demographic backgrounds of women, recruitment procedures, the tasks assigned to them at project worksites, maintenance issues, other economic activities that women engage in, their household responsibilities, social activities, etc.

The results show that those who participated in the projects as wage labourers were relatively younger. It seems that younger women were less burdened with household work to participate in the projects. Moreover, the participants were in greater economic poverty than the non-participants. Their marital status (e.g. the single with children, the divorced and the widowed), the size of the farm land owned by their families and other economic indicators confirm this. Since one of the immediate aims of SPWPs is to provide employment to generate income among the needy, the recruitment of women workers, at least, appears to have been carried out more or less satisfactorily.

However, the proportion of female wage labourers was still much lower than that of men. It has been learned that many project staff who were directly responsible for recruiting workers held the idea that the type of work offered at SPWP worksites was too strenuous or culturally unfit for women. They also expressed the view that women, in general, were too occupied with agricultural and household work that they would have no extra time to spare in the projects.

Contrary to what had been generally believed, the findings show that women were assigned to multiple tasks at worksites. Moreover, they were not only physically capable of performing, but also very much willing to accept, varied jobs available. Considering their daily responsibilities in agriculture and household chores, which by no means are light tasks, we would not be able to rule that the type of work offered in SPWPs is any more strenuous than what they are culturally accustomed to.

The fact that the proportion of women wage labourers was estimated to be much lower than that of men, therefore, does not seem to be explained by the reason that work was too strenuous or unfit for them. The real explanation for the situation might be found in the recruiting procedures. According to the project staff in Mto-wa-Mbu, for example, the ward secretary in coordination with village leaders selected the gang leaders who were responsible for the recruitment of paid workers. Before the recruitment, the technicians estimated how many and what type of workers they needed each week based on their work plans.

Labour demand fluctuated from the rainy season to the dry season. If the tasks in the work plans included activities that were culturally considered as "women's work", such as carrying sand, stones, etc. on the head, and thus preferably be done by them, the technicians asked the gang leaders for a certain number of women to be recruited. The latter then hired the requested number of labourers in the manner of "first come, first served" among those wishing to earn wages. They could have looked for job seekers through their friends, but healthy and hard-working people that they knew personally in the village were preferentially chosen.

The above implies that the number of women recruited in the project was largely determined by the notion of sexual division of labour held by project staff. In other words, women's access to employment provided by the project was somewhat in danger of being limited by their stereotyping way of classifying certain tasks as "women's work" and others as "men's work".

Although the wages earned by male labourers ^{were they?} could be shared with women, it should be noted that many households are in fact headed by women, who might need extra income as much as men. It would therefore be important to ensure to ensure equal employment opportunity to both men and women in our future projects.

Nearly all the women who earned wages in the projects were content with the extra money which, as they said, was important for their families. Their earnings were spent for purchasing items such as soap, sugar, salt, cooking oil, meat, kerosene, paraffine, clothes, furniture, etc. Some used part of the money for children's education, medical fees, farm tools, etc. A small proportion of them managed to save some or reimbursed debts with their earnings. In general, their earnings seem to have helped them improve their living and nutritional conditions.

Although the level of women's participation during the project implementation was estimated to be much lower than that of men, it was still significantly higher than their involvement in other stages of the SPWP in Tanzania. For example, their involvement in the project selection and plan-

ning was almost nil. This was the case even in the water supply project, which was closely associated with their daily work. The village council, the decision-making body for community affairs, has traditionally been dominated by men, and this was why women were hardly involved in the projects other than as hired labourers.

Their not having being part of the project planning might have been the reason behind their limited awareness of the problems concerning operation and maintenance. The findings show that women have only a vague notion of the maintenance requirements by lack of understanding of issues involved. It is imperative that all beneficiaries, including women, in the community be re-educated and re-trained for proper maintenance in the future. It would also be advisable that women participate in new projects from the early stages of selection and planning in order to grasp what their benefits as well as responsibilities are. O/M

In the Rukwa villages where water of sufficient quality and quantity is now available throughout the year, people's health conditions seem to have improved. Data obtained in the local dispensaries show that the number of patients treated for several water-borne diseases dropped after water began to flow. Although we are unable to claim that it is all due to the outcome of our project, there is a strong indication that the availability of water in the villages has improved sanitary conditions, which has perhaps reduced the number of the sick to some extent. The improvement of people's health is expected to have a considerable impact in the future in terms of agricultural productivity and the financial resources of the community. Wt

In the Mto-wa-Mbu area, on the other hand, the increase in agricultural labour demand due to the modern irrigation scheme is estimated to be far more significant than the employment generated during the project implementation. Other related sectors of the economy in the area will also be vitalised by the increased agricultural production. All the beneficiaries in the area, including women, should be able to enjoy the long-term economic benefit of the project. At the same time, it is essential for them to keep in mind that it is their responsibility to operate and maintain the scheme in such a way that their benefit would be long lasting.



INTRODUCTION

The ILO's Special Public Works Programme (SPWP) has now been in operation for more than a decade and has gained considerable experience. Concerned with the growing employment crisis and poverty problem, especially in the rural areas of many least-developed and developing countries in the world, the ILO started, in 1973, within its World Employment Programme, an action-oriented research programme on the feasibility of emergency employment schemes. Labour-intensive SPWPs constituted the main ingredients of this research programme. Recognising the great potential of SPWPs as an instrument for rapid employment promotion and income generation, especially for landless workers and marginal farmers, the ILO launched in 1974, with the financial assistance of the United Nations Development Programme (UNDP), the interregional projects for constructing productive infrastructures and basic communal facilities.

Over the past decade, three successive UNDP-funded interregional projects and an expanding ILO Regular Budget-funded staff structure have ensured the continuity of the programme. The programme has thus far responded to different needs of people in more than 45 countries, mainly in Africa and Asia. It has also successfully enlisted the support of a large number of donor countries and UN agencies for financing SPWP projects that have been implemented in those continents.

The objectives of the interregional projects were progressively oriented towards the development of SPWPs launched during the initial phase and adapted to the conditions in countries which recognised the validity of such programmes. One of the concerns being to strengthen the efficiency of SPWPs in bestowing the intended benefits on the target groups, by increasing employment and incomes for the poorest populations of the LDCs, the ILO is eager to improve further the procedures of future project identification, selection and planning.

In principle, SPWPs offer ample opportunities for popular and target group participation in all phases: the selection of projects, supervision and actual execution of projects within their competence and technical capabilities and the maintenance and the operation of completed infrastructures. The Fourth Joint Meeting for Support to SPWPs held in 1982 noted that, in several countries, a genuine effort was being made by the governments concerned to encourage popular participation at various stages of programme implementation. It was being achieved satisfaction through decentralised planning and implementation that allowed the creation of community-based project committees to perform specific tasks among the skills locally available. (ILO, 1983b)

However, women have often been excluded in the countries where SPWPs have been implemented, especially at the stages

of project selection and planning. Their participation as wage labourers in the project implementation improves, though the rate fluctuates from one country to another and from one type of project to another. For example, the report presented at the Eighth Joint Meeting for Support to SPWPs held in 1986 shows that, in Burkina Faso, their participation rate varied from four per cent in food storage construction to 43 per cent in educational facilities building. In Tanzania, it ranged from zero per cent in road construction to 15 and 23 per cent in irrigation projects implemented in the Arusha (Mto-wa-Mbu) and Dodoma regions respectively. In Cape Verde, Rwanda, Sudan and Uganda, the average participation rate was reported to be about 23 per cent, as against 30 - 50 per cent in West Bengal, India. (ILO, 1986)

Women in many developing countries around the world are often isolated from the main stream of economic development programmes, although it is well known that their contribution to the national economy may be as significant as that of men. Most of them assume all types of farm work throughout the agricultural season and engage in market-oriented activities during the rest of the year, by selling surplus or processed food as well as articles they produce with their handicraft skills. In addition, they carry the burden of household chores, such as food preparation, fetching water and firewood, cleaning, washing, child care, etc., that are absolutely necessary for the welfare and the survival of their families. (Tomoda, 1985)

When we consider the predominant economic role that women play, it is quite unnatural that, in general, rural development projects fail to take sufficient account of their needs, and that only too often they should be excluded from the benefits that they could derive from such projects during their construction and, even more, their operation.

At present the developing countries and the specialised agencies of the United Nations are increasingly aware of the need to associate women with development projects and enable them to share the benefits derived from them. The ILO, in particular, has been committed to the objectives of achieving equality of men and women in all aspects of employment, including equal treatment in wages, job training, benefits, etc. It is the agreement of the tripartite constituents that this mandate should be extended to the area of SPWPs and that the ILO undertake more vigorous and thorough research work on women's participation and roles in SPWPs, in order to allow a greater proportion of women to enjoy the benefits, as wage earners or beneficiaries, of infrastructures created.

Thus in the past few Annual Meetings for Support to SPWPs, increasing attention was paid to the question of women's involvement in SPWPs, particularly at the request of donor countries. This growing interest led to the first major survey work, carried out in 1983 in Burkina Faso, on women's participation and roles in SPWPs.

The survey in Burkina Faso was carried out by one round of interviews on a sample of 519 women from 103 family units, randomly selected from the village registries, and one round of direct observation on the time use of 12 women, also randomly selected from those interviewed. It covered four villages out of six, where water-supply, afforestation, road construction, irrigation and community facilities construction projects were being implemented. (Van den Oever-Pereira, 1984)

The survey found that, among others, the existence of women's groups in the villages, women's familiarity with the aims of the projects, remuneration in cash rather than in kind, and the higher number of female members in the family led to higher women's participation in SPWPs. For example, if women were already organised in a group, there was a ready-made social structure conducive to the implementation of community work. Moreover, if they were firmly convinced that the infrastructure to be created would improve the quality of life in the area, in addition to the chance to earn extra cash income, they would most likely support such projects in any way they could. The higher the number of female members in the family, the higher the participation was. This was due to the fact that they generally assumed all types of household chores which kept them fully occupied at home, and that they could not afford to participate in SPWPs, even if they would have liked to, unless there were other women in the family able to share or take over some of the work.

During the Eighth Joint Meeting for Support to SPWPs, the topic of women's participation and role in SPWPs provoked a very lively discussion among the participants representing both the donor and beneficiary governments. They stressed the need for collecting more data on the subject and urged the ILO to undertake more research work for the purpose of securing larger participation of women, not only as mere wage labourers, but also at all phases of future SPWPs.

Having felt that local culture and tradition could not be altogether ignored, the participants at the Meeting nevertheless agreed that some traditional values and practices would have to be somewhat modified or totally eliminated, if they were unfair or oppressive to some, in order to improve the world for all. For example, they posed the question: why is it that men are encouraged to participate in remunerative SPWP work while non-remunerative domestic duties are always "reserved" for women? They also refuted the idea that SPWP work was too strenuous for women workers. "Women workers," they argued, "frequently carried heavy loads on their heads or backs in their daily domestic tasks."

Prior to the Eighth Joint Meeting, however, the ILO was in the process of making plans for undertaking another case study, similar to the one carried out in Burkina Faso. Out of several English-speaking nations in Africa where the

Infrastructure and Rural Works Branch has been implementing SPWPs, we selected Tanzania as the best country for such a study for the following reasons:

- a) The SPWP projects there have been in operation long enough to see the women's role in them and to study their impact, if any, on the socio-economic role of women.
- b) They include components such as water supply and irrigation that are pertinent to women's traditional activities.
- c) They are larger in scale, involving different regions, and it would be interesting to see variations, if any, in the participation patterns among women by type of project and region.

In May 1986, a data collection mission was undertaken. Due to time, climatic and transport constraints, the first survey was carried out in Arusha Region only, where the foold control-cum-irrigation project has been in operation since 1980. Another survey was conducted in October of the same year to cover the Rukwa water supply project, which has been under implementation since November 1979.

Through the use of a questionnaire (see Appendix) in the surveys, we tried to obtain information on women's roles in SPWP in two different projects, the extent of their participation in project implementation, their socio-economic roles and activities in the family and the community, the impact, if any, of the project on women and the community life, etc. In addition, we tried to find out what other projects might help improve the living conditions for women, in particular, and their community, in general. It is hoped that the findings in this study will facilitate a greater participation of women in all aspects of community development, including in the implementation of future SPWP projects.

I. General Information on the Country and the Projects

A. Tanzania: a brief socio-economic profile and LIPWP

Tanzania occupies an area of 945,100 square kilometers. It has a total population of 19.8 million (mid 1982), of which 91.5 per cent live in rural areas. The population growth is estimated at 3.5 per cent per annum, and according to population estimates, the country will have to feed approximately 36 million people by the year 2000 (World Bank, 1984).

The Arusha Declaration of 1967 formed the basic framework for Tanzania's economic and social development policies under one party, socialist government. Since then, great emphasis has been placed on rural development based on self-reliance and promotion of universal education throughout the country. In order to accomplish these goals, in the late 1960s the State nationalised large-scale industries, commerce and finance and created numerous parastatal bodies, Ujamaa (cooperative) villages, etc. under the decentralised administrative system.

Agriculture continues to dominate the Tanzanian economy, accounting for 45 per cent of the GDP, more than 80 per cent of export earning and employing a bulk of the labour force. The long term agricultural prospect is favourable with a significant proportion of the cultivable land yet to be utilised and climatic conditions quite suitable for a variety of crops. However, since 1977, the economy has been under severe strain, mainly due to the collapse of the coffee boom, the war with Uganda and flood and drought in the late 1970s.

The rate of the Government investment in the welfare of the rural population has increased from 16 per cent of the GDP in the mid 1960s to 20 per cent in recent years. This investment has however been financed increasingly through external assistance. Despite the high level of investment, the country has suffered from endemic underemployment of its labour force, the rate being estimated at about 40 per cent. With population increasing at 3.5 per cent per annum, the situation may deteriorate, unless investment is accelerated, especially in rural areas (ILO, 1983a).

The Tanzanian Government launched in 1979 the Labour-intensive Public Works Programme (LIPWP) or SPWP, with the technical assistance of the ILO and the financial support of the UNDP and other multi-bilateral donors, such as DANIDA, the Netherlands, the Federal Republic of Germany, EEC and the WFP. It aims to create social and economic infrastructures in rural areas by utilising unemployed and underemployed human resources. One of its main features is the emphasis on the concept of "popular participation", which is to involve the beneficiaries in the planning, implementation and maintenance of the projects.

The programme covers multisectoral activities including irrigation, flood control, water supply, rural roads const-

ruction, afforestation and housing and community buildings construction. Currently, a total of 10 projects are under implementation in Arusha, Dodoma, Rukwa and Ruvuma Regions and in Pemba Island(see Figure 1).

The LIPWP in Tanzania is an important component of the rural development activities in the country. Rural development programmes, including the ILO-assisted LIPWP, are planned implemented and maintained with the involvement of all people concerned from the national level down to the village level. This includes the Prime Minister's Office(PMO), the Regional and the District Authorities, the Divisional and Ward Office and the Village Councils. The PMO is responsible for overall coordination at the national level while others have responsibilities and authorities, within their administrative boundaries, to plan activities and to carry out the decisions made according to their planned schedules.

The UNDP/ILO Technical Assistance Team is based in the PMO and works closely with its Administrative Unit. The role of the team is to advise and assist the unit in the planning and implementation of the LIPWP projects. The team is also responsible for developing adequate technical capacity within the Government, so that in future the planning and implementation of larger LIPWPs can be carried out by the national staff without external technical assistance.

By the end of 1986, the total external resources in support of the LIPWP projects in Tanzania amounted to more than US\$ 12 million. The second phase is expected to be approved soon, for commencement in mid 1987.

B. Brief Information on Mto-wa-Mbu and the Project

Mto-wa-Mbu is located at the foot of an escarpment, north of Lake Manyara, approximately 120 km from Arusha. A trunk road passes through Mto-wa-Mbu to connect Ngorongoro with Arusha. Three rivers flowing through the area, the Simba, the Kirurumo and the Mto-wa-Mbu, have deposited fertile soil here before draining into the lake. Prior to the commencement of the project, however, the rivers had flooded annually during the rainy season because of poor drainage in the area, leaving many villagers incapacitated with destroyed or extensively damaged houses, crops and livestock.

Mto-wa-Mbu in Monduli District in Arusha Region is composed of three villages, Barabarani, Majengo and Migombani, which were directly affected by the implementation of the project at all stages. The population of these three villages combined was reported to be approximately 7200 in 1978. It increased to approximately 9600 by 1984, possibly due to a high birth rate in the area, as well as the migration, from other regions, of people looking for fertile agricultural land. At the time of the household survey carried out in the same villages by the project team in 1984, women constituted 47.5 per cent of the total population. Children under the age of fifteen constituted 47.2 per cent of the total population, which

indicated a high birth rate. The total number of households in three villages was 2302, an average size of the family being 4.2.

The flood control-cum-irrigation project in Mto-wa-Mbu commenced in January 1980 and is expected to be completed in June 1988. It aims at preventing flood damage to 3000 hectares of land in the area. This component is almost terminated. Since 1982 floods have been well contained, though in 1984 there was some damage to the river banks during the unusually heavy rainfalls. This has since been repaired. When the irrigation component of the project is completed, 2500 hectares will be irrigated, in addition to 500 hectares being reclaimed. This will increase food production of the area to meet the demand of the country's growing population. Farmers there have mainly cultivated maize, finger millet and banana. Now, with an increased amount of irrigated land for cultivation as a result of the project, they are expected to grow more profitable crops, such as rice.

The long term objectives of the project are, of course, to control floods and to increase irrigated and cultivable land in the area, in order to expand employment in agriculture and to increase food production. In addition, this LIPWP project has well met its short term objective, which is to provide temporary employment opportunities for unemployed and under-employed people during the implementation stage. By the end of December 1985, a total of 541,246 man-days of paid work were created for unskilled workers and 9,349 man-days of paid work for skilled workers.

As "LIPWP" indicates, labour-intensive techniques are applied to the major part of the work involved during the implementation stage. This means that work is mainly carried out by unskilled workers with simple hand tools and a minimum of equipment. The project activities in Mto-wa-Mbu have so far included, among others, clearing, deepening, widening and straightening of rivers, construction of earth dams, dry stone dams and rubble masonry wall for diverting floods, excavation of irrigation and drainage canals and lining of irrigation canals, etc.

C. Brief Information on the Rukwa Water Supply Project

Rukwa Region is situated in the south-west of Tanzania, bordering Zaire (across Lake Tanganyika) to the west and Zambia to the south-west and other Tanzanian regions of Mbeya, Tabora and Kigoma on its other boundaries. The town of Sumbawanga is the seat of the regional headquarters. The water supply projects, which started in November 1979, aims at supplying safe water to 11 villages in the region, 3 villages under the Mwazye sub-project and 4 under the Kate sub-project that are nearly completed (see Figures 2 and 3), and 4 under the Kilesha sub-project, the implementation of which is about to start.

Mwazye is an old village situated about 60 km south of Sumbawanga, with 353 households (in 1982). The total populat-

ion of the three villages under the sub-project was 4895. Almost every household in the villages, except those of civil servants, depends on agriculture as the main source of income, maize, beans and millet being the major crops there. For a short period of time in the past there used to be a bus service to Sumbawanga once a week, but due to the deterioration of the road, this is no longer in service.

Kate is located on the slope of a valley about 60 km southwest of Sumbawanga, with 1475 inhabitants (1982 data). Like Mwazye and other villages under the project, it is an isolated village connected with the main road several kilometers away by a feeder road in poor condition (Project Office, URT/77/033, 1983).

The villagers in Mwazye and Kate used to collect water from the nearby taps that had been installed by the Catholic missions. However, perhaps due to poor maintenance or water resources becoming exhausted, water flow has become extremely limited. In other villages under the project, the residents had to walk to nearby rivers to get water of dubious quality and sometimes, especially in the dry season, of insufficient quantity.

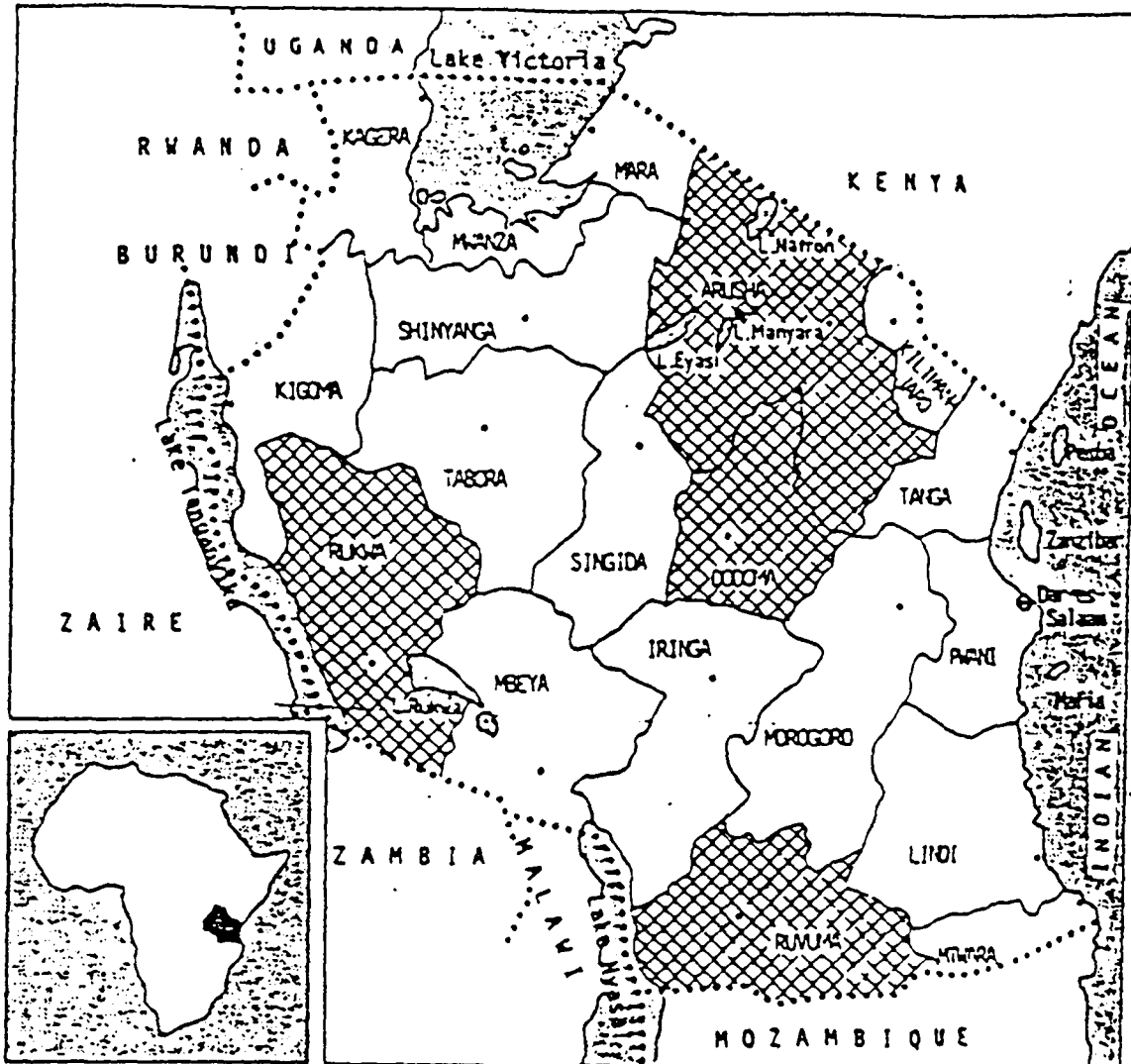
At the beginning of the International Drinking Water Supply and Sanitation Decade(1980), approximately 63 per cent of the Tanzanian rural population was estimated to have had no access to clean water. The proportion was estimated to be 71 per cent in Rukwa Region. One of the long term aims of the project is to improve the health and sanitary conditions of the rural dwellers who are often suffering from water-borne diseases without adequate access to medical facilities. The other aim is to liberate women from the drudgery of water collection by making clean piped water readily available in the village. This would help improve productivity in other economic activities.






The project in Rukwa did not provide employment to as many people as that in Mto-wa-Mbu. Nevertheless, a total of 92,177 man-days of work for unskilled workers and 10,634 man-days of work for skilled workers were created by the end of December 1985. The activities at the worksite included construction of intakes, storage tanks, laying of pipes, construction of domestic points, etc.

By 1986, more than 52 km of pipes had been laid to draw water to the villages from the sources that can be, as in the case of Kate, more than 10 km away. The two sub-projects have nearly been completed, except for the construction of a water treatment and storage tank in Mwazye and some more work on the intakes in Kate.

TANZANIA

(Locations of Regions)



-  — Regions where SPWP is under implementation
-  — Regional Capital
-  — Regional Boundary
-  — International Boundary
-  — Ocean/Lakes

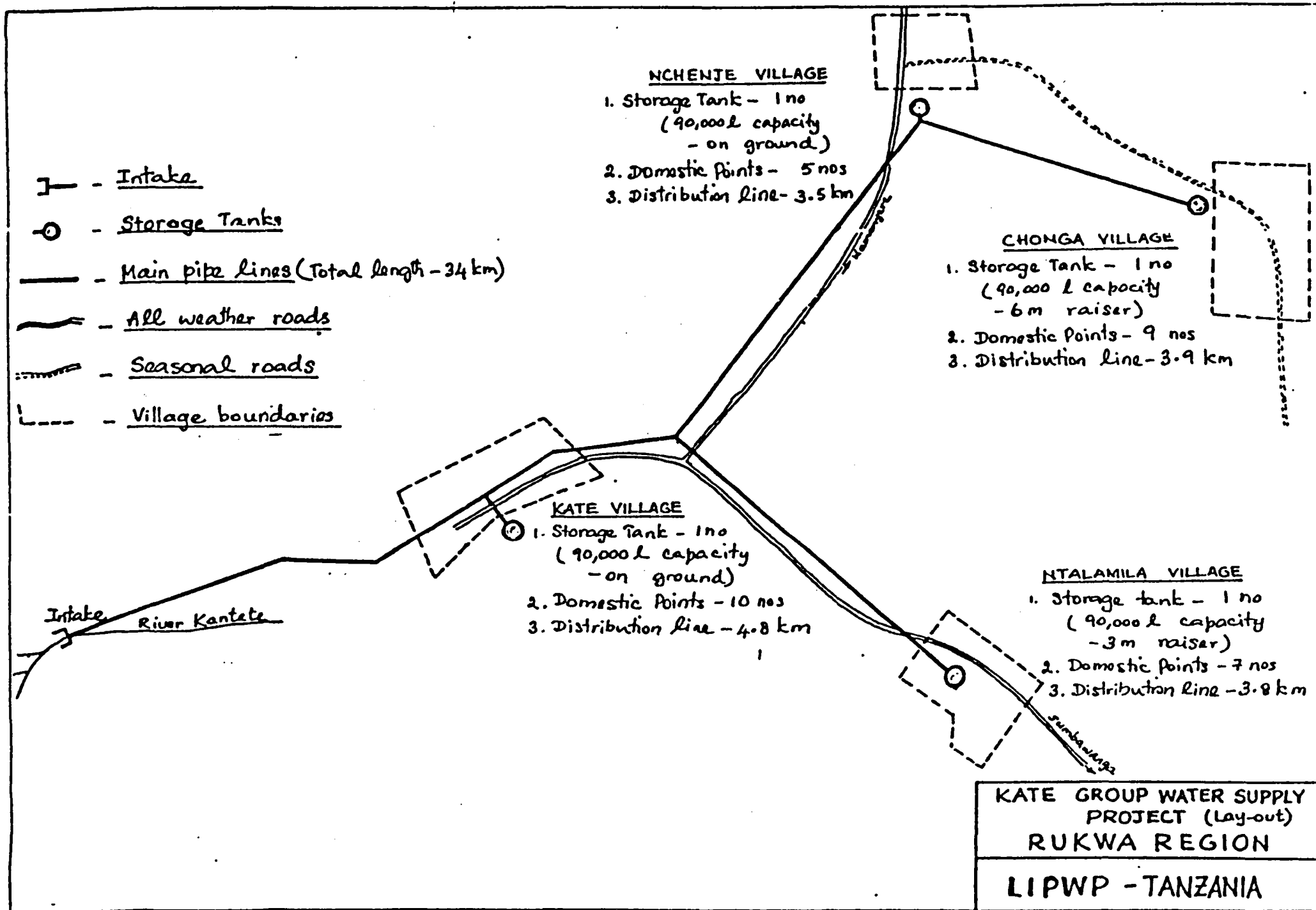
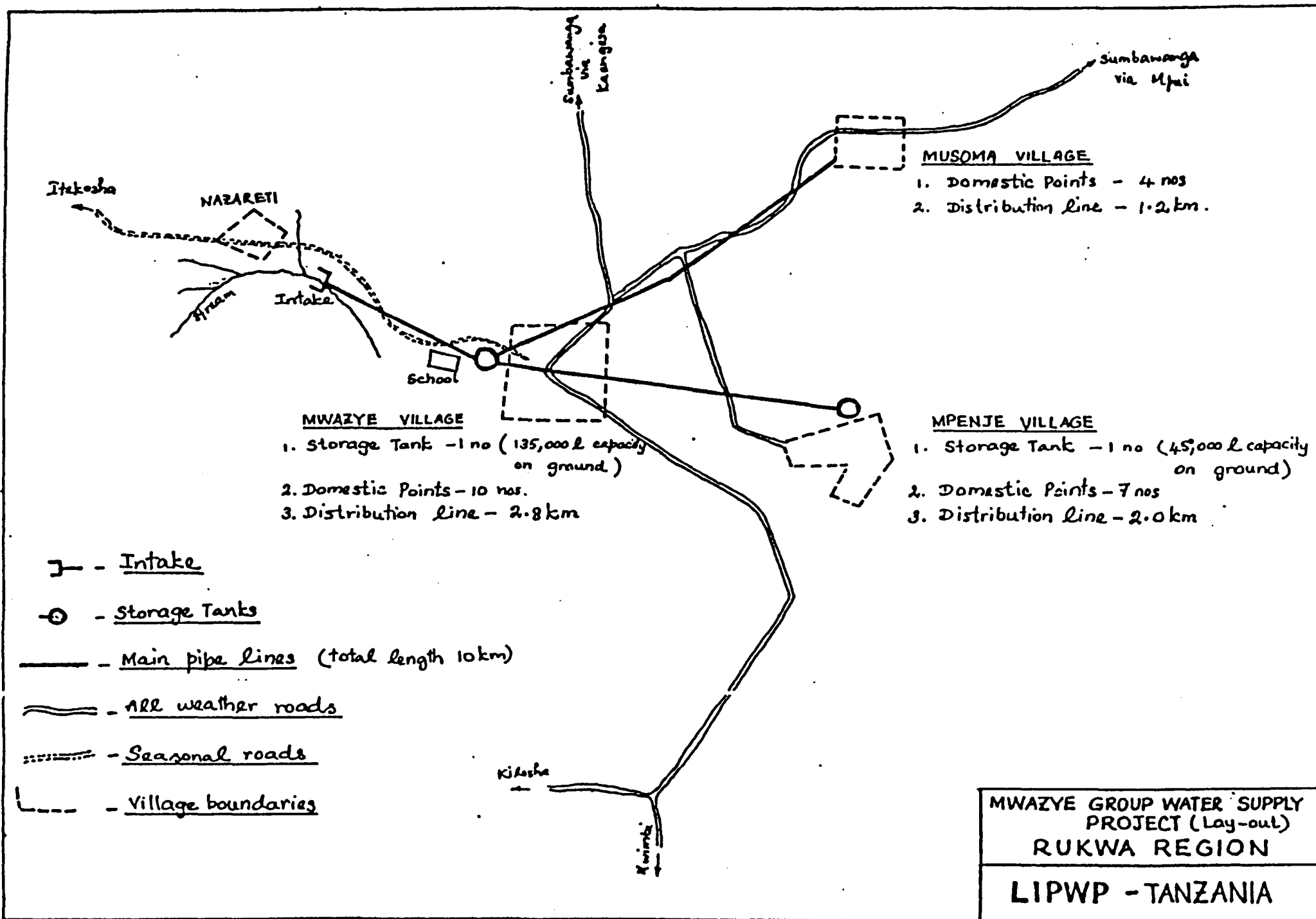


Figure 2



MUSOMA VILLAGE
 1. Domestic Points - 4 nos
 2. Distribution line - 1.2 km.

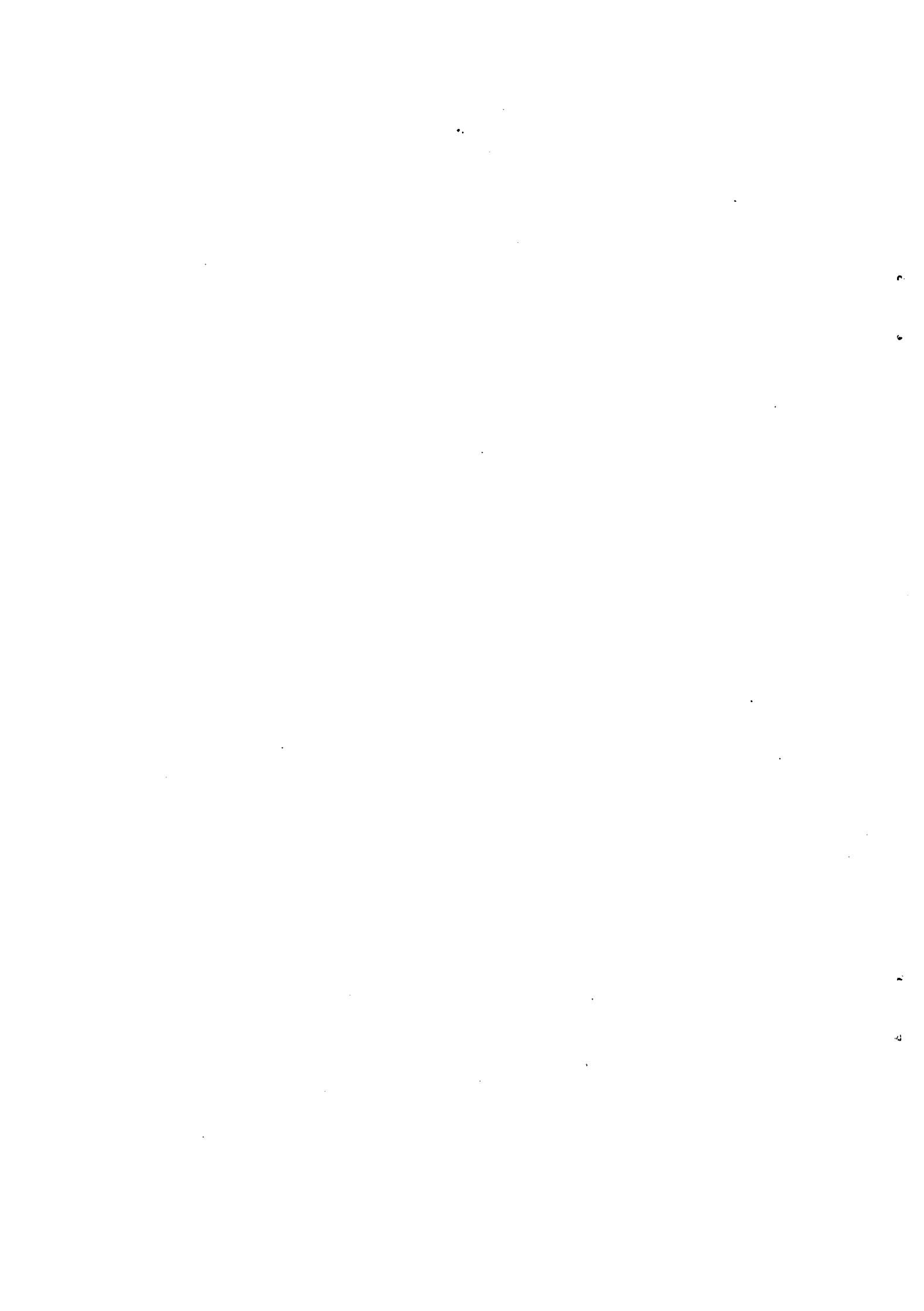
MWAZYE VILLAGE
 1. Storage Tank - 1 no (135,000 L capacity on ground)
 2. Domestic Points - 10 nos.
 3. Distribution line - 2.8 km

MPENJE VILLAGE
 1. Storage Tank - 1 no (45,000 L capacity on ground)
 2. Domestic Points - 7 nos
 3. Distribution line - 2.0 km

- └─ Intake
- ⊙ - Storage Tanks
- Main pipe lines (total length 10km)
- ≡ All weather roads
- ⋯ Seasonal roads
- └─ Village boundaries

MWAZYE GROUP WATER SUPPLY PROJECT (Lay-out)
 RUKWA REGION
 LIPWP - TANZANIA

Figure 3



II. Results

We carried out surveys in Mto-wa-Mbu and Rukwa to obtain information on women's roles in the ILO projects, and on socio-economic impacts, if any, of such projects on them. In order to achieve our objectives, we designed a questionnaire consisting of several parts to cover varied topics. The first part dealt with personal data of the sample women. Their participation and the nature of their participation in the projects were covered in the second part. These topics were then followed by the questions on other economic activities, such as agricultural work, marketing of handicraft products, animal husbandry, etc. Household chores and some impacts of the water-supply project on them were also taken up along with their social activities. The final topic in the questionnaire dealt with economic indicators.

A total of 151 women in Mto-wa-Mbu and 154 in Rukwa were interviewed. The former are grouped into two, namely, the participants who worked for wages in the project and the non-participants who were not involved in it at all. The latter, on the other hand, are categorised into three groups, namely, the wage labourers, the self-help workers and the non-participants.

A. Personal Data of the Sample

1. Village of Residence

Large proportions of both participants and non-participants in the Mto-wa-Mbu study were from Majengo, especially 78 per cent of the former being residents there (Table 1A). This was due to the fact that the village had been affected by floods more than the other two. Since the labour-intensive work for flood control took place largely in and around Majengo, and since the flood control work required more labourers, naturally more Majengo villagers were hired. The women in the list of participants, from which the sample were randomly selected, were thus largely from Majengo.

Unlike the survey in Mto-wa-Mbu, where the proportions of participants (wage labourers) and non-participants were more or less the same, the wage labourers in Rukwa is very small (Table 1b). The major reason behind this was that the Mto-wa-Mbu project employed a large number of people, 62.2 per cent of the total budget up to 1985 having been spent on wages for unskilled labour, as opposed to 21.8 per cent in Rukwa (ILO, 1985). According to the local project technicians interviewed, the number of male wage labourers fluctuated at around 40, while that of women did not exceed 20 at the peak of the project implementation. Some of the women who had worked for wages no longer lived in the villages covered. Thus, only 17 women who had earned wages in the project at one time or another were located and interviewed.

Most of the female wage labourers in the water supply project were recruited from the village of Kate. According

to the fore-mentioned technicians, wage-labourers were mostly utilised in Kate where implementation work required 11 km of pipe-laying through a steep escarpment to draw water from the nearest source to the village. While women did not carry pipes up the steep mountain, their labour was nevertheless utilised for clearing the area before excavating trenches and for back-filling after pipes were laid. The details on the nature of work assigned to women will be covered later.

2. Age

In Mto-wa-Mbu the age of the participants ranged from 16 to 67, the average being 31.0. The age of the non-participants, on the other hand, ranged from 16 to 75, the average being 34.5 (Table 2A). More than 60 per cent of the participants were under the age of 30 as opposed to 36 per cent for the non-participants, resulting in a lower average age for the former. Looking at the age factor only, we might conclude that the participants included relatively younger women than the others because they were less likely to be tied down at home with numerous household and family responsibilities, and that perhaps more free time was available to them to be engaged in wage-earning work outside the house.

In Rukwa the age of the wage labourers ranged from 19 to 56, the average being 27.4, the lowest among the three categories. The age of the self-help workers and the non-participants, on the other hand, ranged from 17 to 68 and from 17 to 60 respectively, the average ages being 33.7 and 29.7 respectively (Table 2B). These results are more or less in line with those obtained in Mto-wa-Mbu, that is, younger women tend to work for wages, perhaps due to their having less constraints at home compared to older ones.

3. Religion

Among the participants in Mto-wa-Mbu, the Christians and the Moslems constitute equal proportions (Table 3). Among the non-participants, however, the large majority happens to be the Moslems.

The table also presents the breakdown of the participants and the non-participants within respective religious groups. Among the Christians, for example, 60 per cent were participants. Among the Moslems, on the other hand, the majority (56 per cent) of the respondents were non-participants, which may suggest that the religious custom mentioned earlier might explain the survey outcome. However, one thing that should be noted here is that the data collection in Mto-wa-Mbu was carried out in May during the month of Ramadhan, when it was easier for us to find Moslem non-participant women to be interviewed at home as they were preparing meals for those who were fasting. However, since information on the religious make-up of the population of Mto-wa-Mbu was not available at the time of the data collection, it is not possible to conclude that the religious practice was the reason behind the results obtained.

In Rukwa, on the other hand, all the sample women turned out to be Catholics. In both Kate and Mwazye, Catholic missions have been well established since the turn of this century, and all the residents of 7 villages covered were uniformly Catholic. The religious factor in the Rukwa survey, therefore, is not a variable influencing sample women's different roles in the water-supply project or other socio-economic activities in their villages.

4. Education

The literacy rate throughout Tanzania has been improving since its independence, but especially after the Arusha Declaration on Socialism and Self-Reliance in 1967. Though the Universal Primary Education Act was not enacted until 1977, much emphasis had been placed on a basic education of reading, writing and arithmetics by the State and varied religious organisations involved in educational activities. Thus the educational curriculum was fairly developed by 1977. In general, education in Tanzania is now being offered at four levels: 1) primary education from Standard I to VII, 2) secondary education from Form I to IV and the senior level from Form V to VI, 3) higher education offered at university level, and 4) adult education from I to III, generally offered to those who have had no educational opportunities earlier or to those who would like to acquire other technical and professional skills to improve their productivity (Ministry of Education, 1984).

Table 4A presents the level of education achieved by different religious groups in the Mto-wa-Mbu survey. We see that the total number of respondents exceeded the total women interviewed for all groups. This was because in each group there were several women who had received both primary and adult education. None received any secondary education, however. If we assume that each level equals one year of education and divide the total number of years of education by the sample number, we can obtain the average number of years of education each group obtained. The results show that the participants had more education than the non-participants. This is most likely due to the fact that the former are younger than the latter, and that the younger ones have enjoyed more educational opportunities, even in rural areas such as Mto-wa-Mbu, because of the educational policy of the Government over the last two decades.

When we compare the level of education by religion, we hardly see any difference between the Christians and the Moslems among the participants. This was perhaps due to the fact that there was hardly any difference in the average ages of the two groups. Among the non-participants, on the other hand, there is a noticeable difference. The higher average age of the Moslem women probably explains the lower amount of education they obtained in comparison to the Christians.

However, the age factor does not seem to take full account of the level of education the sample women obtained. For example, the Christian non-participants had a slightly higher education than their counterparts among the partici-

pants, though the average age of the former was a little higher. The level of education achieved may also be partly explained by economic factors of the sample women, especially because most of them had apparently been educated before 1977, when there were still school fees to be paid by the parents. Another possible explanation for the lower level of education among the Moslem non-participants might be that of the traditional value system, often found among Moslem populations of the world, of not encouraging women to be educated as much as men. This might have partly been the case here, since the non-participants included slightly older women who must have been subject to a more traditional value system.

In Rukwa, as in Mto-wa-Mbu, those who participated in the project as wage labourers had more education than the others (Table 4B). This is also believed to be attributed to the age factor. If we now compare the average amount of education the self-help workers obtained with that of the non-participants in the Mto-wa-Mbu survey, we notice that they are the same. This may be partly explained by the close proximity of their average age, that is, 33.7 for the former as opposed to 34.5 for the latter. Tables 4A and 4B show that the amount of education each category of group received is directly proportional to their average age, regardless of the region in which they live. This seems to be an indication that the educational policy of the Government is being executed uniformly throughout the country.

5. Marital Status

Our data on the Mto-wa-Mbu sample have so far described the participants as being younger and more educated than the non-participants. Another characteristic of the participants is that they are more inclined to be economically in greater need than the non-participants (Table 5A). For example, the unmarried group constituted 50 per cent and 29 per cent of the participants and the non-participants respectively. However, "single with children", "divorced" and "widowed" constituted 37 per cent of the former as compared to 21 per cent of the latter. In general, these categories of women are believed to be in greater economic need than the "singles without children" and the "married", who are more likely to get economic support from the members of their nuclear or extended families.

The above data indicate that the Mto-wa-Mbu project has been relatively well implemented as far as the recruitment of labourers is concerned, since one of the objectives of SPWP is to provide an income-earning opportunity to the needy segment of the society. What should not be ignored here, however, is the fact that there were 20 per cent of the non-participants who might have wanted to participate in the work, but could not, for one reason or another. Thus, recruitment procedures should be examined once again to make sure that the really needy people be able to secure employment before others in a project such as this.

The data obtained in Rukwa give somewhat similar pictures of the sample women as those in Mto-wa-Mbu. For

example, the "married" constituted 85 per cent of the self-help workers and a little over 80 per cent of the non-participants respectively. Among the wage labourers, on the other hand, 60 per cent were the "non-married", the single with children being the predominant category (Table 5B). The data, therefore, seem to indicate that though the number of wage labourers was extremely small in Rukwa, the ones who worked for wages did so out of an economic need.

6. Family

The distribution of the family size by religion in the Mto-wa-Mbu survey is given on Table 6A. The size ranged from 0 to 12 for the participants and from 0 to 13 for the non-participants (excluding respondents). The average size for the former was slightly smaller than that of the latter, the figures being 4.7 as opposed to 5.0 (excluding respondents). This may be due to the fact that the participants were of younger age and included more "non-married" women. However, the figures for both groups happen to be higher than 4.2, the average family size obtained in the 1984 household survey conducted in the villages by a project economist. On the other hand, the family size of the two religious groups shows no significant difference among the participants, though some difference exists among the non-participants. However, this difference is believed to be attributed to the factor of marital status and the average age of the respondents, rather than religion itself.

In Rukwa the family size ranged from 0 to 10 (excluding the respondents) among the wage labourers, while they ranged from 0 to 12 and from 0 to 11 for the self-help workers and the non-participants respectively (Table 6B). The average family size of the groups were 4.0, 4.8 and 4.1 (again excluding the respondents) respectively, which were directly proportional to the average age, as in the case of Mto-wa-Mbu. They also correspond more or less to the average family size obtained in the labour surplus assessment study carried out in the area in 1983 (Project Office URT/77/033, 1983). According to the result of the study, the average size in Kate was 5.3, while that of three villages, namely, Mpenje, Msoma and Mwazye, was 5.0.

The results of the survey carried out in Burkina Faso revealed that the higher the number of female members in the family, the greater the possibility of them sharing various household chores and thus the greater the possibility of women from such families to participate in SPWP work. However, its survey report did not mention at what age the line was drawn to distinguish the female members who were believed to be able to contribute to household work, from those members who were more or less a burden on the adult females. In Mto-wa-Mbu, many children were seen working in the field, fetching water and firewood for the family, looking after their younger brothers and sisters, etc. Thus, for the purpose of tabulating the number of productive female members in the family, we decided to draw a line to include those aged 10 and above.

nr female members of
hh : from 10 yr
upwards!

Based on the above manner of classifying productive female members in the family from others, we obtained the following results in Mto-wa-Mbu. The average number of productive female members of the family for the participants was only slightly higher than that for the non-participants, and this does not seem to be significant enough to be considered as one of the factors that led the participants to be involved in the SPWP work. On the contrary, the results in the Rukwa study show the lowest average for the wage labourers, though the differences of those three groups seem insignificant.

The methodology employed in the Tanzanian surveys was different from that used in Burkina Faso. The results from two countries, therefore, are not comparable. However, it can be stated that in Tanzania the number of female members in the family did not appear to have been a decisive factor behind women's participation as wage labourers.

7. Occupation of Sample Women's Spouses or Fathers

The occupation of the male head of the family often determines the economic activity of the wife or the daughter. Thus, one of the questions on the personal data concerned the occupation of the respondent's husband or father, to see how much influence this had on the women's role in the project. The results reveal that around 65 per cent of both categories of the sample in Mto-wa-Mbu had husbands or fathers who were farmers. The other category of occupation that we found more common than the others was that of civil service of one kind or another, though the proportions were only 7 and 12 per cent for the participants and the non-participants respectively. The others included driver, businessman, mason, watchman, teacher, doctor, pastor, tailor, machine operator, plumber and labourer ranging from one to four per cent for both categories of the sample.

Although both regions surveyed are heavily dependent on agriculture, the results show that the economy in Mto-wa-Mbu is a little more diversified, with more employment opportunity in other sectors. In Rukwa, jobs in other sectors, except for a limited number of posts in civil service of one kind or another, are nearly non-existent. It appears that the occupation of the male head of the household was hardly significant in the role women played in relation to the ILO project, either in Mto-wa-Mbu or Rukwa.

Regarding the place of work for the spouses or the fathers of the respondents, approximately 80 per cent in Mto-wa-Mbu replied that they worked in, or in the vicinity of, the village of their residence. For the rest, 9 and 7 per cent of the participants and the non-participants, respectively, gave towns and districts within Arusha Region. Despite the fact that daily bus services between Arusha and the Mto-wa-Mbu area are available, they are not very reliable (The schedules are not reliable and often the bus is too full to pick up new passengers.). We therefore assume that even those who work within the region must nevertheless be sepa-

rated from the family for either a short or relatively long period of time. The others gave no response. In Rukwa, on the other hand, nearly 100 per cent of all three categories of the respondents gave the village of their residence as the place of work for their husbands or fathers.

The above information on the occupation and the place of work of the husband or the father seems to indicate that these variables were insignificant in determining the type of roles the different categories of women played, or did not play for that matter, in the projects implemented in those regions.

8. Residential Mobility

In Mto-wa-Mbu a large majority of the participants and the non-participants, as well as their spouses, were born elsewhere and migrated to where they currently reside. Among those who were born elsewhere, half of all categories in the survey were born in other regions of Tanzania. The results give us an impression that the participants are a little more established in their villages than their counterparts since the proportion of those born where they live now is slightly higher for them and the spouses. However, among those who were born elsewhere, more participants than non-participants moved there for economic reasons, while more non-participants moved for personal reasons such as "marriage".

In Rukwa, on the other hand, most of the wage labourers and over half of the self-help workers and the non-participants were born in the present villages. A large majority of their spouses were also born where they currently live. In addition, we discovered that those who were born elsewhere were born mostly in the neighbouring districts in the same region. Among the respondents who moved, there were very little economic motives behind their change of residency. Thus, the results indicate that Mto-wa-Mbu is a more dynamic community with greater geographical and socio-economic mobility among the residents than the villages surveyed in Rukwa.

As far as the average number of years of residence in the villages was concerned, it was in direct proportion to the average age for the participants and the non-participants in Mto-wa-Mbu (18.2 years and 20.2 years respectively). In Rukwa, however, the results turned out to be the following: 26.4 years, 25.6 years and 20.6 years for the wage labourers, the self-help workers and the non-participants respectively. The wage labourers, with the lowest average age among the three categories of women, had lived in the village longer than the other two.

In summarising the general personal characteristics of the sample women in Mto-wa-Mbu and Rukwa, we can describe the different groups as follows. In Mto-wa-Mbu, the partici-

pants consist of younger women with a little more education (due to more educational opportunities the younger generation have been enjoying over the last two decades) than the non-participants. However, the former are inclined to be in greater economic need as they include more "non-married" such as the "single with children", the "divorced", the "widowed", etc. They also appear to be economically and socially less established in the village than the non-participants. A greater proportion of them moved to where they are today in search of cultivable land. In addition, 10.5 per cent of them have lived there for 5 or less number of years as opposed to 6.7 per cent of the non-participants in the same category. Religion did not seem to have been a key factor behind the participants' decision to be involved in the ILO project as wage labourers. Even if there had been any constraints attributed to their religious heritage, their economic needs might have overridden them in this case.

In Rukwa, too, the wage labourers were younger than the non-participants and the self-help workers, and the average amount of education the three groups obtained was, as in Mto-wa-Mbu, inversely proportionate to the average age. Information on their marital status indicates that the "married" constituted a great majority of both the self-help workers and the non-participants, while there were more "single with children" than any others among the wage labourers. The fact that there were no "single without children" among the wage labourers seems to indicate that they worked for wages, not simply because they were young with more time to spare for such work, but because they had an economic need to do so, as in the case of the participants in Mto-wa-Mbu.

Unlike the results in the Mto-wa-Mbu survey, the wage labourers in Rukwa had lived in their villages longer than the other two groups, despite their lowest average age among them all. This probably meant that they were socially more established in their villages and were perhaps more prone to taking advantage of limited employment that became available in the area where it is normally non-existent. Their being young, in a greater economic need and socially in a more advantageous position to capitalise on the opportunities that became available were, probably, the factors that had most helped them to become involved in the project as wage labourers. When the self-help workers are compared with the non-participants, we notice that the former are older and have lived in their villages longer than the latter. The nature of the former's involvement in the project may, therefore, be due to the fact that they identified themselves more with their community than the latter and were more willing to contribute their labour to a cause from which the whole community could benefit.

Table 1A: Distribution of Respondents by Village(Mto-wa-Mbu)

village	part.(%)	n.-part.(%)	total(%)
Majengo	59 (77.6)	35 (46.7)	94 (62.3)
Barabarani	15 (19.7)	21 (28.0)	36 (23.8)
Migombani	2 (2.6)	19 (25.3)	21 (13.9)
total	76(100.0)	75(100.0)	151(100.0)

Table 1B: Distribution of Respondents by Village(Rukwa)

Village	W.L.(%)	S.H.(%)	N.P.(%)	total(%)
Chonga	0	15(20.5)	9(14.1)	24(15.6)
Kate	15(88.2)	11(15.1)	28(43.8)	54(35.1)
Nchenge	0	5(6.9)	5(7.8)	10(6.5)
Ntalamila	1(5.9)	12(16.4)	5(7.8)	18(11.7)
Mpenje	0	7(9.6)	5(7.8)	12(7.8)
Msoma	0	7(9.6)	5(7.8)	12(7.8)
Mwazye	1(5.9)	16(21.9)	7(10.9)	24(15.6)
total	17(100.0)	73(100.0)	64(100.0)	154(100.0)

note: W.L., S.H. and N.P. stand for wage labourers, self-help workers and non-participants respectively.

Table 2A: Distribution of Sample^f Women by Age(Mto-wa-Mbu)

age	participants(%)	non-participants(%)
15 - 19	2 (2.6)	5 (6.7)
20 - 24	26 (34.2)	8 (10.7)
25 - 29	19 (25.0)	14 (18.7)
30 - 34	9 (11.8)	14 (18.7)
35 - 39	7 (9.2)	16 (21.3)
40 - 44	1 (1.3)	6 (8.0)
45 - 49	3 (4.0)	3 (4.0)
50 - 54	2 (2.6)	3 (4.0)
55 - 59	2 (2.6)	2 (2.7)
60 - 64	3 (4.0)	0 (0.0)
65 - 69	2 (2.6)	2 (2.7)
70+	0 (0.0)	2 (2.7)
total	76 (100.0)	75 (100.0)
average	31.0	34.5

Table 2B: Distribution of Sample Women by Age(Rukwa)

Age	W.L.(%)	S.H.(%)	N.P.(%)
15 - 19	1 (5.9)	6 (8.2)	7 (10.9)
20 - 24	5 (29.4)	10 (13.7)	19 (29.7)
25 - 29	7 (41.2)	19 (26.0)	17 (26.6)
30 - 34	2 (11.8)	7 (9.6)	5 (7.8)
35 - 39	1 (5.9)	8 (11.0)	2 (3.1)
40 - 44	0	8 (11.0)	3 (4.7)
45 - 49	0	6 (8.2)	6 (9.4)
50 - 54	0	4 (5.5)	4 (6.2)
55 - 59	1 (5.9)	3 (4.1)	0
60 - 64	0	1 (1.4)	1 (1.6)
65 - 69	0	1 (1.4)	0
total	17 (100.0)	73 (100.0)	64 (100.0)
average	27.4	33.7	29.7

Table 3: Distribution of Respondents by Religion(Mto-wa-Mbu)

religion	part. (%)	non-part.(%)	total(%)
Christian	38 (50.0) < 60.3>	25 (33.3) < 39.7>	63 (41.7) <100.0>
Moslem	38 (50.0) < 44.2>	48 (64.0) < 55.8>	86 (57.0) <100.0>
other	0 (0.0)	2 (2.7)	2 (1.3)
total	76 (100.0)	75 (100.0)	151 (100.0)

Note: The figures in () indicate the proportions of respective religious groups within the participants and the non-participants, while those in < > represent the proportions of the participants and the non-participants within the Christian and the Moslem groups.

Table 4A: Distribution of Sample Women by Religion and Education(Mto-wa-Mbu)

educ.	participants				non-participants			total
	relig. Christian	Moslem	sub-toal	Christ-ian	Moslem	other	sub-total	
0	3	0	3	2	5	1	8	
Std. 1	0	0	0	0	0	0	0	
2	3	0	3	2	4	0	6	
3	2	1	3	0	0	0	0	
4	4	7	11	5	6	0	11	
5	2	0	2	3	0	0	3	
6	1	0	1	1	1	0	2	
7	15	16	31	9	15	0	24	
Ad.Ed. 1	11	16	27	5	22	1	28	
2	0	0	0	0	1	0	1	
3	0	1	1	1	0	0	1	
total	41	41	82	28	54	2	84	
average	4.2	4.3	4.2	4.7	3.5	0.5	3.8	
average age	31.1	30.9	31.0	33.6	35.1	31.0	34.5	

Table 4B: Distribution of Sample Women by Education(Rukwa)

Education	W.L.(%)	S.H.(%)	N.P.(%)
0	0	1 (1.4)	2 (3.1)
Std. 1	0	0	1 (1.6)
2	0	1 (1.4)	2 (3.1)
3	0	3 (4.1)	2 (3.1)
4	1 (5.9)	12 (16.4)	6 (9.4)
5	0	3 (4.1)	1 (1.6)
6	2 (11.8)	4 (5.5)	1 (1.6)
7	9 (52.9)	19 (26.0)	31 (48.4)
Form 1	0	0	1 (1.6)
2	0	0	0
3	0	0	2 (3.1)
Ad.Ed. 1	5 (29.4)	24 (32.9)	16 (25.0)
2	3 (17.6)	12 (16.4)	3 (4.7)
total	20	79	68
average	5.3	3.8	4.9
average age	27.4	33.7	29.7

Table 5A: Distribution of Respondents by Marital Status and Religion (Mto-wa-Mbu)

m.s.**	participants			non-participants*		
	rel. Christian(%)	Moslem (%)	sub-total (%)	Christ-ian(%)	Moslem (%)	sub-total (%)
(1)	6 (8)	4 (5)	10 (13)	3 (4)	3 (4)	6 (8)
(2)	7 (9)	6 (8)	13 (17)	2 (3)	2 (3)	4 (6)
(3)	16 (21)	17 (22)	33 (43)	17 (23)	33 (45)	50 (68)
(4)	3 (4)	2 (3)	5 (7)	0	2 (3)	2 (3)
(5)	6 (8)	6 (8)	12 (16)	2 (3)	6 (8)	8 (11)
(6)	0	3 (4)	3 (4)	1 (1)	2 (3)	3 (4)
N	38 (50)	38 (50)	76(100)	25 (34)	48 (66)	73(100)

* Excluded from this table are 2 non-participants whose religion was "other". Both were married(monogamy).

**marital status: (1) single without children, (2) single with children, (3) married(monogamy), (4) married(polygamy), (5)divorced, and (6) widowed.

Table 5B: Distribution of Respondents by Marital Status (Rukwa)

marital status	W.L.(%)	S.H.(%)	N.P.(%)
single w/o child.	0	3 (4.1)	2 (3.1)
single w. child.	7 (41.2)	3 (4.1)	4 (6.3)
married(monogamy)	4 (23.5)	54 (74.0)	48 (75.0)
married(polygamy)	3 (17.6)	8 (11.0)	4 (6.3)
divorced	2 (11.8)	2 (2.7)	4 (6.3)
widowed	1 (5.9)	3 (4.1)	2 (3.1)
Total	17 (100.0)	73 (100.0)	64 (100.0)

Table 6A: Distribution of Respondents by Family Size and Religion(Mto-wa-Mbu)

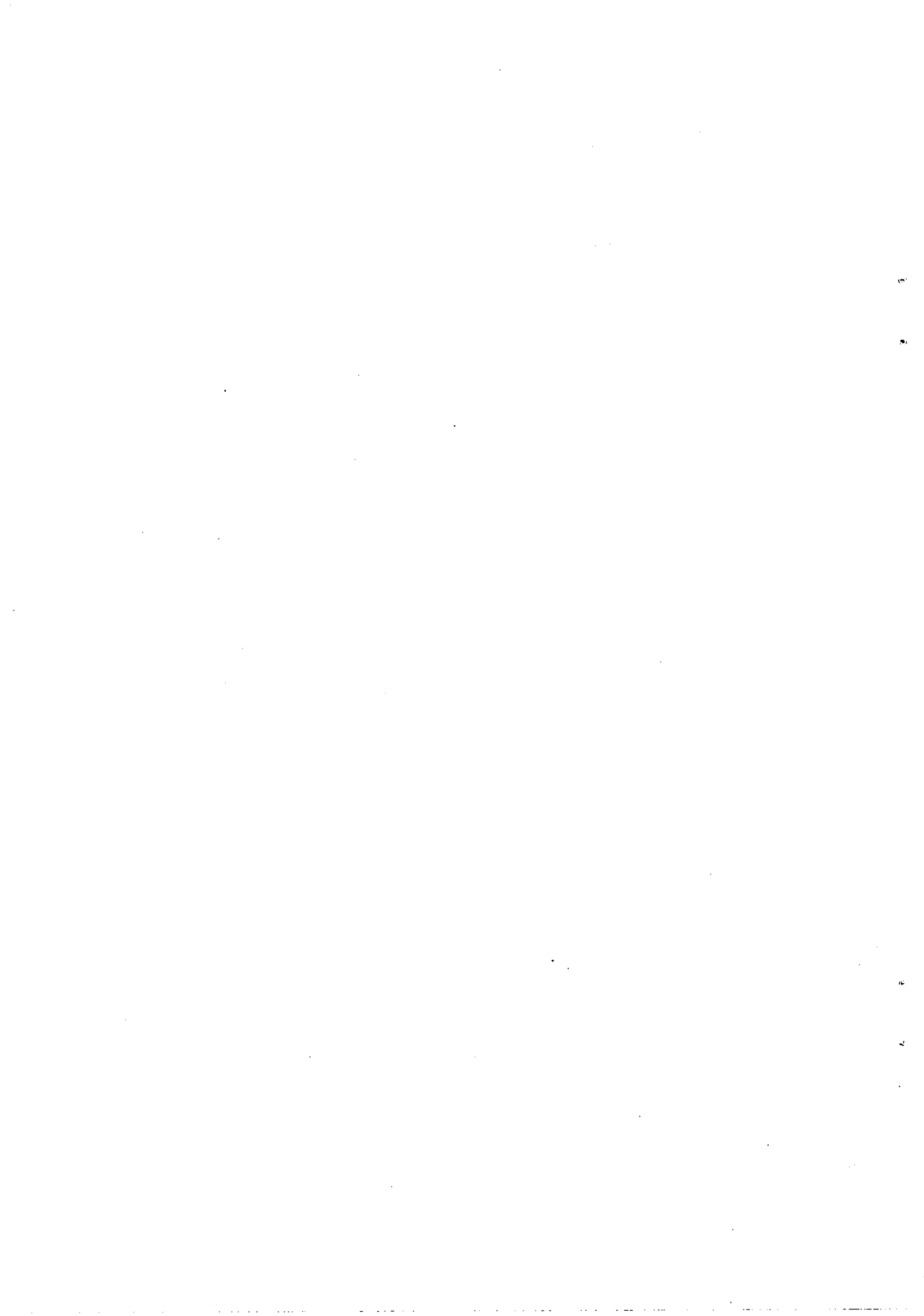
size*	participants			non-participants			
	relig.Christ- ian	Moslem	sub- total	Christ- ian	Moslem	Other	sub- total
0	1	1	2	1	2	0	3
1	4	1	5	3	4	0	7
2	6	5	11	2	4	1	7
3	1	5	6	3	5	0	8
4	7	9	16	5	8	0	13
5	5	5	10	2	4	0	6
6	2	4	6	0	6	0	6
7	5	3	8	3	5	0	8
8	4	4	8	4	2	1	7
9	2	1	3	1	2	0	3
10 & plus	1	0	1	1	6	0	7
total	38	38	76	25	48	2	75
(average)	(4.8)	(4.6)	(4.7)	(4.7)	(5.2)	(5.0)	(5.0)

*The number excludes the respondent.

Table 6B: Distribution of Respondents by Family Size (Rukwa)

Size*	W.L.	S.H.	N.P.
0	1	1	2
1	0	4	5
2	2	7	12
3	5	6	8
4	3	18	12
5	4	11	9
6	0	8	6
7	1	10	5
8	0	5	3
9	0	0	1
10 & plus	1	3	1
total	17	73	64
(average)	(4.0)	(4.8)	(4.1)

*The number excludes the respondent.



B. On Participation in the ILO Project

The second section of the questionnaire covered many topics concerning the projects in both regions, retrospectively and prospectively. Those who participated as wage labourers or self-help workers revealed the nature of their involvement, including recruitment practices they were subject to, types of work they did, working conditions, etc. The rest, on the other hand, explained the reasons of their non-involvement. Regardless of their participation or non-participation in the projects, they would all be the beneficiaries of the infrastructures to be completed. Thus, they were questioned on their awareness of their responsibilities and of the issues involved in future maintenance work. The sample women were, then, asked to suggest some project ideas for the future that they thought would meet community needs and how they would like to be involved in such projects.

The wage labourers and the self-help workers interviewed in Rukwa were those who participated in our water-supply project. Out of the 76 participants in Mto-wa-Mbu, on the other hand, 58(76.3 per cent) responded that they were involved in the flood control work, while 47(61.8 per cent) in the irrigation scheme. The figures do not add up to 76(100.0 per cent) because the respondents who participated in both works had given double answers. However, the figures indicate that more women were involved in the flood control work which, according to the local technicians, recruited more labourers than the irrigation work, especially in 1982 and 1983.

In Mto-wa-Mbu we randomly selected 76 women who had participated in the ILO project. However, nearly all of them were involved in the work merely as labourers. Only one woman reported to have participated in the selection and the planning of the project through a women's group. Likewise in Rukwa, excepting one self-help worker who was participating in the operation of the completed scheme, all the wage labourers and the rest of the self-help workers were involved only in the implementation work. No one took part in the selection or planning stages of the project.

In Tanzania the village council, elected by the village assembly, where issues involving the whole community are discussed and decisions made, is dominated almost entirely by men. Women are largely excluded from the arena of decision-making. One possibility of them participating in such a decision-making body appears to be through an organised group such as UWT(which stands for Umoja wa Wanawake Tanzania, that is, the Tanzanian Women's Association), which promotes women's active roles in the country's economic development and political stability. Since it is an organisation with a nation-wide network, it can be an effective group if the leaders are able to unify the interests of its members in order to make their voices heard in a community decision-making body.

1. Rating on Selection and Planning

Despite most of the sample women not being involved in either the selection or the planning in both projects, they were nevertheless asked to give their ratings on these aspects. The results show that the respondents in both projects rated the selection very favourably (Tables 7A and 7B). In Rukwa they gave higher rating than in Mto-wa-Mbu. This was perhaps due to the problem that not having water affected people's welfare much more directly and constantly than the problem of flooding. This seems to indicate that the inhabitants in Rukwa appreciated their project much more than their counterparts did theirs in Mto-wa-Mbu.

In addition, the data on Rukwa show that those who participated in the work either as wage labourers or self-help workers gave higher ratings on selection than the non-participants. This might be one of the reasons why the former participated while the latter did not. The wage labourers had most likely had a strong economic motive behind their involvement. For the self-help workers, however, it was necessary for them to develop a strong conviction that the project was very good before participating in the work.

The local technicians in Rukwa informed us that at the early stage of the project implementation, the village chairman had difficulty in getting villagers to come for self-help work. Despite the fact that the village council had decided that every villager above a certain age had to contribute some hours of labour toward the project, many were apparently not convinced that their work would lead to having clean and abundant water within the village and, thus, ignored the call by the chairman. Only after they had been convinced through some examples of other villagers getting water as a result of their self-help work, according to the technicians, they began coming to worksites willingly. Most villages imposed, in principle, a fine on those who did not show up. However, this was, according to the technicians, not well enforced. For example, when people reported that they were sick or had other engagements, the village could not make them pay. The fine, therefore, was set up more or less to be used as a kind of pressure rather than a punishment. The self-help workers can, therefore, be considered as villagers who were more supportive to the project than the non-participants.

As far as the planning of the project was concerned, a large majority of the respondents rated it also favourably both in Mto-wa-Mbu and Rukwa. The tables show, however, that the project in Mto-wa-Mbu received better rating than the one in Rukwa. A gang leader interviewed in Mto-wa-Mbu informed us that the flood control work was in fact initiated by the residents of three villages prior to the project approval. According to him, the villagers cleared the rivers strictly in self-help work under the leadership of the village chairman. The ward secretary coordinated the work in the villages. When the project was finally approved, the project planning was carried out by the village and the regional authorities that also listened to the voices and the advice

of technicians and the local people affected by floods. Despite the fact that only one participant was involved in the selection and the planning, the women in Mto-wa-Mbu generally approved and supported the project and the way it was implemented.

In Rukwa nearly 20 per cent of the self-help workers and the non-participants gave low ratings on the planning. The fact that the village chairman had difficulty in getting the support of the villagers in the beginning, as pointed out earlier, seems to reflect a problem of planning and organisation that existed at the village level, at least at the initial stage. This may indicate that the villagers were not sufficiently consulted with, or informed of, many issues concerning the project implementation. The fact that no respondents in the project had been involved in the planning indicates the existence of the problem that women are excluded from decision-making bodies, even for a project such as this. If they are to be integrated in all processes of community development, a project like this, which concerns women's daily responsibility as well as the fundamental health and welfare of their families, should certainly be the starting point.

2. Work Carried out by Women

As mentioned earlier, women's participation in SPWP has been limited in most countries where the ILO implements such projects. In defense of this situation, opinions have been expressed many times that the types of work available at SPWP worksites are too strenuous and not suitable for women and that they should not, therefore, be especially encouraged to be involved in such work. It is also true, however, that women in the countries where ILO labour-intensive projects are in operation are frequently seen carrying heavy loads on the head or on the back in their daily economic and household activities.

Another justification for low participation of women is that jobs offered at worksites do not conform to the traditional norms concerning sexual division of labour. It is true that people's attitude on such a matter changes extremely slowly. However, it needs to be modified to a certain extent if the society is to be dynamic and if it supports the idea of allowing all its citizens to contribute to the improvement of living conditions in the community.

What type of work, then, did those women do at the project sites in Mto-wa-Mbu and Rukwa? The tasks carried out by women in Mto-wa-Mbu include excavation work, embankment formation, stone collection, river clearing, water and sand carrying, and first aid assistance (Table 8A). Many did more than one type of work, but they were concentrated in sand carrying followed by stone collection and embankment formation. One of the project technicians and one of the gang leaders interviewed there confirmed that carrying anything on the head was considered to be women's work in the area, and that men would try as much as possible to avoid

taking such tasks. They also admitted that because women were so accustomed to carrying heavy loads on the head, they were much more efficient than men when they were assigned to the same task of carrying certain materials from one place to another.

To the question of whether or not the participants had choices on the tasks they carried out, only 7 (9.2 per cent) responded positively. This indicates that a large majority of the women were simply assigned to types of work that were socially viewed as women's work. This does not mean, however, that many of them were dissatisfied with the tasks they were assigned to. In response to the question on the types of work they preferred, they chose "sand carrying" more than anything else (54 per cent), though the proportion declined sharply from that under the work done (83 per cent). Although they tended to accept work that was socially considered to be suitable to them, their responses also show that they were willing to try all kinds of work available at worksites.

Table 8B presents the tasks women carried out in Rukwa as well as those they actually preferred to have carried out. Since 7 wage labourers (41 per cent) and only 6 self-help workers (8 per cent) reported to have been able to choose the work they did, most of them carried out the tasks assigned to them. As in Mto-wa-Mbu, many women carried out the task of collecting and transporting materials such as sand and stones. Most of the self-help workers were assigned to the task of constructing tanks, in-takes, domestic points, etc., though a large number of them preferred to have engaged in site clearing. It is shown that hardly any of them were assigned to the task of transporting heavy materials such as cement, steel, timber, etc. This might have been due to the fact that they were not transportable on the head or back. However, carrying of sand or stones is not exactly light work either.

The information obtained on this subject seems to indicate, however, that, contrary to the traditional norms of the way women should participate in SPWP, different tasks available at worksites can be and are, in fact, being assumed by women. Moreover, it should be pointed out that many women are willing to take up other types of work beyond the traditional division of labour based on sex. If they are willing and are physically capable, there is no reason why they should not be more encouraged to be involved in various types of SPWP work.

3. Recruitment of Labourers

Technicians in both regions reported that there were no officially established procedures of recruitment for project work. However, the results show that most wage labourers secured employment through gang leaders or project technicians in both projects. In Mto-wa-Mbu friends and neighbours were also frequently utilised channels of getting jobs. Personal connection, therefore, appears to have been the most usual way of obtaining work.

According to the information obtained through two gang leaders in Mto-wa-Mbu, the ward secretary, in coordination with village leaders, selected gang leaders who were responsible for the recruitment of wage labourers. Labour demand depended on the availability of work, which fluctuated from the rainy season to the dry season. It also depended on the type of work available from one week to another. First, it was the technicians' responsibility to estimate how many and what type of workers were needed, based on their workplans. For example, if the technician felt that a certain number of unskilled and skilled workers were needed to accomplish a certain amount of work in a given time period, he contacted the gang leader and asked him to recruit the required number of workers. If the task included activities such as carrying sand or water, preferably done by women, he would ask for the recruitment of a certain number of women as well. The gang leader then recruited the needed number of labourers in the manner of "first come, first served" among those wishing to work. He could recruit workers indirectly through friends, but the healthy and the hard working people that he knew in the village were preferentially chosen.

It was mentioned earlier that the recruitment of wage labourers in Mto-wa-Mbu was relatively well carried out since the participants were found to be generally in greater economic need than the non-participants. The gang leaders revealed, however, that they recruited workers in the manner of "first come, first served". There were in fact some landless or marginal farmers among the non-participants who were female heads of households and who appeared to be in the same economic need as some of the participants. If they were not employed, even if they had so wished, simply because of the existing recruitment practice, then the procedures should be improved to meet one of the objectives of SPWP, that is, to provide employment to the most needy people.

The number of both male and female wage labourers recruited in Rukwa was far smaller than that in Mto-wa-Mbu. As mentioned earlier, this was due to the fact that the project in Mto-wa-Mbu was labour-intensive as opposed to the one in Rukwa being material-intensive. The technicians in Rukwa informed us that many women were not interested in participating in the project as wage labourers though they were willing to hire more of them. According to them, people in the region are still very traditional and many including women are reluctant to accept the idea of women being employed outside the house. Another possible explanation for low interest among women in participating as wage labourers might be that market economy in the villages covered in Rukwa is less advanced than in the Mto-wa-Mbu area. Cash income, therefore, may not be as attractive in those villages as in Mto-wa-Mbu to draw many workers.

However, a non-participant in Rukwa reported that she had not been informed of the employment opportunities under the project while another claimed that she had not been hired by a gang leader even though she had wished to be employed.

These examples seem to illustrate some communication gaps between the village and project authorities on the one hand and villagers on the other hand. For example, the announcement regarding available jobs might not have been made uniformly to all villagers and some villagers might have been uncertain as to who were eligible for employment. Formal procedures of announcing available jobs or of recruiting wage labourers should be established rather than handling these matters arbitrarily at the convenience of project staff. Unless all the matters are handled fairly and openly, some villagers may become resentful toward the project itself, which may prevent the completed infrastructure from being operated and maintained smoothly in the future.

One other problem was the stereotyped way of assigning certain kinds of work to women, thus recruiting them only when such work was available. The women covered in these surveys did all kinds of work and many were willing to do other than what had been assigned to them. It will probably require some time still before we see changes in people's attitude towards sexual division of labour. However, this type of work assignment should be modified if we are to give fair employment opportunities to both men and women.

In some countries where the ILO SPWP projects are in operation, those who are responsible for the recruitment of women workers are said to be required to obtain permission from their parents or spouses. In the case of Mto-wa-Mbu, however, the gang leader did not need to go through such a process. Out of 76 participants, 74 (97.4 per cent) reported that they decided by themselves to be involved in the work, and that neither they nor any other person had to obtain consent of any member of the family prior to their participation. Only two reported that they had to obtain an agreement from others, one from her husband and the other one from the village secretary. The reason why the village secretary came into the scene under this topic, according to one of the gang leaders, was that when project work was available in a specific village, it was usually reserved for its residents and someone from outside the village was often required to obtain approval from the village authority before the gang leader could officially recruit him/her.

In Rukwa four wage labourers reported that the decision to get involved in the project was not entirely up to them. Three of them had to obtain consent of their husbands while the other one from her father. The decision of the self-help workers to participate in the project was made largely by the village authorities, as mentioned earlier. However, since they had no power of coercion, the villagers must have participated in the work because they had been convinced to a great extent of the positive results of the project. Moreover, 13 of the self-help workers (18 per cent) reported that they were willing to work even if there had been no pressure from the village authorities.

4. Conditions of Work

In implementing SPWP, ILO has placed emphasis on working conditions such as remuneration, hours of work, safety of workers and worksites, minimum age of work, etc. as well as on training courses organised for higher and middle-level SPWP planners, administrators and engineers. Regarding the policy of wage payment to SPWP workers, some individuals have been critical of this and propose self-help-style community development projects. However, direct employment creation for unskilled and semi-skilled rural dwellers who are unemployed or underemployed is one of the main objectives of SPWP. It is expected that the wages earned by the workers would help to create new demands for goods and services, which in turn would make the economy of the area more viable. Furthermore, tools, equipments and materials needed for the project are locally procured as much as possible to stimulate the local economy.

The ILO's general policy on the level of remuneration in SPWPs is that efforts should be made, except in cases of self-help work, to assure the workers wages sufficient to enable them to improve their living conditions. However, since SPWPs should be complementary and not compete with other normal economic activities, wages must not be so high that they divert labour from those activities.

The flood control cum irrigation project in Mto-wa-Mbu was initiated by the villagers in self-help work. The District and the Regional Authorities had a general meeting in 1979 with the village assembly and discussed the project activities and conditions of implementation. It was spelled out and agreed upon there that the villagers would contribute self-help labour. Because of this, 20 per cent of the work done by the recruited workers was continued to be regarded as voluntary work for which no wages were paid. In other words, if one reported to work for five days a week, he/she was paid for four days of work. The gang leaders admitted that this had been resented by some, but had been retained since it was reconfirmed between the village assembly and the Regional Commissioner when the latter inaugurated the project in 1980.

The participants in Mto-wa-Mbu responded that they worked at worksites on the average of 5.2 hours per day for the average daily wages of TAS 23.27. Their responses ranged from 2 to 8 hours of daily work and from TAS 13.9 to 34.0 for daily wages. However, the gang leaders and a technician explained that workers were given a piece work for which all unskilled workers, constituting the large majority at worksites, were paid TAS 23.9 in cash regardless of one's sex or age. One could take only three hours to finish a piece of assigned work, while another person may easily spend 7 hours for the same amount of work. Furthermore, if one finished the assigned piece of work quickly and wanted to take up another piece, he/she was paid double wages for the day. However, working quickly was not the only condition one had to meet to earn double wages; his/her completed work had to meet the standard set

by the project technician. According to the gang leaders, a given piece of work generally required 5 hours for an average worker to finish.

The reason behind the gap between the officially fixed daily wages and the amount that the respondents had reported to have earned was probably attributed to their errors in accounting the exact amount of wages earned under such a system of remuneration. Or perhaps, they were simply unable to recall the exact amount of income earned. In relation to the wages earned, 58 out of 76 participants did not, or could not, answer the question as to how many days they had worked in 1985. Among those who responded, the answers ranged from 26 to 265 days.

The daily rate of wages paid to workers in the ILO SPWP projects was uniform for men and women throughout Tanzania. The wage labourers in Rukwa were thus paid the daily rate of TAS 23.9, as in Mto-wa-Mbu. However, their responses on the question of daily wages ranged from TAS 12.0 to 25.0 (8 women indicated having earned TAS 23.9), the average being TAS 22.4. A water engineer explained that great variations in the responses might have been due to the fact that the rate was fixed at TAS 17.7 until June 1984. He asserted, however, that at no time wages were paid below the rate of TAS 17.7 under the current ILO project in the area, and that some respondents might have confused the wages with something else.

Regarding the number of hours the women spent per day at worksites, the wage labourers in Rukwa reported to have spent more than their counterparts did in Mto-wa-Mbu, the average being 7.6 hours as opposed to 5.2. These hours of work, however, cannot be compared in a strict sense since the nature of work was different and time measuring was arbitrarily based on respondents' subjectivity. As opposed to the wage labourers, the self-help workers in Rukwa reported that they put in between one to 8 hours, the average being 3.3 hours. They provided labour in response to the call of the village chairman whenever he and the technicians needed to mobilise villagers to accomplish certain work, the labour for which was not covered by the project budget.

In response to the question of whether any provisions had been made or not to facilitate women's involvement in the project work, such as setting up a child-care facility, the project staff in both regions replied that household chores and child care were shared among the family of the workers and that nothing special had been provided.

In some projects, worksites are located far from the homes of those involved as labourers. In such cases, work camps are often set up so that they do not need to walk back and forth every day, which could take up to several hours daily. Since worksites in both projects are located in or in the vicinity of the villages covered, although they are quite spread out in terms of walking distance, the participants walk everyday to work. The survey results in

Mto-wa-Mbu show that 30 per cent of the participants reached worksites in less than 30 minutes, 36 per cent in less than one hour, and the rest needed more than one hour. Therefore, even if they were able to finish a piece of assigned work in 5 hours, participation in the project was a full day's work for most of them. In Rukwa, most of the self-help workers (74 per cent) reported that it required less than 30 minutes for them to reach worksites, while 21 per cent needed up to one hour. Among the wage labourers, 9 women spent less than 30 minutes, though there were 6 who reported to have spent more than 2 hours to get to work.

5. Direct Impacts of Participation as Wage Labourers

The extra cash income the project enabled the workers to earn was the most important of the immediate benefits derived from participating in the SPWP work. Out of 76 participants in Mto-wa-Mbu, 74 (97.4 per cent) reported that they were happy with their participation in the work, and most of them were happy primarily due to the income earning opportunity they had. Only 10 per cent of them mentioned the present ability of the village to control floods as a reason of their satisfaction.

As opposed to the large majority of those who were happy with their participation, two answered that they were dissatisfied with their involvement in the project. The reason they gave was that the wages were too low. Indeed, the official wages at SPWP worksites were lower than those generally paid in the area. As pointed out earlier, the level of remuneration in SPWP is set in such a way not to divert labour from other economic activities. Ideally, the wages earned from the project would be complementary to the family incomes. However, if a family must depend largely on the wages from the project for its livelihood, though it was not the case in both project areas, then the income would most likely be insufficient for a family of an average size to adequately live on.

In Rukwa, on the other hand, all the sample women involved in the project reported that they were happy with their participation. A large majority of the wage labourers gave the income-earning opportunity as the reason of their satisfaction, as in Mto-wa-Mbu. However, many of them were also content, for they knew that their participation would soon enable them to obtain clean water right in the village. This was the reason given by most of the self-help workers.

It has just been pointed out that most of the wage labourers covered in both surveys were attracted to the work mainly for a financial reason. Then, how important were the earnings to their families? The total amount of wages earned by the women naturally varied depending on the number of days they worked; however, the income from the project was important to over 90 per cent of the respondents in both projects.

How did the women spent the wages they earned? The results show that nearly everyone reported to have purchased basic consumer items such as soap, salt, cooking oil, food, clothes, shoes, furniture, utensils, paraffin, etc. Women in both regions purchased more or less similar items mainly to meet their basic needs in daily life. The employment opportunities provided by the projects, though the ones in Rukwa were extremely limited, seemed to have been very helpful to the wage labourers who were able to buy supplementary but essential items for themselves and their families (Tables 9A and 9B).

In addition to purchasing consumer goods, some managed to save a little or to reimburse part of their debts with their earnings. Moreover, 17 per cent of the wage labourers in Mto-wa-Mbu reported that they used a part of their wages to purchase farm equipment, to pay for school fees, taxes or wages for hired labour or to repair the house. The purchase of consumer goods would raise nutritional and other living conditions in the immediate future, while the expenditure on farm equipment or education would be an investment from which they would benefit in the long run.

All but one participants in Mto-wa-Mbu and 13 wage labourers in Rukwa were able to decide on their own to work in the projects without having to obtain parental or spouse's consent (One other person in Mto-wa-Mbu reported that she had to obtain permission from the village secretary, but this comes under a different issue, as mentioned earlier.). Regarding the right to make decisions on the expenditure of the money they earned, 73 women in Mto-wa-Mbu responded that they decided by themselves as opposed to all of them in Rukwa. As for those without own decision-making power on the expenditure, one reported that it was her husband who decided while another woman turned her money over to her father. One gave no answer. The fact that most women covered in both surveys enjoyed the decision-making power over the money they earned in the projects seems to be an indication that they would be capable of taking more active roles, if they were given opportunities, in the development of their community.

There is, of course, an adverse effect of participation especially on women. This results from the traditionally held view on the division of labour based on sex, particularly in household work. "Very often the lure of a monetary income induces the men to renounce certain agricultural and even household chores; the result is an increased workload for women. In extreme cases, where the women also participate in a SPWP, their workload becomes almost unbearable." (ILO, 1986)

In response to the question on how the participation in the project affected their daily life, in Mto-wa-Mbu 67 women (88.2 per cent) replied that they were not particularly inconvenienced, while 7 (9.2 per cent) reported of their not having had enough time for other work or having overworked, and two had no response. These results do not appear to reflect the situations that the participants went through

during their involvement in the project. It might have been that, in addition to the work in the project, they simply accepted the household work that was socially imposed on them, without doubting or questioning the fairness of such tradition in relation to sexual division of household responsibility.

In Rukwa, however, 11 women (65 per cent) out of 17 wage labourers reported that their participation in the project affected their families and their daily responsibilities. While 8 were said to have neglected their housework to some extent, one said she was overworked and two had no response. Among the self-help workers, on the other hand, only 20 women (27 per cent) said that they were affected. This was obviously due to the fact that the self-help workers spent less hours at worksites than the others.

6. On Non-participation in the Project

It has been mentioned that the satisfaction of most of those who participated in the projects as wage labourers was mainly for the reason of having been able to earn extra incomes. Most of them were also able to decide by themselves on the expenditure of the money they earned. What were the reasons, then, of those non-participants for not having been involved in the project work?

In Mto-wa-Mbu nearly 60 per cent of the non-participants did not get involved in the project, for they were occupied with other work. This seems to indicate that the recruitment of workers was rather well carried out in the sense that labour for other economic activities in the area did not appear to have been diverted to the project.

However, among those who gave other reasons for non-participation, five answered that they were not allowed to participate. All of them were Moslems and married (monogamy), who revealed that it was the husband who prevented them from participating. In rural areas, especially of developing countries, women often find themselves subject to a situation where their aspirations for non-traditional activities are suppressed by their families. This is one of the obstacles for them to be integrated on an equal footing with men in many development programmes. However, this was apparently not the case here as only 5 were not allowed to participate.

Finally, one replied that she did not participate due to poor working conditions, though she failed to respond to the question on what improvement in the working conditions she would have liked to see. The other reasons given for not participating included the worksite being too far, not being interested in the project work, having been away from the village at the time of project implementation, etc.

In Rukwa, on the other hand, many self-help workers did not respond to the question; however, a majority of them were believed to have been too busy with other work to be engaged in the project for wages. The fact that their average land-

holding was the largest among the three categories of the sample women seems to support this assumption. Many non-participants (41 per cent) also did not participate due to the fact that they were too busy with other work. Among those who reported that they were not allowed to participate (3 self-help workers and 15 non-participants), 3 self-help workers and 13 non-participants said it was the husband who prevented them from participating. The other reasons given by both groups included poor working conditions, old age, having been sick, etc. Two respondents also mentioned that they were not hired.

7. Participation by Other Members of the Family

The respondents in both surveys were asked if anyone in the family had worked in the project as wage labourers. In Mto-wa-Mbu, 31 out of 76 participants (40.8 per cent) and 28 out of 75 non-participants (37.3 per cent) answered positively to the question. In Rukwa, on the other hand, 3 wage labourers (17.6 per cent), 8 self-help workers (11.0 per cent) and 8 non-participants (12.5 per cent) said that they had a family member who had worked in the project. The overall proportion in Rukwa was much smaller, which was a reflection of the fact that the project there had a smaller component for paid labour than the one in Mto-wa-Mbu.

In Mto-wa-Mbu the participants had a slightly higher proportion (41 per cent) of their family members working in the project compared to the non-participants (37 per cent). This might be due to the fact that the former came from economically less well-to-do families (small landholders), and that more of their family members might have been unemployed or underemployed and have needed employment offered by the project. The situation was somewhat similar in Rukwa in the case of the wage labourers as opposed to the self-help workers and the non-participants.

Among the family members of the Mto-wa-Mbu sample women who participated in the project as wage labourers, men constituted 70 per cent of them. Likewise in Rukwa, 84 per cent of those from the families of the sample women were men, either their husbands or brothers. This seems to indicate that when there is labour surplus in the family, men are more inclined to take advantage of income-earning opportunities outside the home, while women are still expected to take full responsibility for work in and around the house. In some extreme cases, women may be expected to take over the work formerly done by men as well.

In comparison to how the participant women in Mto-wa-Mbu rated the degree of importance of their own earnings, the earnings of other members of their families appear to have been a little more important. For example, as opposed to 38 per cent of them rating their earnings as "very important", the figure increased to 45 per cent for the similar rating of the earnings of other family members. Since most of the workers recruited throughout the project implementation were men with more working days in total, and since many of the

other family members involved happened to be men, their total earnings could have been higher than what those women were able to earn. Between the participants and the non-participants, the latter reported the earnings of their family members as slightly less important than the former. This is perhaps due to the fact that those from economically better-off families had worked a fewer number of days in total and had earned less, as they were more likely to have been occupied on their family farm.

In Rukwa the earnings of other family members of the respondents were rated as somewhat less important than in Mto-wa-Mbu. For example, though only 19 of the 154 sample women in total had their family members working in the project as wage labourers, only three non-participants rated the earnings as "very important". All others rated them as "somewhat important", excepting a non-participant rating them as "not important". Again, this is probably an outcome of the fact that in Rukwa the "paid labour" component of the project was very small and that the wage earning opportunities were quite limited to both men and women.

Table 7A: Rating on Project Selection and Planning
(Mto-wa-Mbu)

rating	selection		planning	
	Part.(%)	N.Part.(%)	Part.(%)	N.Part.(%)
very good	48(63.2)	43(57.3)	35(46.1)	31(52.5)
good	22(28.9)	16(21.3)	33(43.4)	26(34.7)
not good	0(0.0)	0(0.0)	0(0.0)	2(2.7)
n.response*	6(7.9)	16(21.3)	8(10.5)	16(21.3)
total	76(100.0)	75(100.0)	76(100.0)	75(100.0)

*The non-participants were asked to respond to the question from the second day of the data collection.

Table 7B: Rating on Project Selection and Planning
(Rukwa)

rating	selection			planning		
	W.L.(%)	S.H.(%)	N.P.(%)	W.L.(%)	S.H.(%)	N.P.(%)
v.good	16(94)	71(97)	47(73)	4(23)	21(29)	17(27)
good	0	2(3)	10(16)	12(71)	39(53)	34(53)
n.good	1(6)	0	7(11)	1(6)	13(18)	13(20)
total	17(100)	73(100)	64(100)	17(100)	73(100)	64(100)

Table 8A: Tasks at Mto-wa-Mbu SPWP Worksites

task	task done*(%)	task preferred*(%)
excavation work	6 (7.9%)	21 (30.4%)
embankment formation	26 (34.2%)	29 (42.0%)
stone collection	41 (53.9%)	28 (40.6%)
river clearing	20 (23.3%)	22 (31.9%)
sand carrying	63 (82.9%)	37 (53.6%)
water carrying	22 (29.0%)	33 (47.8%)
first aid assistance	6 (7.9%)	27 (39.1%)
other	2 (2.6%)	14 (20.3%)
no response	1 (1.3%)	7 (10.1%)

*multiple answers of 69 participants

Table 8B: Tasks at Rukwa SPWP Worksites

task**	task done*		task preferred*	
	W.L.(%)	S.H.(%)	W.L.(%)	S.H.(%)
clearing site	3(17.6)	7(9.6)	4(40.0)	36(53.7)
excavation(1)	2(11.8)	4(5.5)	1(10.0)	3(4.5)
collect/transp.(2)	13(76.5)	34(46.6)	3(30.0)	9(13.4)
transport/cement(3)	1(5.9)	0	1(10.0)	1(1.5)
aggregate making(4)	6(35.3)	9(12.3)	0	5(7.5)
pipe laying(5)	8(47.1)	5(6.8)	2(20.0)	2(3.0)
construction(6)	7(41.2)	55(75.3)	1(10.0)	11(16.4)
first aid	0	0	0	8(11.9)
other(7)	1(5.9)	6(8.2)	0	4(6.4)

*multiple answers of 17 wage labourers and 73 self-help workers under 'task done' and 10 wage labourers and 67 self-help workers under 'task preferred'.

**task includes: (1) excavation of drainage/trenches, (2) collection and transport of sand, stones, etc., (3) transport of cement, steel, timber, etc., (4) aggregate and block making, (5) pipe laying and back filling, (6) construction of tank, in-take, domestic point, etc., and (7) other(such as fetching water or cooking for the project staff and workers).

Table 9A: How Project Incomes were Spent(Mto-wa-Mbu)

<u>how money was spent*</u>	<u>participants (%)</u>
purchased consumer goods	75 (98.7)
saved	18 (23.7)
reimbursed debts	15 (19.7)
other	13 (17.1)

*multiple answers of 76 participants

Table 9B: How Project Incomes were Spent(Rukwa)

<u>how money was spent*</u>	<u>W.L. (%)</u>
purchased consumer goods	17 (100.0)
saved	2 (11.8)
reimbursed debts	5 (29.4)
other	0

*multiple answers



C. On Maintenance

The proper maintenance of the infrastructure constructed or improved under SPWP is an important concern of the recipient as well as of the donor countries. The task involves the organisation of appropriate institutional arrangements and preferably the active participation of local beneficiaries. The key to proper maintenance is regular and timely follow-up actions so that the completed economic assets will be preserved in a productive state for a long time to come. Whether or not the newly acquired infrastructure will be well-maintained, therefore, depends on the competence of all parties concerned to organise efficient institutional machineries at the local level and to mobilise technical skills, labour and financial resources required for the task.

The maintenance of any infrastructure completed under SPWP has two components: one includes recurrent activity such as clearing irrigation canals; the other involves repairing work of damage caused by natural disasters such as landslides, floods, etc. As far as the first component is concerned, it is feasible to draw up a regular maintenance programme and the annual cost of such a programme. It is not very feasible, however, to make an estimate for the second component, although the responsible authorities should always allocate a certain amount of emergency funds to be utilised in case of need, especially if any recurrent disasters have been recorded in the area.

In selecting one maintenance strategy over another, one must take into account the skills and resources likely to be available in the area. The maintenance issue should, therefore, be considered during the planning and implementation stages. The technology appropriate to future maintenance requirements should be employed as much as possible during construction. Moreover, training should be incorporated during the implementation stage in order to develop the skills required for the tasks because future maintenance work will rely heavily upon those individual skills acquired during construction.

How should the funds required for maintenance work be secured, then? In most countries, local beneficiaries are encouraged to provide themselves in a form of self-help work in order to keep the cost down to a locally affordable level. Establishing a strong link between beneficiaries and maintenance responsibility is a key factor here, and it can be achieved only by involving the local population in the selection and the designing of projects so that they would feel that the assets are being created by them for their own benefit and that they would be responsible for the maintenance. Needless to say, adequate maintenance tasks require more than self-help work by the beneficiaries. Appropriate tools or certain materials are also necessary even with the labour-intensive approach.

In order to cover deficiencies of government resources, some countries have imposed, or are in the process of imposing, taxes or fees on the beneficiaries to cover the cost. In Tanzania, too, a statutory provision is being proposed, whereby the users' committee for irrigation is to be established under the village council which will be responsible for collecting fees of TAS .70 per acre per person per year to cover the maintenance cost.

Some villages under the water-supply project in Rukwa are also said to have imposed on the villagers a certain amount of water fees. Some repair work and replacement of parts are to be financed out of these funds. However, there has not been a formal water committee established in each village under the supervision of the Regional Water Department. Thus, it has not been clearly established as to how much and what type of maintenance work should be the responsibility of the villagers. A formal structure of the water committee per village is now being proposed so that a systematised maintenance work would be carried out at the local level. It is proposed that at least 50 per cent of the committee members be female so that their voices would be reflected in the important matter of daily life - water.

For the purpose of finding out how much the participants in Mto-wa-Mbu were aware of the issues involved in proper maintenance of the infrastructure being created there, we included an open-end question concerning maintenance. In fact, the question should have also been directed to the non-participants, since they are beneficiaries as well.

The results (Table 10) indicate that the majority of them seem to have some notions, however vague they might be, of the necessity of maintenance work. However, many revealed their lack of adequate knowledge of the important and basic issues, such as self-help work or the collection of fees from beneficiaries, involved in the maintenance to be carried out at the local level. If the community is to become more self-sufficient in operation as well as in maintenance of the infrastructure created, all the members of the community, including those who had never participated in any aspect of the project work, must become more aware of their responsibilities for preserving their economic asset. This can probably be achieved through continuous educational and training programmes through the initiative of village authorities.

In the survey carried out in Rukwa, the question on maintenance was directed to all the respondents including the non-participants (Table 10B). In general the responses obtained in Rukwa appear to be a little more specific than those obtained in Mto-wa-Mbu as far as what the villagers thought was needed to be done for the maintenance of the scheme. This seems to imply that the villagers in Rukwa were a little more aware of exactly what problems they faced in smooth operation of the scheme. This is perhaps due to the fact that the problem of water-supply is much more closely intertwined with people's daily life than that of floods

or irrigation. The village authorities still have the task of raising the awareness of the whole community even higher. Certain individuals should now be designated by the village council for assuming the responsibilities of dealing with the maintenance problem. Whether or not they can get total cooperation of every villager would be the key to a successful and long-term operation of the scheme. Last but not least, financial arrangements for maintenance work must also be worked out at the local level as much as possible.

Table 10A: Participants' Awareness on Maintenance
(Mto-wa-Mbu)

<u>what is needed to be done</u>	<u>participants(%)</u>
appropriate repair and cleaning of drains	6 (7.9)
increase wages	23 (30.3)
proper maintenance and extension of drainage system	28 (36.8)
increase labour force	1 (1.3)
extension of project period	2 (2.6)
prompt payment of wages	1 (1.3)
provision of tools and equipment	1 (1.3)
regulate water flow	1 (1.3)
no response	13 (17.1)
<u>total</u>	<u>76(100.0)</u>

Table 10B: Respondents' Awareness on Maintenance
(Rukwa)

what is needed to be done	W.L.(%)	S.H.(%)	N.P.(%)
increase domestic points(1)	3 (18)	17 (23)	15 (23)
employ permanent, trained care-taker for water management(2)	5 (29)	6 (8)	6 (9)
villagers should be responsible for maintenance	5 (29)	11 (15)	4 (6)
replace broken parts or supply spare parts in time	1 (6)	4 (6)	1 (2)
proper maintenance of pipes and domestic points	1 (6)	18 (25)	3 (5)
regulate water flow and avoid water wastage	1 (6)	6 (8)	2 (3)
keep the in-take area clean(3)	0	3 (4)	0
prevent children from reaching domestic points	0	1 (1)	0
involve women in operation and maintenance	0	1 (1)	16 (25)
others	1 (6)	3 (4)	5 (8)
no response	0	3 (4)	12 (19)
total	17(100)	73(100)	64(100)

Note: (1)Some suggested that this would reduce damage done to taps and 3 self-help workers and one non-participant suggested that the villagers should pay for this work.

(2)Some suggested that this individual should also protect the scheme from thieves(Apparently parts are sometimes stolen to be sold in town.)(3)Suggestions were that animals and humans should be prevented from polluting water in the area.

D. Impacts of the Projects in Mto-wa-Mbu and Rukwa

The most immediate impact of the project in Mto-wa-Mbu was the increase in the purchasing power of those who participated as wage labourers, at least during the project implementation. From the commencement to the end of 1985, the project created 541,246 man-days of employment for the unskilled and 9,349 man-days for the skilled. The total expenditure for both types of labour up to December 1985 was approximately US\$ 1 million (Project Office URT/77/033, 1986).

One of the objectives of SPWP is to provide employment for the underemployed and the unemployed rural population of developing countries, and the project in Mto-wa-Mbu has been able to achieve this to our satisfaction. As the women reported that they spent their earnings on purchasing soap, cooking oil, paraffin, salt, food, clothes, etc., the wages contributed to the improvement of their nutritional, sanitary and living conditions. Some were able to save a portion of the money or to spend it for children's education or farm equipment. Furthermore, the presence of the project in the area itself (because materials are procured locally as much as possible) and the increase in the purchasing power of the people must have generated further employment in the area, though statistical data are not available on this matter, in such sectors as commerce, services, transport, etc.

However, the expected increase in labour demand in agriculture in Mto-wa-Mbu is believed to be far more significant than the employment created during the phase of implementation. For example, the size of the irrigated area together with the reclaimed land increased from 1,941 acres in 1980 to 3,209 acres in 1985. This will be increased further to 5,213 acres by 1990 when the project terminates. As a result of this, the production of maize alone increased from 1,013 tons in 1980 to 1,587 tons in 1985 and is expected to reach the production level of 2,378 tons by 1990. The eventual output is likely to increase even further with the introduction of improved seeds, fertilizers and farming techniques. The increase in the irrigated and cultivable land area and the increase in production necessarily mean an increase in labour demand in the agricultural sector. It has been estimated that the labour required for agriculture increased from 209,000 man-days in 1980 to 320,000 man-days in 1985. It is expected to increase further to 477,000 by 1990. Therefore, the long-term impact on labour demand is far greater than the employment created during the project implementation (Martens et al., 1987).

In Rukwa, on the other hand, the magnitude of the employment created by the project has not been as great as that in Mto-wa-Mbu. There were 92,177 man-days of work created for the unskilled and 10,634 for the skilled up to December 1985, and the total expenditure for wages for both categories of workers amounted to approximately US\$ 287,000 (Project Office URT/77/033). Though the purchasing power of the wage labourers in Rukwa did not increase as much as that of the participants in Mto-wa-Mbu, the extra income they

earned nevertheless helped them obtain certain items that were very necessary or useful for daily life. The employment generation in other sectors in the area was believed to have been equally limited, unlike the situation in Mto-wa-Mbu.

The most significant impact of the water supply project, however, is believed to have been on the sanitary and health conditions in the villages covered by the project. The number of patients treated for selected water-borne or water-related diseases at the Kate and the Mwazye dispensaries gives us some indications. The figures for 1977 in Table 11A and for 1982 in Table 11B indicate the volume of treatment before the completion of the project, while those for 1986 were recorded after the completion. According to the tables, the number of patients declined quite drastically in absolute terms for many diseases examined here. In some cases there were declines of more than 50 per cent.

When we take the data on population into consideration, we realise that the rate of decline per 1,000 inhabitants was even greater. The records at the District Office show the total population of the four villages under the Kate sub-project for 1977 as 4,851 and that for 1985 as 6,386, the annual rate of population increase there being about 4 per cent during those years. Although the data on the table do not cover the village of Chonga, we can nevertheless make some calculations using the available information to have an approximate idea on the decline of cases of diseases. For example, the cases of conjunctivitis reported to the Kate dispensary were approximately 7.6 per 1,000 inhabitants. They were reduced to 3.0 by 1986.

According to data we obtained from the District Office for the villages under the Mwazye sub-project, there was a decrease in population from 3,725 in 1982 to 3,418 in 1986. The district authorities explain that it was mainly due to people away on training or migrating elsewhere in search of employment. Comparing the population data and the figures in Table 11B, we see that the cases of the selected diseases per 1,000 inhabitants declined quite remarkably from 1982 to 1986. However, the cases of diarrhoea or conjunctivitis increased slightly from September 1982 to the same month in 1986. It has been discovered that the water from the Mwazye intake is somewhat contaminated due to the villages being located upstream (Project Office URT/77/033). This may be partially responsible for the increase. A treatment plant is now being envisaged, and its completion is expected to bring about further improvement in people's health conditions in those villages.

Prior to the completion of the water supply scheme, the villagers had to fetch water of dubious quality and often of insufficient quantity. At least water of better quality is now abundant to most of the villagers covered by the project. This is believed to have improved the sanitary and the health conditions in the area. We do not have sufficient data on other aspects, such as the national health programme or

improved medicines available in the region, which might have also contributed to the decline in the number of the sick. Therefore, we do not intend to claim that our project was solely responsible for the decline. However, the tables give us a strong indication that a positive impact of the project is indisputably felt on people's health in the area.

What does this mean to the individual family and each community? There has been a tremendous amount of labour loss among men and women due to their poor health. In addition, there has also been female labour loss due to children's health, since it is normally the mother who nurses the sick child. The improvement in people's health conditions means a considerable amount of savings on medical fees for each family and the local health authorities. Likewise, a tremendous amount of labour previously lost can now be utilised to improve agricultural productivity. Better health for the nation as a whole would certainly make a significant difference in the agricultural or other economic output which would help improve the overall standard of living for the country.

Another impact of the water-supply project is that the distance one had to walk to the nearest source of water has now been drastically reduced. Our findings indicate that the average distance is now only about 200 meters throughout the year. Some women reported that they had to walk up to 3 kilometers especially during the dry season. Now many can obtain it after walking less than 100 meters. The wage labourers live much nearer to the domestic points than the self-help workers or the non-participants. This may be due to the fact that the former have been settled in the village slightly longer than the other groups, which may possibly imply that their families have been settled in the village centre longer than those of the other groups. Since more domestic points are constructed in the village centre than in other areas, the wage labourers might be walking a shorter distance to fetch water than the others.

The reduced distance for water fetching has drastically cut down on the time required for this chore. This makes it possible for women to allocate more time to other productive activities in and around the house. Carrying water for a shorter distance also means less physical strain on them. Because of this they may now be able to afford a little more relaxation that they rightly deserve. In addition, the availability of water makes it easier for them to do other chores such as cooking and washing. A woman reported that it would also help her with brick making, while several respondents admitted that gardening was now possible with the readily available water. The latter case is a misuse of the water, according to the RWD, since the volume of water piped to the villages was calculated based on people's expected daily consumption for drinking, cooking, washing, etc. It was not meant to be utilised for irrigation. The RWD ^{Regional Water Dept.} confirmed its intention to supervise the usage of water better so that it would be well distributed to all villagers.

Table 11A: Cases of Water-borne or Water-related Diseases
Treated at the Kate Dispensary**

period	disease* (1)	(2)	(3)	(4)	(5)	(6)	(7)
Jul. - Aug. '77	36	37	38	58	72	45	38
Jul. - Aug. '86	21	19	12	33	51	17	18

Note: *(1) scabies, (2) conjunctivitis, (3) goitre, (4) diarrhoea, (5) malaria, (6) helminthiasis, (7) infection from wounds. **It provides medical and health-related services to the residents of Kate, Nchenge and Ntalamila.

Table 11B: Cases of Water-borne or Water-related Diseases
Treated at the Mwazye Dispensary**

period	disease* (1)	(2)	(3)	(4)	(5)	(6)
July '82	50	40	40	95	65	95
Aug. '82	18	24	13	42	25	18
Sept. '82	7	3	3	18	20	8
July '86	20	17	2	15	32	18
Aug. '86	8	13	3	16	18	13
Sept. '86	5	6	0	22	14	3

Note: *(1) - (6) are the same as Table 21A. **It provides medical and health-related services to the residents of Mpenge, Msoma and Mwazye.

E. Types of Projects Women Proposed

In Mto-wa-Mbu all the participants interviewed except one had been involved in the project as mere labourers. Despite this, 90 per cent of them felt that the selection and the planning of the project were generally good, as mentioned earlier. Moreover, 97 per cent of them were happy about their participation, though it was mainly for the wage-earning opportunity they had. Likewise in Rukwa an overwhelming proportion of the sample approved the selection and the planning of the project, though none of the wage labourers nor the self-help workers participated in either of them.

In view of improving the socio-economic conditions of rural women in developing countries, many small-scale projects, but just as effective as large ones, are now being contemplated or being introduced in many regions around the world. In the light of this trend, the sample women in both surveys were asked if they would like to have new projects in their communities in the future, and if yes, what types of projects they would like to see implemented.

In Mto-wa-Mbu 96 per cent of the respondents combined answered that they would like to have new projects in their communities, while 4 per cent either replied negatively or had no response. The results (Table 12A) show that the the proposal for a water-supply project received the largest support from both the participants and the non-participants, a reflection of the problem of securing safe drinking water in the area. Such a project would certainly be beneficial for all the residents of the community from the aspects of economic productivity (the time that is being allocated for water-fetching could be used for more productive activity such as agriculture) and better health and sanitation. As at the time of the survey in Mto-wa-Mbu, a bilateral water-supply project was in the process of being concretised between the Governments of Tanzania and the Netherlands.

The other project ideas proposed were as follows: tailoring(sewing), weaving(handicraft), health care service, horticulture(gardening), shop-management(beer brewing), school facilities building, tractor service, food processing, etc. Some of the ideas do not come under the usual domain of labour intensive SPWP; nevertheless, they would be income-generating as well as community development activities that could help improve the standard of living in the Mto-wa-Mbu area.

In response to the similar question on new project proposals, the UWT chairwoman of Barabarani and of Monduli, the district in which the village of Barabarani lies, replied that training of women in food preservation, handicraft making, housing improvement, etc. would be very much appreciated for the betterment of living conditions in the area. She also confirmed that water-supply and electrification projects would be much needed for the area.

Regarding the project ideas they proposed, 19 participants and 22 non-participants (27 per cent of both groups combined) expressed their willingness to be involved in the planning, while one participant was interested in working as gang leader. A large proportion of them, however, showed interest in participating only as paid labourers (44 per cent of both groups combined), while 5 per cent and 6 per cent said that they would be willing to be self-help labourers and financial contributors respectively. The rest did not give any response. Among those 41 women who expressed their interest in participating as planners, 28 (68 per cent) were married (monogamy), while the proportions of other categories were rather insignificant. On the other hand, 46 per cent of them were Christians as opposed to 54 per cent Moslems. These figures seem to indicate that if women are encouraged and given proper training and opportunities, they would be willing to take active roles and initiatives in development programmes that are currently assumed by men.

In Rukwa, too, almost everyone interviewed (98.7 per cent) expressed their support for certain projects that they felt would help improve their lives (Table 12B).

A project that the largest number of the respondents proposed was milling machine services. In fact, while going from village to village for data collection, we saw many women queuing in front of the village miller waiting for their turn. They seemed to be losing much time by waiting, but they probably thought that it was still much more efficient to have their grains ground by machine than by traditional grinding stones. The demand for more milling machines is reported to be very high in rural areas throughout Tanzania. In response to this growing demand, small-scale income-generating projects are being introduced here and there, whereby a fixed amount of funds are made available on loan to a women's group, for example, which will be in charge of purchasing a machine and establishing a milling service business with competitive fees to be charged to customers. The profits would then be used to pay back the loan initially, but they could eventually be accumulated and be utilised as the capital for expanded business activities for the group. This type of project, however, does not come under SPWP. Such a project may perhaps be supported by other rural development programmes.

The other project ideas proposed by the respondents include road construction/maintenance, construction of dispensaries and hospitals, transport service, irrigation, afforestation, tailoring, shop management, etc. Some of them are in fact what SPWP deals with, thus they might be seriously considered in the future as viable projects, should they be submitted as formal project proposals to possible donors.

While working in Rukwa on data collection, however, we felt that afforestation was urgently needed in the area since most of the hills and mountains were becoming practically

bare. Not only are the villagers soon expected to face a problem of acute energy shortage, but also the bald mountains can bring serious damage to the ecology of the region especially after a long rainy season. Ecological deterioration would also be detrimental to the agriculture of the area.

An overwhelming proportion of the people there cultivate non-irrigated fields. However, thanks to favourable weather and other elements for agriculture, Rukwa has been producing surplus food. They are surely capable of increasing agricultural production with an irrigation scheme. However, the problem they are now facing is a lack of adequate all-weather roads and enough vehicles to transport surplus crops to towns and cities in other regions of the country. Therefore, road construction might probably be much more pertinent to the area than an irrigation project.

In relation to the project ideas the women proposed, a number of them expressed their willingness to participate as wage labourers. The proportion was the highest among the wage labourers (59 per cent) followed by the self-help workers (45 per cent) and the non-participants (25 per cent). However, the largest proportion of the non-participants (50 per cent as opposed to 24 per cent and 19 per cent of the wage labourers and the self-help workers respectively) were interested in getting involved in planning. This might perhaps be due to the fact that a greater proportion of the non-participants gave unfavourable ratings on the selection of the present project and that they might not want to be left out of decision-making if given such an opportunity in the future. Approximately 8 per cent of the respondents combined also showed interest in project coordination and administrative/secretarial work. Finally, an interesting point to be mentioned here is that approximately 12 per cent of the respondents combined reported their willingness to participate in self-help work. The proportion of such women was the highest among the self-help workers. This might be a reflection that they have had a greater disposition for unpaid community work.

As in Mto-wa-Mbu, many of the women interviewed in Rukwa showed much interest in, and willingness to be actively involved, in community development programmes. Their concern towards new projects to be implemented in the future can be interpreted as a sign of their desire to be a part of the development process. It may also mean their willingness to acquire skills needed for assuming more active roles in the whole process. Such skills cannot be acquired overnight. They can only be acquired through training of a certain duration and practical experiences. Women should, therefore, be integrated in all phases of future projects, from planning to operation. This means that they should be encouraged to take part in village and district decision-making as actively as men and in applying the decisions they helped to make in actual community work.

Table 12A: Types of New Projects Proposed(Mto-wa-Mbu)

project*	part. (%)	non-part. (%)	total(%)
water supply	26 (34.2)	26 (34.7)	52 (34.4)
tailoring	25 (32.9)	26 (34.7)	51 (33.8)
weaving	15 (19.7)	7 (9.3)	22 (14.6)
health service	10 (13.2)	5 (6.7)	15 (9.9)
horticulture	10 (13.2)	5 (6.7)	15 (9.9)
shop management	6 (7.9)	8 (10.7)	14 (9.3)

*multiple answers of 76 participants and 75 non-participants.

Table 12B: Types of New Projects Proposed(Rukwa)

project*	W.L.(%)	S.H.(%)	N.P.(%)	Total(%)
milling machine	9 (53)	28 (38)	37 (58)	74 (48)
road construction/ maintenance	6 (35)	16 (22)	18 (28)	40 (26)
construc. of hospital/ dispensary	1 (6)	36 (49)	15 (23)	52 (34)
transport service	0	8 (11)	3 (5)	11 (7)
irrigation	2 (12)	6 (8)	5 (8)	13 (8)
afforestation	3 (18)	7 (10)	5 (8)	15 (10)
tailoring	1 (6)	4 (6)	2 (3)	7 (5)
shop management	0	6 (8)	3 (5)	9 (6)

*multiple answers

F. Other Economic Activities

In a society where subsistence work is a predominant form of economic activity, people are usually engaged in multiple activities that are all relatively important for the survival and the well-being of the family and the community. In view of grasping women's total socio-economic roles in Mto-wa-Mbu and Rukwa, we included in the questionnaire the question on other economic activities such as wage labour, agricultural work, production and marketing, and livestock raising.

1. Wage Labour

In response to the question of if the women normally engage in wage labour other than the work in the project, 4 participants and 5 non-participants (6 per cent of the sample) in Mto-wa-Mbu answered positively. While 6 of them reported to be engaged in seasonal work, 3 were in steady work. As far as the type of their work was concerned, 5 were in commerce/trade, 2 in civil service and 2 in others.

Looking at those who were engaged in wage labour by religion, we found that 4 were Christians as opposed to 5 Moslems. As for their marital status, 5 were singles without children while 2 each were singles with children and the married (monogamy). One conclusion that can be drawn here is that very few women engage in wage labour in the area since such opportunities are extremely limited to anyone regardless of one's religious background or marital status.

In Rukwa, wage labour was even rarer than in Mto-wa-Mbu. Among 154 women interviewed there, only one wage labourer and one non-participant (1.3 per cent of the entire respondents) replied that they were engaged in seasonal work, both in the forestry sector.

The impression that we had while going from village to village for field work was that the economy in Mto-wa-Mbu was in a more advanced stage than that in Rukwa. As mentioned before, the former is located on the main road connecting Arusha with Ngorongoro. There is a tourist hotel at Lake Manyara National Park nearby, in addition to a few local inns in the centre of the town. There are also several shops that cater for the travellers passing through. The villages in Rukwa, on the other hand, are located in remote areas far from the main road in the region. Since there are hardly any outsiders passing through the villages, there are no inns or shops that cater for them. Thus, the volume of monetary transactions in the area is assumed to be much smaller than that in Mto-wa-Mbu. The results concerning wage labour, therefore, were as expected.

With regard to the wages the women earn in Mto-wa-Mbu, 6 reported that they were somewhat important, while 3 said they were not so. None, therefore, considered them as very important, which seems to indicate that the total earnings from this activity in this area are limited. Nevertheless,

all of the 9 women reported that they use the money for buying items such as salt, food, soap, shoes, clothes, etc., while the money stretches enough for 5 women to buy some farming tools as well. Although the total amount of their earnings appears to be rather limited, all of them were found to exercise their own decision-making power on the expenditure.

In Rukwa, both women engaging in seasonal wage labour were married (polygamy). While the wage labourer responded that her earnings were somewhat important and that she enjoyed the decision-making power over the expenditure, the non-participant reported that her husband decided how to spend the income she considered to be very important. Both reported that they purchased items similar to those bought by the Mto-wa-Mbu women.

2. Agricultural Work

The fertile soil deposited in the Mto-wa-Mbu plain by three rivers flowing through the area had attracted people from nearby districts and regions of Tanzania. Now that the irrigation project has increased the acreage under the modern irrigation system, agricultural activities are expected to become even more important, perhaps drawing an increased number of migrants from other parts of the country. Women in the area have always been considered to be important contributors to all types of agricultural activities. For those women covered in this survey, too, agricultural work was a significant part of their daily work.

In Rukwa, on the other hand, the completion of the water supply project will not have any direct impact on the agricultural production in the area, though there may be an indirect impact due to the improved health conditions of the people, as discussed earlier. However, the region has been known as the granary of Tanzania despite the lack of a modern irrigation system in most of the region. As in Mto-wa-Mbu, women's labour contribution to agriculture there is indispensable. For this reason their agricultural activities were also covered in the survey.

In Mto-wa-Mbu the size of the farm owned by the families of the sample ranged from 0 to 8 acres for the participants and from 0 to 9.5 acres for the non-participants, the average size being 2.2 and 2.8 acres for the former and the latter respectively. Among them, 50 per cent of the participants and 55 per cent of the non-participants reported that they had some land irrigated under the ILO scheme. This means that though the non-participants were not involved in the project as wage labourers, they will, in fact, enjoy long-term benefits that the irrigation scheme is expected to bring to the area.

In Rukwa, the average size of the family farm was much bigger than that in Mto-wa-Mbu, reflecting its reputation of being the granary of the country. The size ranged from 1 to 14 acres for the wage labourers, from 1.5 to 22 acres for the

self-help workers and from 1.25 to 36 acres for the non-participants. The average holdings of 7.8 acres of the self-help workers were the largest followed by 7.3 acres of the non-participants and 4.6 acres of the wage labourers. As in Mto-wa-Mbu, those who participated in the project as wage labourers happened to have smaller holdings. This seems to indicate that the wage labourers probably had more time to be involved in the project than the others. It might also mean that they were in need of additional employment to supplement the family incomes.

Maise, banana and finger millet were found to be the major crops produced in Mto-wa-Mbu. Under the newly built irrigation system, however, rice cultivation is rapidly being introduced in the area, and its acreage is expected to expand. In Rukwa maize and finger millet were also the major crops produced, along with beans (Tables 13A and 13B).

Maize being the staple food of the country, most of the respondents in Mto-wa-Mbu produce it. As shown in Table 13A, major crops there are now grown in irrigated fields, which should gradually help increase the total output in the area. The fact that everyone who reported to be growing rice utilises the irrigation system is a clear end-result of the ILO project. In addition to the crops listed in the table, the other minor produce includes tomatoes, potatoes, onions, and various types of fruits.

In Rukwa, on the other hand, the crops produced are not as varied as those produced in Mto-wa-Mbu. For example, nearly everyone reported to be producing maize and beans. In addition, approximately 80 per cent of the sample women were growing finger millet as well. However, only a very small percentage of them appear to be producing other crops. Though the region is known to be the granary of the country, Table 13B seems to imply that the diet of the people there is not as well-balanced as it should be. The difference in the variety of crops grown in the two regions is surely due to the fact that the agriculture in one region enjoys the benefit of the irrigation scheme, while the other has to rely only on rainfalls.

Tables 14A and 14B present the crops that were sold in order of importance in the two regions. In Mto-wa-Mbu, finger millet was the crop that the largest proportion of the participants and the non-participants combined listed as the most important surplus crop sold. Other crops sold in order of importance were banana, maize, rice, etc. In Rukwa, beans, maize and finger millet were listed in order of importance by all three categories of the sample women. Comparing the two tables, we notice that the proportion of the women who normally sell surplus crops is higher in Rukwa than in Mto-wa-Mbu. This also confirms the reputation the region enjoys of being the granary of the country.

Since it is not clear exactly how much of the crops are normally sold, it would not be possible to estimate the level of farm incomes of those with surplus crops. However, it is

evident from the tables that in Mto-wa-Mbu more non-participants had surplus crops to sell than the participants. Furthermore, considering the larger average size of the family farm of the former, we may safely assume that their average earnings are also greater than those of the latter. In Rukwa, more self-help workers than the wage labourers or the non-participants were found to have surplus crops to sell. Since the average size of their farm is larger than those of the other two, we may also assume that their farm incomes are greater.

In Tanzania, where an overwhelming proportion of its population live in rural areas, agriculture is the most important economic activity. Women's contribution in this sector has been estimated to be as great as that of men's, if not greater. How, then, do they contribute to agriculture in the villages surveyed? Tables 15A and 15B present the types of farm work the sample women normally do in Mto-wa-Mbu and Rukwa.

Though the proportions of the respondents carrying out each type of work listed varied, the work patterns appear to be quite similar for all categories of women within each region. In Mto-wa-Mbu the proportion was high under "ploughing by hand", "sowing", "weeding", "harvesting" and "transporting" for all groups. On the other hand, it was either zero or extremely low under "ploughing with animal", and relatively low under "transplanting", "bird scaring", "threshing" and "selling on the market" for all. The latter types of work are commonly carried out by men (ploughing with animal, for example), by children (bird scaring) or by other members of the family such as daughters and elderly women (threshing).

Women's work pattern in Rukwa is somewhat different from that in Mto-wa-Mbu, partially a reflection of different work required for different crops being grown in those regions. Another reason is probably the different size of the family holdings in the two regions. For example, a large majority of women in Rukwa were found to be engaged in "ploughing with animal", which was hardly done by their counterparts in Mto-wa-Mbu. Or, "transplanting", which normally goes along with rice cultivation, is not done in Rukwa. As expected from the greater proportion of people in Rukwa with surplus crops to sell, a higher proportion of the respondents there also engage in "selling on the market".

Our findings show that women are truly men's equal partners in agriculture which often involves strenuous and heavy work. This is especially so in the areas where modern farm machinery are rarely utilised.

The question was asked in the Mto-wa-Mbu survey whether or not the number of hours spent on agricultural work had increased after the irrigation system was installed there. Among 79 of those whose family farm was being irrigated under the project, 9 reported that their time input increased, 11 unchanged and 59 decreased. An assumption was that the time

input in general would increase under the irrigation system since one could have double or even triple annual croppings with water available throughout the year. However, the results appear to reflect their narrow interpretation of the question. Most of them seemed to have understood it as time input in terms of merely irrigating the field. If they had previously transported water for certain crops from a long distance, the present system would certainly cut down on the time spent.

How did the sample women in Mto-wa-Mbu with surplus crops to be sold rate their agricultural incomes? Surprisingly, the higher proportion of the participants over the non-participants thought their incomes "very important", though we have earlier presumed that the average incomes of the former are likely to be lower than those of the latter based on the number of those with surplus crops and the average size of the family farm. The results may be an implication that for a family with inadequate incomes, every Shilling would be important. Looking at the results, however, we realise that agriculture is a very important source of incomes for both groups, as 85 per cent and 87 per cent of the participants and the non-participants respectively considered them at least "somewhat important". Furthermore, farm incomes were more important than the wages from the ILO project even for the participants, since 51 per cent of them thought the former "very important" as opposed to 38 per cent thinking so of the latter. This is because the project offered only temporary employment.

In Rukwa among those with surplus crops to sell, the greater proportions of the self-help workers and the non-participants over the wage labourers rated the farm incomes as "very important". Since the holdings of the former groups are larger than those of the latter, the outcomes are as expected. As in Mto-wa-Mbu, agriculture appears to be the most important source of family incomes for all. This seems to be so for the wage labourers as well, since a greater proportion of them rated the farm incomes as "very important" compared to the wages earned from the project.

We have also obtained information on how the women in Mto-wa-Mbu and Rukwa with farm incomes normally spend them. As is usually the case in a subsistence economy, most of the women utilise a great portion of their incomes for buying basic consumer goods. They were reported to purchase items such as soap, salt, kerosene and clothes while a few of them listed even watches as one of the items purchased. After obtaining the basic needs, some are still left with a little amount for other purposes.

The fact that in Mto-wa-Mbu a greater proportion of the non-participants than the participants manage to save seems to be another indication that the former are economically better off than the latter. Furthermore, 23 and 21 per cents are still able to buy farming tools or to pay for education, medical treatment, house repair, taxes, etc. Some women said that they contribute a part of the remainder to the group of their social or religious affiliation.

Likewise in Rukwa most of the women with farm incomes spend the money first for purchasing basic consumer goods. The list of the items they normally bought included, in addition to those listed by the Mto-wa-Mbu women, sugar, cooking oil, meat, beer, vegetables, matches, paraffin and eating utensils. The findings seem to give us another indication that the self-help workers are economically better off than the wage labourers or the non-participants. First, a much higher proportion of the former appear to be saving than the latter two groups. Second, the former also spend more on "others" that included educational fees, medical treatment, agricultural tools, livestock, business investment, etc.

In response to the question on who in the family decides on the expenditure of the farm incomes, we obtained the following results. Since more single women were among the participants than the non-participants in Mto-wa-Mbu, it is natural that more parents of the former came onto the decision-making scene. However, the participants have more decision-making power on the expenditure of farm incomes than the non-participants. Another observation we may make is that although the families of the latter are believed to be enjoying a higher level of farm incomes, the male member, especially the husband, appears to be the dominant figure with the decision-making authority. In many societies, this phenomenon is more commonly found among the families with economic stability than among those with instability.

Our findings in Rukwa also give us a somewhat similar picture as that in Mto-wa-Mbu regarding male decision makers. We discussed earlier that the self-help workers are believed to be enjoying higher farm incomes than the other groups. It is their husbands more than those of other groups who exercise the decision-making power in the family budget. The proportions of the respondents making the decisions themselves are inversely related to the level of farm incomes.

3. Production and Marketing

Many rural women of developing countries have been recorded to be engaging in production of handicraft items, tools or processed food for their own consumption as well as for sale on the market. For some women this is an important economic activity for which they may spend a considerable number of hours daily especially during the slack season for agriculture. The incomes from this activity may not be so much for many; nevertheless, it is a necessary supplement for the family well-being.

Among the women covered in Mto-wa-Mbu, 57 (75 per cent) of the participants and 33 (44 per cent) of the non-participants were found to be producing certain items to be sold. In Rukwa 15 wage labourers (88 per cent), 69 self-help workers (93 per cent) and 55 non-participants (86 per cent) reported that they engaged in this type of economic activity whenever they had time to spare. The items that they often produce and sell are presented in Tables 16A and 16B.

As indicated, in Mto-wa-Mbu the participants appear to be more active than the non-participants in production and marketing. This is probably due to the fact that a greater proportion of the former are underemployed with less amount of family farm and have more time to spare on an activity such as this than the latter. The items that are commonly produced are beer and mats, the materials or the ingredients for which can be easily obtained in their villages.

In Rukwa, greater proportions of all three categories of the sample women were found to be engaged in production and marketing. What is interesting is that the self-help workers who are assumed to be busier than the other two groups of women were slightly more active. What is also interesting is that those who engage in production and marketing almost invariably concentrate on beer production. This may explain the reason why the self-help workers are more active. In other words, they have more surplus crops that are used as ingredients for beer making. The women in Rukwa as a whole produce less varied items than those in Mto-wa-Mbu.

Compared with the farm incomes, much smaller proportions of women both in Mto-wa-Mbu and Rukwa considered their incomes from production and marketing "very important". In the former, for example, only 25 per cent of 57 participants and 12 per cent of 33 non-participants rated the incomes as "very important". In the latter, on the other hand, only 6.5 per cent of all the women engaging in this activity, but none of the wage labourers, considered them "very important". Nevertheless, the earnings were "somewhat important" to around 90 per cent of those engaging in this type of economic activity in both regions.

As far as the utilisation of the money from the sale was concerned, 51(90 per cent) participants and 32(97 per cent) non-participants in Mto-wa-Mbu responded that it was normally used for buying soap, salt, food, clothes and kerosene. The remainder was then to be used either for reimbursing debts (for 6 (11 per cent) participants and 4 (12 per cent) non-participants) or paying for education, farm tools, taxes and others (for 8 (14 per cent) participants and 6 (18 per cent) non-participants). Furthermore, 9(16 per cent) of the former and 4 (12 per cent) of the latter reported that they even manage to save a little out of it. The figures presented here represent multiple answers of 57 participants and 33 non-participants.

In Rukwa 100 per cent of the sample women engaging in production and marketing reported that they would use their earnings to pay for consumer goods such as the ones listed by their counterparts in Mto-wa-Mbu. Some would pay with it for the services rendered by the owner of the milling machine. Furthermore, 15 per cent of the women (27 per cent of the W.L.s, 21 per cent of the S.H. workers and 5 per cent of the N.P.s) save part of it, while 17 per cent (47 per cent of the

W.L.s, 4 per cent of the S.H. workers and 24 per cent of the N.P.s) use it to reimburse part of their debts. Finally, 9 per cent of them (7 per cent of the W.L.s, 12 per cent of the S.H. workers and 5 per cent of the N.P.s) were also able to invest some in education and/or business, in addition to paying for medical treatment.

Regarding the decision-making power on the incomes from production and marketing, 54 (94 per cent) participants and 29 (88 per cent) non-participants in Mto-wa-Mbu reported that they would normally make the decisions by themselves on the expenditure. Likewise in Rukwa, 66 per cent of the women engaging in this activity (87 per cent of the W.L.s, 72 per cent of the S.H. workers and 53 per cent of the N.P.s) were found to be enjoying the decision making power on it. The incomes from this work are most likely be earned solely by women. However, 3.5 per cent of the participants and 9 per cent of the non-participants in Mto-wa-Mbu and 6.7 per cent of the wage labourers, 5.7 per cent of the self-help workers and 25.5 per cent of the non-participants in Rukwa reported that their husbands decided on the expenditure.

Tables 16A and 16B show that women, especially in Rukwa, concentrate on beer making in this type of their economic activity. It is believed that a considerable amount of it is consumed within the nuclear or the extended family and almost all is consumed within the local community. Their activity, therefore, may not be as much income-generating as it could be in terms of time input. It would be advisable for the local authorities as well as the existing women's groups to explore the possibilities of them producing and marketing other items that might be more directly related to the improvement of family incomes. To do this, the questions regarding the supply of raw materials and skills required for the production of any suggested items and the demand for them not only within their community but also outside must be answered.

Another suggestion, which is closely related to the above, might be that instead of most women concentrating on the production of one item, as in Rukwa, diversification in their productive activities should be looked into. An undeniable fact, however, is that a very high proportion of women in both regions have control over their own earning from this activity. This is an encouraging sign promoting certain income-generating programmes in the region in the future.

4. Livestock Raising

Animal husbandry is often an important source of livelihood in rural areas especially in developing countries. For example, animals provide people not only with food such as milk, eggs, meat, etc. but also with sources of energy (e.g. In some parts of the world dried cow dung is used as fuel (Anker, 1983)) and shelter (e.g. Animal hide used to cover the roof.). Furthermore, bird feather can protect people from cold weather or animal hide can also be used as

materials for clothes, tools, utensils, etc. Livestock is not only a means of mere subsistence but it generates a market economy. For this reason we tried to investigate the magnitude of women's contribution to this form of economic activity in Mto-wa-Mbu and Rukwa.

In response to the question on the ownership of any livestock, 53 (70 per cent) participants and 56 (75 per cent) non-participants in Mto-wa-Mbu reported that they kept the kinds of animals presented in Table 17A. In Rukwa, 13 (76 per cent) wage labourers, 64 (88 per cent) self-help workers and 60 (94 per cent) non-participants were found to own the animals as presented in Table 17B.

Though 72 per cent of the sample in Mto-wa-Mbu were reported to own some kinds of animals, the majority of them own poultry rather than livestock in a real sense. A small number of families own goats, while only a handful of people keep cattle, sheep and pigs. Furthermore, when we look at the average number of the animals owned by each family, it is evident that livestock raising in this area is more or less a part of subsistence economy. The animals or their products are mainly consumed at home rather than being sold on the market. To confirm this, only 16 (30 per cent) of 53 participants and 13 (23 per cent) of 56 non-participants responded that they usually sold some of the animals or their products.

The majority of animals owned by the Rukwa women were also poultry rather than livestock, though the proportions of them owning goats and cattle were higher in Rukwa than in Mto-wa-Mbu. The proportion of the non-participants owning animals is higher than those of the other two groups; however, the self-help workers appear to be more active than the other two groups in terms of livestock raising. The average number of each kind owned indicates that in Rukwa, too, people mainly subsist on animals they raise. Among those who own animals, 5 (38.5 per cent) wage labourers, 21 (32.8 per cent) self-help workers and 10 (16.4 per cent) non-participants reported that they sold part of their animals or their products.

Looking at Tables 17A and 17B, we notice that sexual division of labour in animal husbandry is more marked in Rukwa than in Mto-wa-Mbu. In both regions the responsibility of feeding poultry is assumed largely by women. When it comes to the care of livestock, however, the proportions of the Rukwa women responsible for their care drop sharply in comparison with those in Mto-wa-Mbu. In Tanzania male members of a family, such as the husband and the sons, have traditionally been responsible for grazing livestock. The results on the tables are probably the reflection of the fact that Rukwa Region has retained far more traditional values than the other area because of the stage of its economic development.

Few of the respondents in both regions reported to have earned incomes from animal husbandry. Among 29 Mto-wa-Mbu women with incomes from this activity, 21 per cent considered

them as "very important". The results were similar in Rukwa. Among 36 respondents with such incomes, 19 per cent rated them as "very important" as opposed to 78 per cent considering them as "somewhat important".

In both surveys women's expenditure patterns on the incomes from livestock raising were found to be somewhat similar to those under other economic activities reviewed. For example, most of them spent their earnings for purchasing basic consumer goods such as clothes, cooking oil, salt, soap, kerosene, etc. When the sample women of Rukwa are compared with those of Mto-wa-Mbu, the former as a whole appeared to have a higher level of incomes than the latter. The fact that the former reported to save or spend for others in greater proportions than the latter seems to illustrate this.

Table 17A shows that in Mto-wa-Mbu women's contribution to animal husbandry, including the care of livestock, is quite extensive. However, our findings seem to show that the decision-making power on the expenditure of the incomes lies largely with men, especially among the non-participants. In Rukwa, on the other hand, the decision-making power appears to be better distributed or shared among those who contribute their labour.

It has been pointed out that the sample women in Rukwa and their families were found to be more active in animal husbandry than their counterparts in Mto-wa-Mbu. One of the reasons for this might be that the region has been producing surplus crops that could have been utilised as part of animal feed. This aspect should be looked at more closely to examine the feasibility of encouraging the expansion of animal husbandry in the region. It could surely help improve people's nutritional conditions and family incomes.

5. The Order of Importance of Five Sources of Incomes

The sample women in both surveys were asked to place different sources of incomes in the order of importance to their families. The sources that are being considered here include the incomes from the ILO project, wage labour outside the project, farming, production and marketing, and animal husbandry. How they placed them are presented in Tables 18A and 18B.

The tables show that all categories of respondents both in Mto-wa-Mbu and Rukwa rated the farm incomes as the most important of all. This is an indication that agriculture is the foremost economic activity in these areas. Ranked in the second place were the wages from the projects for those who participated as wage labourers in both projects and the earnings from production and marketing for other categories of women also in both regions. Ranking the incomes from production and marketing higher than those from animal husbandry was the pattern for all categories of women in both surveys. Since opportunities of wage labour are extremely limited in both areas, the incomes from this activity were considered, as expected, as the least important by all.

There were five sources of incomes which the respondents were asked to rank in the order of importance. However, many participants and wage labourers ignored 2 sources and the self-help workers and the non-participants even 3. None of them ranked all five. This is because many earned nothing from two or three sources listed. This may also mean that while the former had to earn incomes from as many sources as possible, the latter secured relatively sufficient incomes from two sources, namely, farming and production and marketing. In this respect, the ILO projects have perhaps been very helpful, especially in Mto-wa-Mbu, for the employment they offered to those without enough land to keep themselves fully occupied or to those who had very limited means of earning additional incomes.

Table 13A: Crops Produced in Mto-wa-Mbu

crop	participants		non-participants	
	number(%)*	irrig.(%)**	number(%)*	irrig.(%)**
maize	69 (90.8)	56 (81.2)	67 (89.3)	57 (85.1)
banana	32 (42.1)	28 (87.5)	40 (53.3)	37 (92.5)
millet	29 (38.2)	22 (75.9)	31 (41.3)	22 (71.0)
rice	26 (34.2)	26(100.0)	20 (26.7)	20(100.0)
cassava	6 (7.9)	6(100.0)	8 (10.7)	8(100.0)
beans	12 (15.8)	7 (58.3)	4 (5.3)	3 (75.0)
s. cane	2 (2.6)	2(100.0)	3 (4.0)	3(100.0)
s.potato	4 (5.3)	1 (25.0)	4 (5.3)	4(100.0)

*The figures under "number" indicate the total number and the proportion of the respondents reported to be growing the indicated crop.

**Under "irrigation" we find the number of those reported to be growing the crop in irrigated fields and the proportion of them among the respondents reported to be growing the crop. The numbers represent the multiple answers of the sample women.

Table 13B: Crops Produced in Rukwa

crop	W.L. (%)	S.H. (%)	N.P. (%)
maize	17 (100.0)	73 (100.0)	63 (98.4)
beans	16 (94.1)	72 (98.6)	63 (98.4)
millet	8 (47.1)	59 (80.8)	52 (81.3)
ground nuts	3 (17.6)	40 (54.8)	42 (65.6)
yam	0	0	12 (18.8)
cassava	0	1 (1.4)	5 (7.8)
s. potato	1 (5.9)	2 (2.7)	2 (3.1)

Note: All of the above crops were reported to be produced in rain-fed fields.

Table 14A: Crops Sold In Order of Importance(%)
(Mto-wa-Mbu)

order	first		second		third	
	Part.	N.P.	Part.	N.P.	Part.	N.P.
crops						
maize	17.1	13.1	9.2	18.7	5.3	6.7
f.millet	14.5	24.0	2.6	9.3	4.0	1.3
banana	11.8	20.0	9.2	13.3	4.0	4.0
rice	11.8	16.0	6.6	1.3	-	-
sweet potato	-	-	-	-	1.3	4.0

Note: 30.3 per cent of the participants and 25.3 per cent of the non-participants made no sale.

Table 14B: Crops Sold in Order of Importance(%)
(Rukwa)

order	first			second			third		
	WL	SH	NP	WL	SH	NP	WL	SH	NP
crops									
beans	41	51	44	24	22	3	6	8	13
maize	35	29	28	29	29	25	6	22	14
f.millet	6	14	8	6	29	23	18	12	9
ground nuts	-	-	-	-	-	2	6	3	-
cassava	-	1	-	-	-	-	-	-	-

Note: 18 per cent of the wage labourers, 6 per cent of the self-help workers and 19 per cent of the non-participants reported to have made no sale.

Table 15A: Agricultural Work Done by Women by Religion
(Mto-wa-Mbu)

work*	relig.	participants		non-participants	
		Christ.(%)	Moslem(%)	Christ.(%)	Moslem(%)
plough/hand		34 (89.5)	37 (97.4)	21 (84.0)	40 (83.3)
plough/animal		1 (2.6)	0 (0.0)	0 (0.0)	3 (6.3)
sowing		34 (89.5)	37 (97.4)	21 (84.0)	44 (91.7)
transplant.		16 (42.1)	14 (36.8)	9 (36.0)	22 (45.8)
weeding		35 (92.1)	38 (100.0)	23 (92.0)	41 (85.4)
bird scaring		17 (44.7)	18 (47.4)	7 (28.0)	20 (41.7)
harvesting		35 (92.1)	37 (97.4)	20 (80.0)	43 (89.6)
transport.		33 (86.8)	32 (84.2)	20 (80.0)	36 (75.0)
threshing		18 (47.4)	19 (50.0)	6 (24.0)	23 (47.9)
sell./market		19 (50.0)	18 (47.4)	13 (52.0)	21 (43.8)

*ploughing by hand, ploughing with animal, transplanting, transporting, and selling on the market.

The figures represent multiple answers of 38 Christians and 38 Moslems of the participants and 25 Christians and 48 Moslems of the non-participants.

Table 15B: Agricultural Work Done by Women in Rukwa

work	W.L. (%)		S.H. (%)		N.P. (%)	
plough/hand	7	(41.2)	19	(26.0)	32	(50.0)
plough/animal	12	(70.6)	39	(53.4)	47	(73.4)
sowing	17	(100.0)	73	(100.0)	64	(100.0)
transplanting	1	(5.9)	0		2	(3.1)
weeding	17	(100.0)	73	(100.0)	63	(98.4)
bird scaring	0		1	(1.4)	1	(1.6)
harvesting	17	(100.0)	73	(100.0)	62	(96.9)
transporting	15	(88.2)	49	(67.1)	50	(78.1)
threshing	17	(100.0)	71	(97.3)	63	(98.4)
selling/market	10	(58.8)	41	(56.2)	50	(78.1)

Table 16A: Items Produced and Sold (Mto-wa-Mbu)

item	participants*(%)		non-participants*(%)	
beer	35	(61.4)	15	(45.5)
mats	27	(47.4)	13	(39.4)
baskets	7	(12.3)	3	(9.1)
buns	3	(5.3)	5	(15.2)
embroidery	1	(1.8)	0	(0.0)
other handicraft	0	(0.0)	1	(3.0)

*multiple answers of 57 participants and 33 non-participants.

Table 16B: Items Produced and Sold*(Rukwa)

item	W.L. (%)		S.H. (%)		N.P. (%)	
beer	14	(93.3)	65	(95.6)	52	(94.5)
mats	2	(13.3)	4	(5.9)	6	(10.9)
food	1	(6.7)	1	(1.5)	4	(7.3)
baskets	1	(6.7)	1	(1.5)	0	
pots	0		3	(4.4)	0	

*multiple responses of 15 wage labourers, 69 self-help workers and 55 non-participants.

Table 17A: Livestock and Women's Responsibility (Mto-wa-Mbu)

kind	participants(53)			non-participants(56)		
	(A)	(B)	(C)	(A)	(B)	(C)
chicken	45(85%)	8.4	77.8%	47(84%)	7.1	85.1%
ducks	15(28%)	7.9	80.0%	11(20%)	6.2	81.8%
goats	9(17%)	6.1	33.3%	15(27%)	7.5	53.3%
cattle	3(6%)	2.7	66.7%	9(16%)	9.6	33.3%
sheep	2(4%)	2.5	50.0%	2(4%)	11.5	50.0%
pigs	1(2%)	3.0	0.0%	0	-	-
doves	1(2%)	1.0	100.0%	1(2%)	40.0	100.0%

(A): The number of respondents who reported that their families own the indicated animal and its proportion among those reported to keep any livestock; (B): The average number of the indicated animal owned by each of the respondents; and (C): The proportion of the respondents responsible for the care of the indicated animal.

Table 17B: Livestock and Women's Responsibility
(Rukwa)

kind*	W.L. (13)			S.H. (64)			N.P. (60)		
	(A)**	(B)**	(C)**	(A)	(B)	(C)	(A)	(B)	(C)
(1)	11(85%)	6.3	64%	45(70%)	8.3	84%	54(90%)	5.6	91%
(2)	4(31%)	10.3	50%	16(25%)	7.3	81%	9(15%)	8.3	89%
(3)	4(31%)	5.0	0%	29(45%)	5.9	10%	12(20%)	3.8	0%
(4)	5(38%)	11.0	40%	43(67%)	9.7	2%	38(63%)	5.2	0%
(5)	0	-	-	3(5%)	2.7	0%	0	-	-
(6)	0	-	-	3(5%)	4.7	0%	0	-	-
(7)	1(8%)	20.0	0%	0	-	-	0	-	-

Notes: *(1) chickens, (2) ducks, (3) goats, (4) cattle, (5) sheep, (6) pigs and (7) doves.
**See Table 31A for (A), (B) and (C).

Table 18A: The Order of Importance of Five Sources
of Incomes (Mto-wa-Mbu)

source	participants					non-participants				
	1st	2nd	3rd	4th	order	1st	2nd	3rd	4th	order
project*	26	32	11	3	2	1	6	1	0	4
wage labour	0	2	1	0	5	0	4	1	0	5
farming**	41	20	10	0	1	62	4	1	0	1
product.**	7	18	24	3	3	5	21	5	1	2
livestock**	1	3	9	8	4	2	12	5	1	3
total	75	75	55	14		70	47	13	2	

*Included in it were wages earned also by others in the family.

**These incomes include the values of what the families consumed at home as well as what they sold.

Table 18B: The Order of Importance of Five Sources
of Incomes (Rukwa)

(S)	W.L.					S.H.					N.P.				
	1st	2nd	3rd	4th	(O)	1st	2nd	3rd	(O)	1st	2nd	3rd	(O)		
(1)	5	5	5	2	2	0	0	0	-	0	0	0	-		
(2)	0	1	0	0	5	0	0	0	-	0	1	0	4		
(3)	11	3	0	0	1	58	11	0	1	45	7	0	1		
(4)	1	6	8	0	3	7	49	12	2	13	39	3	2		
(5)	0	2	2	1	4	6	9	4	3	3	1	6	3		
total	17	17	15	3		71	69	16		61	48	9			

Notes: (S) stands for sources which are (1) ILO project, (2) wage labour, (3) farming, (4) production and marketing and (5) animal husbandry. (O) stands for order.

G. Household Chores

In rural societies the traditional division of labour by sex is still rigidly observed and domestic chores usually fall on the shoulders of women. For that reason women are often tied down to the unpaid work in and around the house. This sexual division of labour has been one of the obstacles faced and to be overcome by them if they are to benefit from new job or training opportunities that become available in and around their communities.

The survey results show that all the sample women both in Mto-wa-Mbu and Rukwa are largely responsible for the chores such as food preparation, washing clothes, fetching water, collecting firewood, cleaning the house and child care. An exception in Mto-wa-Mbu was the "house repair", which is expected to be commonly assumed by men. Regarding the chores that women are normally responsible for, the proportions of the participants are uniformly higher than those of the non-participants in Mto-wa-Mbu. One explanation might be that the average family size of the former was slightly smaller and that the former included more "non-married" women than the latter. This probably implies the situation where the latter can find, more easily than the former, other members of the family, such as daughters, sons and even the husband, who could share some of the chores, thereby reducing their workload (Table 19A).

In Rukwa all three categories of women are in charge of the selected chores to more or less the same extent, except in "firewood collection", "house repair" and "child care". A greater proportion of the wage labourers than the two other groups are responsible even for the three chores mentioned above. This phenomenon is also believed to be explained by the fact that the former are relatively younger with smaller children and that they include a greater proportion of "non-married" women. They, therefore, are less dependent on the help of others in doing the chores. In many cases they most likely have no choice but to do the work which may be assumed by men or other members in the families of the self-help workers and the non-participants (Table 19B).

Those who participated in the projects were asked if their involvement in the projects had affected in any way their household responsibilities. Surprisingly, the majority of the participants in Mto-wa-Mbu responded that it had not. In Rukwa, on the other hand, most of the wage labourers admitted it had, while a majority of the self-help workers said it had not. This was most likely due to the difference in the amount of average total hours they worked per day. On average the wage labourers worked 7.6 hours as opposed to 3.3 hours for the self-help workers. Some reported that they had to reduce the amount of time spent for each chore, meaning that work was in effect neglected to a certain degree compared to before. Others reported that some work was totally or partially taken over by other members of the family.

When the participants in Mto-wa-Mbu found help of other family members, it was in most cases other female members of the family who gave them helping hands. For example, among 12 of them who replied that their "food preparation" and "washing clothes" chores were taken over, 11 cases in the former chore and 10 in the latter were reported to have been taken over by their sisters, mothers, daughters or other female members of the family. Only one or two husbands among 12 to 13 cases took over other house chores that the women normally did. The situation was similar in Rukwa as well.

In view of the fact that the participants in Mto-wa-Mbu worked approximately 5 hours daily for the project, in addition to taking up to one hour or more for walking to and from the worksite, it is rather difficult to imagine that their involvement did not affect their household responsibilities. Surprisingly, approximately 66 percent of them reported that it did not. It is true, that they were not involved in the project throughout the year since the work was mainly carried out during the slack agricultural season, during which they had less work in their own farm; nevertheless, housework such as that considered here needs to be done every day of the year. Thus, it is unlikely that the project work had not affected the majority of the participants interviewed. The truth might have been that many of them simply accepted the social norm that household work was to be assumed by women under any condition. They might have simply lived up to the social expectation without questioning it, even if it meant an increase in their workload, at least during their participation in the project.

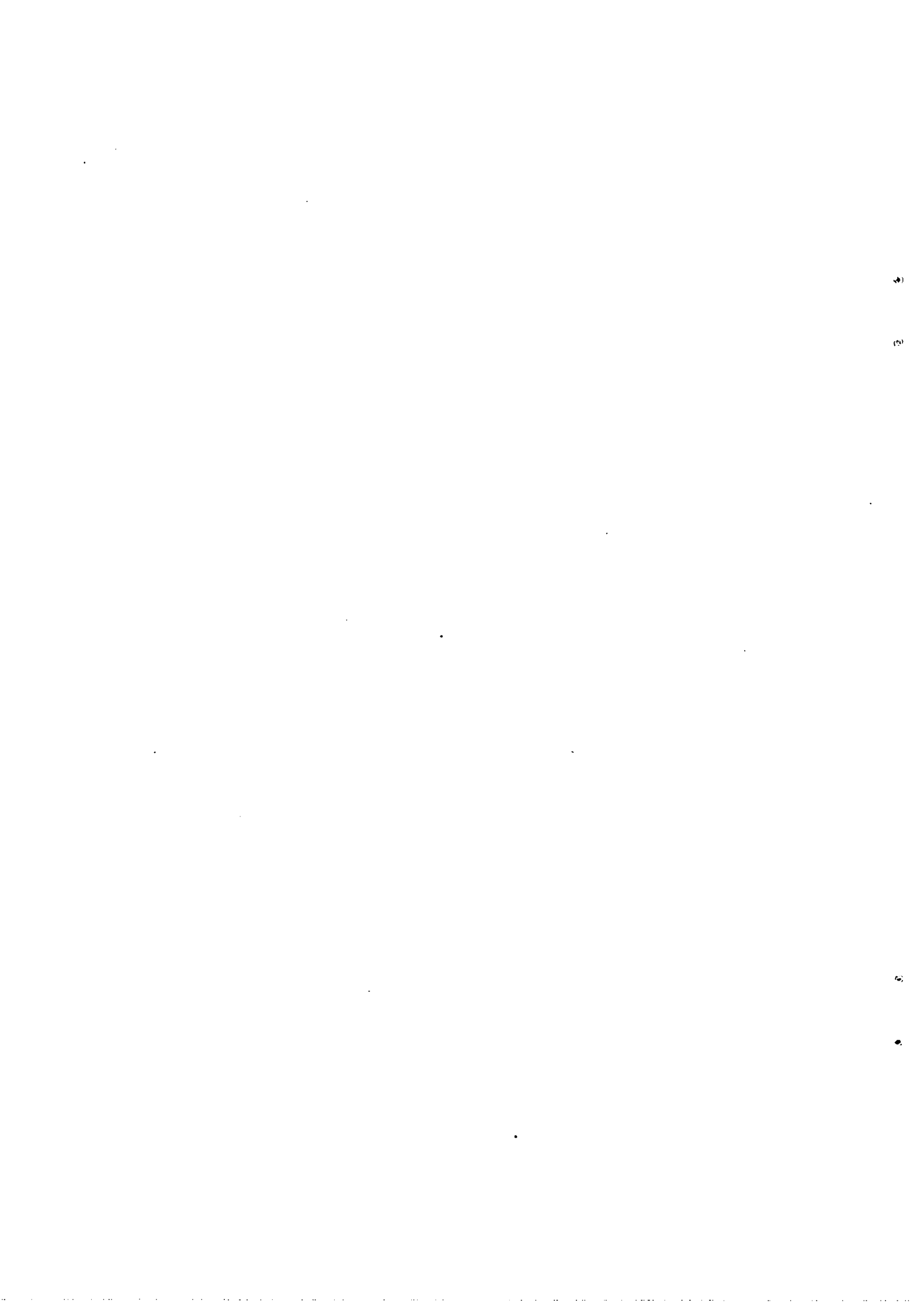
Table 19A: Selected Household Chores and
Women's Responsibility(Mto-wa-Mbu)

chores	participants(%)	non-participants(%)
food preparation	73 (96.1)	59 (78.7) <96.7>
washing clothes	76 (100.0)	57 (76.0) <93.4>
fetching water	73 (96.1)	53 (70.7) <86.9>
collecting firewood	74 (97.4)	50 (66.7) <82.0>
repairing house	30 (39.5)	25 (33.3) <41.0>
cleaning house	73 (96.0)	51 (68.0) <83.6>
child care	68 (89.5)	49 (65.3) <80.3>

The participants were asked if they were responsible for the indicated chores before they started working in the project, while the non-participants were asked if they were normally responsible for the listed work. There were 14 non-participants who did not respond to the question. The figures in < > represent the proportions out of 61 non-participants who responded.

Table 19B: Selected Household Chores and
Women's Responsibility(Rukwa)

chores	W.L. (%)	S.H. (%)	N.P. (%)
food preparation	17 (100.0)	73 (100.0)	64 (100.0)
washing clothes	17 (100.0)	72 (98.6)	63 (98.4)
fetching water	17 (100.0)	72 (98.6)	63 (98.4)
gathering firewood	11 (64.7)	10 (13.7)	11 (17.2)
repairing house	4 (23.5)	3 (4.1)	5 (7.8)
cleaning house	17 (100.0)	72 (98.6)	62 (96.9)
child care	16 (94.1)	59 (80.8)	51 (79.7)



H. Social Activities

One of the findings in the study in Burkina Faso was that whether or not there was a women's group in the village affected the degree of women's participation in SPWP projects. The study found higher participation among women where there were such groups since, according to the report, there was already a social structure conducive to implementation of community work. It also concluded that SPWP would indirectly be able to help women organise.

Since the surveys conducted in Mto-wa-Mbu and Rukwa did not follow the same methodology and did not utilise a similar questionnaire, the findings in this study are not intended to support or refute the conclusions from the above-mentioned report. They are to be presented here simply as information obtained concerning the social activities of the sample women covered in the surveys.

According to the UWT chairwoman of Barabarani and of Monduli District, there are several political, religious, economic and social groups in Mto-wa-Mbu to which many women belong and in which some take rather active roles and leadership. While some groups accept membership from both men and women, certain groups such as UWT are for women only. Although UWT is a politically affiliated group, its activities include many that are of economic nature. For example, the group under this particular chairwoman is reported to be running 4 shops; a food shop, 2 consumer goods retail stores and another shop where beer is produced and sold. In addition, there are five nurseries in the area that are being run by her group as well. These activities are intended, she added, to help women acquire business and management skills and to help them improve their socio-economic status.

Table 20A presents the number and the proportion, by religion and marital status, of those who are members of social groups in Mto-wa-Mbu. The results show that a majority of the women interviewed (54 per cent of the sample) were members of one group or another existing in the villages. It is also evident from the table that the non-participants are socially more active than the participants. One of the reasons behind this will be revealed as we continue our analyses.

Table 20B shows the extent of women's involvement in social groups in Rukwa. The proportion of those who belong to any groups among the total sample was 43.5 per cent, which indicates that the women in this region are socially less active than their counterparts in Mto-wa-Mbu. Though the participants in Mto-wa-Mbu were less involved in social groups than the non-participants, the opposite was the case in Rukwa. Again, our further examination of the data gathered will partially explain the situation in Rukwa that is different from Mto-wa-Mbu.

Our findings show that there are basically five different groups that the women in Mto-wa-Mbu are members of (Table 21A). While UWT and Msanja are women's groups, others accept

membership from both sexes. Among religious groups, however, there are those which exclusively accept women and others which are open to both men and women. The group that the largest proportion of the sample women belong to is UWT. In Rukwa there are approximately six different types of social groups that are open to women for membership (Table 21B). All of them, except the Catholic youth group, are women's groups. As in Mto-wa-Mbu, UWT appears to be the most influential women's group, at least from the viewpoint of its size.

According to the UWT chairwoman of Barabarani, there are approximately 400 UWT members in Mto-wa-Mbu alone. A chairwoman and a secretary are elected in each village and district, and the group activities such as those mentioned earlier take place under their leadership. Annual fees of TAS 17.0 per person must be paid in order to be accepted as bona fide members. The fees collected are then pooled and utilised as the capital funds for purchasing ingredients needed for beer brewing, for example, or setting up shops stocked with goods to be sold.

The membership of the UWT groups that the Mto-wa-Mbu sample belong to varied from 20 to 200, though the majority gave the figures ranging from 70 to 100. Since the villages are quite spread out, UWT is believed to be subdivided, resulting in variations in membership from one sub-group to another even within the same village. The frequency of group meeting, too, varied from once a week to once a year, the most common frequency being once a month. In Rukwa, too, the membership of UWT ranged from 15 to 80, the average being around 40. While many of the UWT members reported that the meeting was held once a week, a number of them also admitted that meetings were hardly held.

While most of the sample women reported that they were mere members of the groups they belong to, there were in fact several women who appeared to take active roles. For example in Mto-wa-Mbu, three participants held posts as secretaries at village level while six non-participants were found to be taking group leadership as chairwomen(two) and committee members(four), also at village level. Likewise in Rukwa, some of the UWT members were found to be as active as those women in Mto-wa-Mbu. Two self-help workers and two non-participants reported of their being chairwomen in their villages. Moreover, three self-help workers were involved in group activities as secretaries. Other major posts held were those of a treasurer by a wage labourer and of committee members by a self-help worker and a non-participant.

The major activities of the social groups are presented also in Tables 21A and 21B. Though UWT is a politically affiliated group, its activities are of an economic nature. Perhaps because economic power is imperative for political power to be acquired, UWT is eager to recruit more members whose job and business skills may be improved through their group activities of farming, handicraft making, beer brewing, shop managing, etc. The respondents in both surveys, thus, named leadership, handicraft, beer brewing and accounting

skills as well as knowledge in domestic science in response to the question on the skills gained through their involvement in UWT. The other groups that the respondents belong to were also reported to offer similar activities of skills training. Exceptions were Msanja and cultural groups in which the members simply enjoy themselves singing, acting and dancing with their traditional music.

We have learned from the results of the Mto-wa-Mbu survey that in general the non-participants are socially more active than the participants. This is confirmed not only in the proportion of them belonging to any social groups but also in the number of those who take leadership roles in group activities. In Rukwa, however, the self-help workers were found to be socially more active than the other two, if the over-all criteria discussed in the case of the Mto-wa-Mbu results are applied.

As opposed to those who are socially active, there are many who do not associate with groups of any kind. The most outstanding reason given by the Mto-wa-Mbu women for their non-involvement was their inability to pay membership dues. This was a reason that a considerable proportion of the participants gave. An economic reason behind their non-association is consistent with other factors concerning them, such as that they might be economically in greater need since they include more singles with children and the divorced. They are also less established in the area with smaller family holdings than the non-participants. Under these circumstances, it is understandable that we find more participants who would refrain from paying even the amount of TAS 17.0 for the annual membership dues.

The second important reason given for non-association by the participants in Mto-wa-Mbu was that they had no time to spare for social groups. This was, in fact, the main reason given by the non-participants. The latter includes older and more married women with the average family size slightly larger than the former. They also have larger family farms to keep themselves more occupied than the former. For the participants, however, the lack of time may not necessarily mean that they are fully employed. Rather, they may need to be searching for income-earning activities and have no time for social groups.

In Rukwa, on the other hand, the reason that the largest proportion of the respondents gave for their non-involvement in social groups was not having enough time. Higher proportions of the wage labourers and the self-help workers gave this reason than the non-participants. One possible explanation for the results might be that the wage labourers were found to assume greater responsibilities in household chores than the other two, while the self-help workers are perhaps more occupied with work in agriculture, production and marketing and animal husbandry than the other two.

Another comment that should be added here concerns a high proportion of the non-participants who reported that they were not interested in social activities. The fact that

they had lived in the villages less number of years than the other two groups might be an indication that they are not as well integrated in their communities as the other two. This might also imply that they identify less with their villages than the other two. If this had been the case, the fact that they did not participate in the project as self-help workers might also be partially explained by their lack of strong identification with their villages.

Other reasons given for non-association in both regions included that they were in poor health, were unsettled in the area and were not convinced of the effectiveness of the existing groups. Some pointed out that there were many organisational and distributional (e.g. group profits are not fairly distributed among its members.) problems within most groups and that groups were often not successful in their activities. Nevertheless, the findings give us an insight into the socio-economic circumstances under which the women covered in the surveys are placed, which influence the degree of their social involvement and commitment.

Table 20A: Distribution of Members of Social Groups
by Religion and Marital Status
(Mto-wa-Mbu)

m. s. **	participants		non-participants	
	relig. Christ.(%)*	Mosl.(%)*	Christ.(%)*	Mosl.(%)*
(1)	2 (33.3)	1 (25.0)	2 (66.7)	1 (33.3)
(2)	2 (28.6)	4 (66.7)	1 (50.0)	1 (50.0)
(3)	7 (43.8)	10 (58.8)	11 (64.7)	20 (60.6)
(4)	1 (33.3)	2 (100.0)	-	2 (100.0)
(5)	2 (33.3)	3 (50.0)	0 (0.0)	5 (83.3)
(6)	-	1 (33.3)	1 (100.0)	1 (50.0)
total	14 (36.8)	21 (55.3)	15 (60.0)	30 (62.5)

*The figure in () represents the proportion of those who are members of any social groups within the respective group under religion and marital status.

**Marital status (1) - (6) are the same as in Table 5A.

Table 20B: Distribution of Members of Social Groups
by Marital Status (Rukwa)

m. s.	W.L.(%)	S.H.(%)	N.P.(%)
single w. child	-	2 (66.7)	1 (50.0)
single w/o child	3 (42.9)	2 (66.7)	4 (100.0)
married(monogamy)	2 (50.0)	27 (50.0)	17 (35.4)
married(polygamy)	0 (0.0)	1 (12.5)	1 (25.5)
divorced	2 (100.0)	1 (50.0)	2 (50.0)
widowed	1 (100.0)	1 (33.3)	0 (0.0)
total	8 (47.1)	34 (46.6)	25 (39.1)

Notes: The figure in () represents the proportion of those who are members of any social groups within the respective group under marital status.

Table 21A: Social Groups and Their Activities
(Mto-wa-Mbu)

group	participants		non-participants	
	no.	activities	no.	activities
UWT	28	shop keeping handicraft making	42	shop keeping handicraft making beer brewing
UVT**	2	shop keeping	1	not indicated
Msanja***	3	entertainment	3	entertainment
religious	2	shop keeping	2	handicraftmaking agriculturalwork
business	0		1	not indicated
total	35		49*	

*Some were reported to be members of two groups.

**UVT stands for Umoja wa Vijana Tanzania, which means, the Tanzanian Youth Organisation.

***A social group in which members enjoy traditional dancing.

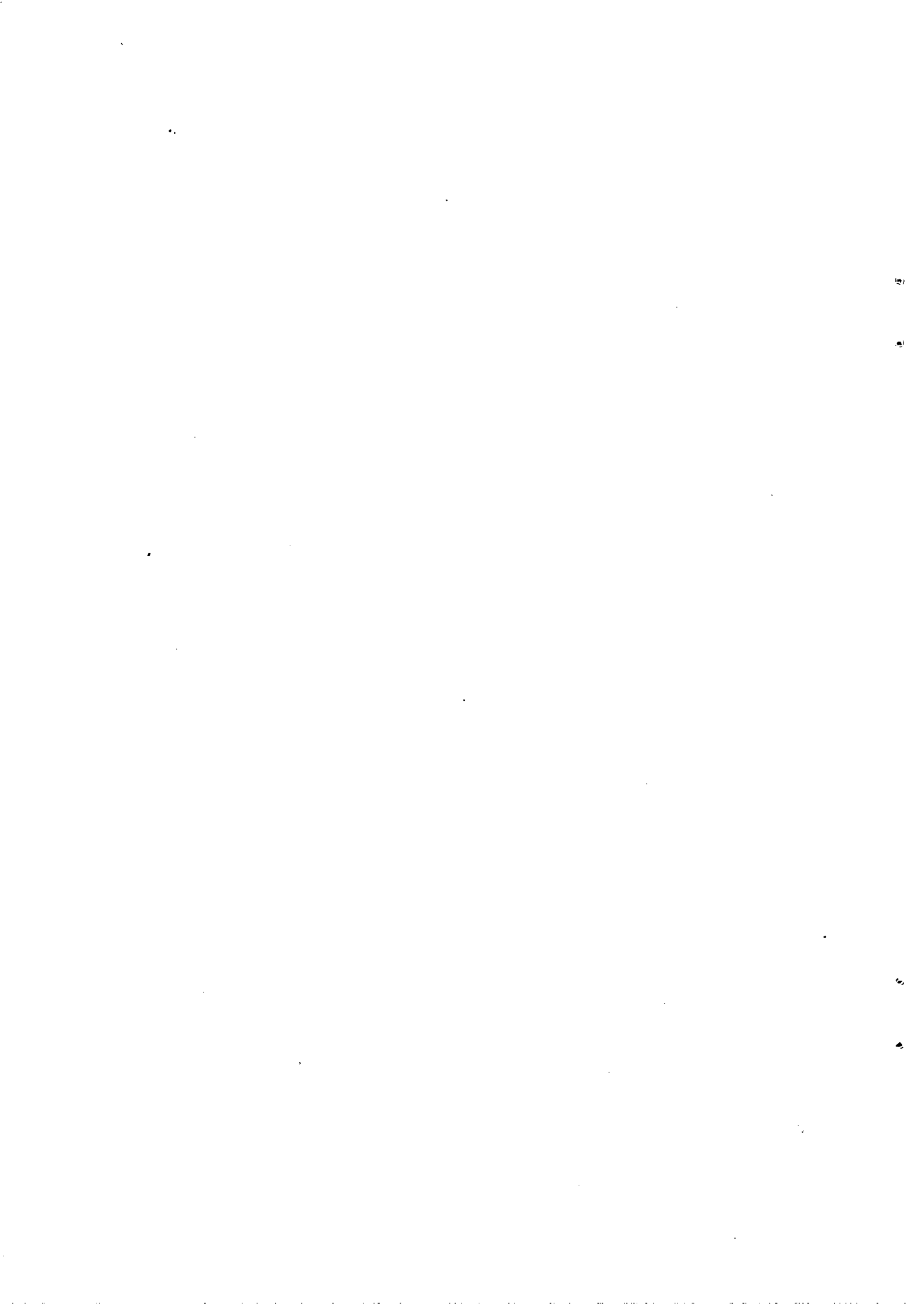
Table 21B: Social Groups and Their Activities
(Rukwa)

group	W.L.	S.H.	N.P.	activities
UWT	7	23	11	beer brewing, farming, shop keeping, handicraft, etc.
UVT	1	0	2	farming, handicraft, etc.
(1)	0	10	5	handicraft, farming, sewing, singing, etc.
(2)	0	1	1	sewing, embroidery, mat making, etc.
(3)	0	1	7	dancing, singing and acting
(4)	0	0	1	gardening
total	8	35*	27**	

Notes: * One S.H. worker is member of two groups.

**Two N.P.s are members of two groups each.

Groups included are: (1) Catholic groups and Catholic youth groups, (2) sewing and weaving groups and youth weaving and knitting groups, (3) women's cultural and dancing groups, and (4) traditional local groups.



I. Economic Indicators

The findings throughout the Mto-wa-Mbu survey indicate overall economic superiority of the non-participants over the participants. On the other hand, the results from the Rukwa survey often implied that the self-help workers are economically better off than the wage labourers or the non-participants. Additional items on the questionnaire have measured further the sample women's economic status. The questions concerned their housing conditions and the extent of their ownership of selected modern consumer goods as well as agricultural tools.

Based on the survey results, we may conclude that in Mto-wa-Mbu the non-participants generally live in slightly better houses than the participants. For example, more of the former were found in houses made of bricks with the galvanised iron sheet roof. This means that a larger proportion of them live in houses that are more solidly built and that can give them more protection against all weather conditions. Such houses are also longer lasting, requiring less frequent repairing and maintenance work.

In Rukwa, however, every woman interviewed lived in a brick house. Since the soil in the region is suited for brick making and since bricks can more easily be obtained there than in Mto-wa-Mbu, houses are commonly built with them. As far as the roof was concerned, a higher proportion of the wage labourers had the galvanised iron sheets covering their house than the others.

As far as the ownership of selected modern consumer goods is concerned, our findings show that in Mto-wa-Mbu the non-participants are again relatively better off than the participants. Although four persons from each group were found to be owning two radio sets, more non-participants than the participants possessed at least one. Owning a radio can enrich their social and cultural lives and access to it also means that they would be more informed of the political, economic and cultural events taking place in other parts of the country as well as in the world.

Regarding the ownership of bicycles, the Mto-wa-Mbu data again confirm economic superiority of the non-participants over the others. For example, as opposed to 11 participants, 25 non-participants owned one bicycle each. While there were two of the former possessing two bicycles each, six of the latter were reported to have the same quantity of the item. Finally, only one non-participant had three bicycles at home. Bicycles are not only consumer items but are indeed capital goods there. Owners can enjoy them merely for riding, but they are often the most important means of transporting surplus crops to the markets nearby.

Although the housing conditions among the Rukwa sample could not be regarded as reliable economic indicators, the

extent of their owning a few selected modern consumer goods appears to be more or less in accordance with other data regarding their economic status. For example, a greater proportion of the self-help workers owned radios than the others, though more bicycles were owned by the non-participants than the others. The smallest proportion of the wage labourers were the owners of these items.

The question included the ownership of motorbikes and tractors. The results were that in Mto-wa-Mbu only one non-participant possessed a motorbike, while none, at least among the sample women, owned a tractor. The results were similar in Rukwa. Only one self-help worker and one non-participant had one motorbike each, while tractors were non-existent among them.

The agricultural tools commonly found in both regions are hand hoes, bush knives, axes, digging forks, spears, shovels, etc. These are utilised by all categories of the sample in both surveys. However, the non-participants in Mto-wa-Mbu and the self-help workers and the non-participants in Rukwa possessed them in greater quantity. Having larger family holdings, they are by necessity equipped with more agricultural tools. Other tools less common among them were ox ploughs, a cart and vehicles. While in Mto-wa-Mbu only 5 per cent of the non-participants owned ox ploughs, in Rukwa 45 per cent of the self-help workers, 36 per cent of non-participants and 6 per cent of the wage labourers owned them. Because of the difference in the average size of family holdings, the farmers in Rukwa, especially the self-help workers and the non-participants, rely much more on ox ploughs than their counterparts in Mto-wa-Mbu for tilling their fields. Likewise, the owners of a cart and two vehicles (one each) were also found among the self-help workers in Rukwa.

CONCLUSIONS and RECOMMENDATIONS

A. Conclusions

1. Personal Data of the Sample Women

1.1 In both Mto-wa-Mbu and Rukwa, those who participated in the projects as wage labourers (in Mto-wa-Mbu they are referred to as participants) were younger than those who did not (in Mto-wa-Mbu they are referred to as non-participants while in Rukwa they are referred to as either self-help workers or non-participants). The fact that the former included more single women than the latter led to their lower average age. This, in turn, resulted in the greater number of years of education for the former, since there have been more educational opportunities, even in rural areas, especially in the last two decades.

1.2 In Mto-wa-Mbu equal numbers of Christians and Moslems were found among the participants (38 each). Among the Christians interviewed (63 out of 151), there were more participants than non-participants (38 as opposed to 25). On the other hand, among the Moslems interviewed (86 out of 151), there were more non-participants than participants (48 compared with 38). In Rukwa everyone interviewed was a Catholic. Religious customs may have affected to some extent the sample women's decision to participate or not in Mto-wa-Mbu. However, the most important factor appeared to have been their economic circumstances. For example, the "single with children", the "divorced" and the "widowed" constituted 37 per cent of the participants, while the same categories of women made up 20 per cent of the non-participants. The same seems to apply to the Rukwa sample as well, since those categories of women constituted nearly 60 per cent of the wage labourers.

1.3 In some countries where ILO implements SPWP projects, women participants tend to come from larger families with more women members. This is because such women are more likely to share household work among themselves, enabling each other to take turns in participating in the SPWP. However, this was not the case in both surveys. The average family size of the participants and the wage labourers was slightly smaller than that of the others. The average number of productive female members of the family (arbitrarily set here as those aged 10 and above) also did not result in much difference among them. This is believed to be attributed to the age and the marital status of the participants and the wage labourers which included younger and more "non-married" women.

1.4 The patterns of residential mobility among the sample women, especially in Mto-wa-Mbu, also indicate somewhat their socio-economic circumstances. While more participants than non-participants moved to where they live today for an economic reason, more non-participants than participants moved for a personal reason, such as "marriage". Although most of the sample women have lived there for a considerable

period of time, there are more participants than non-participants who have lived there for 5 or less years. This seems to indicate that the former are socio-economically less established in the community than the latter. In Rukwa, on the other hand, the wage labourers are at least socially more established than the others. They are younger, yet have lived in the communities longer than the others.

2. Women and SPWP

2.1 Despite the fact that most of the women interviewed were not involved in the selection and the planning of the project, a large majority of them rated them highly. Perhaps it was because the flood control work in Mto-wa-Mbu was first initiated by the villagers themselves prior to the project approval and the women appreciated the usefulness of it. In Rukwa, the selection received even higher rating than in Mto-wa-Mbu. This was most likely due to the fact that the water supply project is much more vital to people's daily life.

2.2 At worksites the women did not have much choice in kind of work they did. In Mto-wa-Mbu they were assigned mostly to stone collection and sand carrying, usually considered as "women's work". However, they were willing to do other types of work if they had been given the chance. There they were recruited on the basis of "first come, first served", but the number of women workers hired was based on the availability of what was considered as "women's work" (e.g. transporting materials on the head). In Rukwa, too, wage labourers were recruited, in principle, as in Mto-wa-Mbu, but the bulk of the work was carried out by self-help workers as agreed in the project document.

2.3 The standard daily rate of TAS. 23.90 for piece work was paid to all the unskilled workers regardless of sex and type of work carried out. It required a worker an average of 5.2 hours to complete in Mto-wa-Mbu and 7.6 hours in Rukwa. The participants' and the wage labourers' main satisfaction over their involvement in the projects was the fact that they were able to earn money, which over 90 percent of them considered as very important for the family. Most of them also made the decision themselves on expenditure. The money was spent mainly for purchasing basic consumer items such as soap, salt, cooking oil, clothes, shoes, etc. which helped to improve family welfare even for a temporary period of time. Some women also used a portion of it for reimbursing debts and buying agricultural tools. A few even managed to save part of it.

2.4 The participants in Mto-wa-Mbu and all the sample women in Rukwa were questioned on their awareness of maintenance. They all seemed to have some vague notions on the necessity of maintenance work of the infrastructures which they were partly constructing. However, most of them appeared to be unaware of the important issues involved in this matter. It is, therefore, necessary for them to become well informed of the issues and to understand what are needed for the long-term usage of the newly created community assets.

2.5 The women in Mto-wa-Mbu proposed water-supply, sewing, handicraft making, health service, horticulture, shop management, etc. as ideas for possible new projects which they thought would help improve the living conditions in their community. Many women in Rukwa suggested milling machine, road construction/maintenance and hospital/dispensary construction projects. Though some of these proposals do not come under the sphere of SPWP work, they can nevertheless be introduced as small-scale income-generating activities in which many women expressed an interest in taking active roles should they materialise. The women should be given more opportunity and be encouraged to take more active roles in community development rather than accepting passive roles they have had in the past.

3. Other Economic Activities

3.1 Opportunities for wage labour other than the ones offered by the ILO projects were extremely limited both in Mto-wa-Mbu and Rukwa. The earnings of those engaged in wage labour were, as expected, not very much since most of them work on seasonal basis.

3.2 Agriculture is the predominant economic activity in both regions. The average family holdings in Mto-wa-Mbu were 2.2 acres for the participants as opposed to 2.8 acres for the non-participants, another indication of the latter being economically better off and more established than the former. In addition, a greater proportion of the latter were found with surplus crops to sell than the former. The family holdings in Rukwa were considerably large, the average being 4.6 acres for the wage labourers, 7.8 acres for the self-help workers and 7.3 acres for the non-participants. The figures suggest that the wage labourers are economically the worst off among three categories of women in the region. Our findings indicate that in both regions those who worked in our projects as wage labourers did so out of economic necessity.

3.3 A large proportion of the sample women in both surveys were found to be producing handicraft items such as mats, baskets, etc. and food and drink, such as buns and beer, for sale. While in Mto-wa-Mbu they produce items of a little more variety, in Rukwa they concentrate more or less on beer making. Among those who engage in this type of activity, most women in both regions rated their earnings as "somewhat important" and reported that they had the decision-making power on the expenditure of the earnings.

3.4 More women in Rukwa than in Mto-wa-Mbu were found to be in animal husbandry, though the animals found among them were mainly poultry such as chickens, ducks and doves. A considerable portion of work involved in animal husbandry was being carried out by the respondents themselves. Especially the care of poultry is largely placed on their shoulders in both regions. Women's responsibility decreases when it comes to herding livestock since in Tanzania it has traditionally been done by male members of a family. What they produce from animal husbandry is mainly for self-consumption, though

some manage to sell a portion of it. Regarding the expenditure on the incomes from animal husbandry, in Mto-wa-Mbu it was largely the respondents themselves who enjoyed the decision-making power among the participants as opposed to the husbands among the non-participants. In Rukwa, on the other hand, many women made decisions on the expenditure jointly with their spouses.

3.5 The earnings from the various forms of economic activities were spent mostly on basic consumer items such as soap, salt, cooking oil, kerosene, clothes, shoes, furniture, etc. In some cases a portion of the incomes was used to purchase farm tools and additional livestock or to pay for education, medical treatment, taxes, etc. Some even managed to save a part of them or to reimburse debts with them. In general the earnings seem to have helped improve nutritional and living standards of the family.

4. Household Chores

When women participate in SPWP, their total workload is expected to increase since their daily household chores are normally continued to be assumed by them. Thus, the Burkina Faso study found out that women's participation rate was higher among those from families with more women members who could share household responsibilities. However, the results of the survey in Mto-wa-Mbu do not necessarily indicate so, probably due to the fact that the participants were very much underemployed with enough time to spare for other work. However, many wage labourers in Rukwa said that their involvement in the project affected their family responsibilities. Among those whose housework was affected, some admitted that it was partly neglected, while others reported that it was taken over by others, mainly by other female members of the family.

5. Social Activities

5.1 The Mto-wa-Mbu women in general were socially more active than the Rukwa women. While in Mto-wa-Mbu the non-participants were more active than the participants, the same category of women in Rukwa were the least active in their region. A large majority of those involved in social groups were members of UWT, the Tanzanian Women's Organisation. It is a politically affiliated organisation, but its activities are mainly of economic nature such as shop keeping, beer brewing and selling, handicraft making, nursery running, etc. UWT intends to give its members leadership training, management, handicraft and brewing skills, etc. In both surveys several women interviewed were found to be in leadership positions.

5.2 Among those who were socially inactive, a significant number of the participants in Mto-wa-Mbu pointed out their inability to pay membership dues (TAS 17.0 per year per person in the case of UWT) as a reason for their non-involvement. This was another indication that the participants were in general in greater economic need than the non-participants.

Many respondents in Rukwa gave their being too busy or not interested in social groups as their reasons for non-involvement.

6. Economic Indicators

The surveys covered, as economic indicators, the housing conditions and the extent of ownership of modern consumer goods among the sample women. The results showed that in Mto-wa-Mbu slightly more non-participants lived in better houses than the participants. Regarding the ownership of consumer items and tools, the former were found to possess greater quantities of radios and bicycles. They also owned, somewhat by necessity, more agricultural tools than the latter. In Rukwa, all lived in a brick house over which most had a thatched roof. The self-help workers were found to own greater quantities of the modern consumer items as well as agricultural tools.

7. Some Impacts of the Projects

7.1 The most immediate impact of the projects was on the purchasing power of those who were involved as wage labourers and possible improvement of nutritional, sanitary and living conditions as results of it. The wages enabled them to buy supplementary items needed for the family or to pay for other useful purposes, such as education, additional agricultural tools, etc. Since they ranked the project work as the second most important source of family incomes after agriculture, the magnitude of the importance of the incomes is obvious, even if they had earned them for a temporary period of time. Furthermore, the increase in the purchasing power of both men and women must have stimulated the economy in the area to some extent, especially in Mto-wa-Mbu, which might have positively affected their production and marketing activity. It was not so much of the case in Rukwa, however, due to the volume of employment offered by the project there.

7.2 Women's participation in the ILO project seemed to have had some impact on their socio-economic status, at least in the family. As the chairwoman of Barabarani, Mto-wa-Mbu mentioned, the income-earning opportunities had given them self-pride, self-confidence and a positive outlook in family and community affairs. Unlike unpaid work in and around the house and agricultural work that women engage in, remunerated work often gives proper and more concrete evaluation of the contribution made by the worker. This often helps improve women's overall status. Their improved status in the family is a requisite step for them to achieve social status equal to men.

7.3 Women's participation in the project has brought in a slight change in their attitude towards the notion of sexual division of labour. For example in Mto-wa-Mbu, the participants were mostly assigned to what have traditionally been considered as "women's work" such as carrying sand and stones on the head. However, there were in fact some women who took "men's work" such as excavation work. In addition, they

showed interest in all types of work available including those considered as "men's work". Through their experiences at worksites, they seemed to have gained self-confidence in their capability to assume practically any kind of work.

7.4 The obvious long-term impact of the Mto-wa-Mbu project would be an increase in production and an increase in employment opportunities in the agricultural sector in the area. It is, in turn, expected to stimulate other agriculturally-related sectors in the area, such as the production and repairing of tools, the production and distribution of fertiliser, the improvement of roads, the establishment of transportation network, etc. The advancement of agricultural economy in the future would also lead to further specialisation in other economic activities in the area, providing more employment opportunities to men as well as to women.

7.5 The most significant impact of the water supply project in Rukwa was on the sanitary and health conditions of the villagers. The data obtained in two dispensaries in the area show sharp decline in recent years in the number of patients treated for water-borne and water-related diseases. Although we do not claim that the decline was all due to our project, there are strong indications that the availability of clean and abundant water within the community has certainly contributed to the betterment of people's health. The fact that the villagers enjoy better health should also lead to considerable saving on medical cost for the community and better utilisation of labour which was often lost in the past when they were sick.

7.6 Another important impact of the project in Rukwa is a drastic decrease on the time required for water collection. Before water was drawn to the village, women had to spend much time and energy for carrying a heavy container filled with water. Some women reported to have walked even up to 3 km to find water during the dry season. All this time and energy can now be utilised for more productive activities.

B. Recommendations

1. A set of guidelines should be designed for the specific aim of integrating more women at all phases of future SPWP projects.

Hardly any women were involved in the selection and the planning of the projects in both regions. Their involvement at the project implementation phase was somewhat better; however, the proportion of women in the total number of the workers recruited was estimated to be much lower compared to that of men. It is recommended that guidelines be designed to remove obstacles and to facilitate the integration of more women at the phases of project selection, planning, implementation and operation.

2. The Government should be invited to initiate a study to be undertaken by national social scientists in search of the best way by which women can be integrated at all levels of future SPWP projects.

Designing guidelines as suggested above would be a difficult task without the initiative of the Government concerned. National social scientists, such as ethnologists, anthropologists or sociologists, should be recruited for the purpose of identifying taboos and other social obstacles that prevent women from participating actively in the local decision-making arena. Once the obstacles are identified, they would be in a better position to design practicable guidelines which would facilitate women's greater participation in every aspect of future community development programmes.

3. Thorough education and training for the beneficiaries on all issues of maintenance must be conducted in both regions so that the created infrastructures will function in the long run.

The surveys attempted to measure the women's awareness of maintenance work for the newly-created infrastructures. The results were rather disappointing. At least many seemed to have vague ideas on the necessity of maintenance. It was evident, however, that their knowledge on important issues involved in it was inadequate. Both men and women need to be educated and trained on this matter if they are to benefit from the newly-created community assets in the long run. Education and training should be organised and carried out through village authorities. Women's participation in this will be indispensable.

4. An economic factor should be considered as one of the criteria in the recruitment of workers in SPWP.

In general, those who participated in the projects as wage labourers were found to be in greater economic need than the others. In this sense, the recruitment of workers was rather well carried out, since one of the objectives of SPWP

is to provide employment to needy people. However, there were in fact some women among the non-participants who were landless or marginal farmers. They might not have been recruited since the gang leaders, mainly responsible for recruiting workers on the instruction of technicians, hired "healthy and hard-working people" they knew, on the basis of "first come, first served". If this were the case, the recruitment procedures should be redefined and should include an economic factor of would-be workers as one of the recruitment criteria.

5. The recruitment procedures should be established by the local project staff and the village authorities in such a way to ensure equal employment opportunities to women as well.

A certain recruitment procedure seemed to have been the direct cause for the low participation rate among women in Mto-wa-Mbu. Women's participation in SPWP has been relatively low in most countries, and the rate in Mto-wa-Mbu was not especially lower than in other projects. In the case of road construction, where work camps are often set up far from the village so that the workers would not have to commute daily, there are too many problems for women to participate. However, in a work situation such as that in Mto-wa-Mbu, their participation can be improved if people concerned so desire. As a gang leader revealed, the number of women workers recruited depended mostly on the availability of work traditionally considered as "women's work". Thus, their participation was more or less determined by the notion of sexual division of labour held by project work planners. Since the participants were found to be physically capable of assuming and were willing to do all kinds of work, there should be more employment opportunities provided to women. Our findings also show that there are a number of families headed by women who are badly in need of employment as much as men. If we are to apply the principle of equal employment opportunity in SPWP, this sexually-biased manner of recruitment should be replaced by a kind of system which would guarantee fairer employment opportunities to women as men. This should also lead to equal opportunities for skills training in SPWP, from which women can benefit for future employment and social advancement.

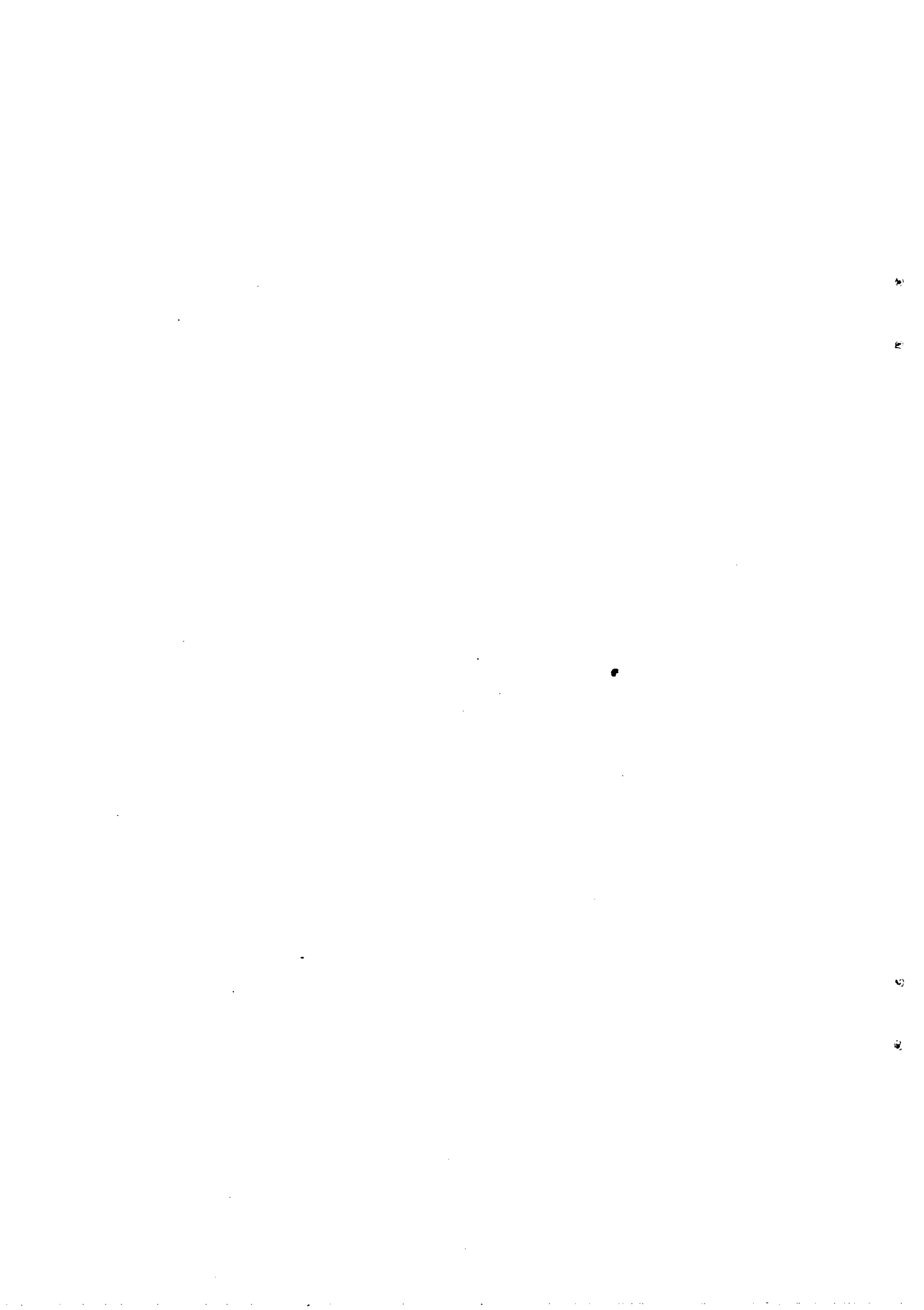
6. The feasibility of pooling a portion of SPWP wages should be checked for the purchase of more efficient farm equipment that can be shared by the contributors to the fund.

A large portion of the money earned from SPWP work in both regions was reported to have been utilised for purchases of daily basic and consumer items. However, there were some women who spent part of the earnings on farm equipment. Since agriculture was found to be the most important economic activity, even for the participants and the wage labourers in the projects, their investing money in farm tools would be very useful. However, because each individual's purchasing power is extremely limited, the productivity of the type of

equipment bought is also believed to be limited. Therefore, it is recommended that the feasibility of pooling a portion of their wages be checked for the purchase of equipment of higher productivity capacity that can be shared by the contributors to the funds. Furthermore, there was a great demand for milling machines among the women in Rukwa. They often waste much time waiting for their turn at the village mill. Buying such a machine with the funds pooled amongst them would also be very beneficial to them. By all means, the wages earned by the women belong to them. The arrangement such as this, therefore, must come forth from their own initiative.

7. More productive activities should be introduced and encouraged among the women in Rukwa so that they would be able to make a better use of time saved as a result of the project.

Because of the availability of clean and abundant water within the village, women can now fetch water in no time compared with the amount of time and energy they spent before. However, they do not seem to be utilising the time saved very usefully. For example, many engage in production and marketing, but most of them concentrate on making beer, a considerable portion of which is believed to be self-consumed, and this does not appear to be improving the family incomes very much. The same can be said concerning animal husbandry. Many keep poultry and livestock, but not in sufficient number even for their own consumption to maintain balanced diet throughout the year. Since surplus food is produced in the region, animal husbandry can be a viable economic activity in the area. It is therefore recommended that production of more marketable items and improved animal husbandry be introduced amongst them, in order to improve further the living standards in the village.



Appendix

A. Methodology

1. Survey Organisation and Some Constraints

Prior to the 1986 Joint Meeting for Support to SPWPs recommending another research study on women's role in SPWP, such a study in Tanzania had been envisaged and plans for data collection had been in the process of being finalised. The initial plan was to cover the flood control cum irrigation project in Mto-wa-Mbu, Arusha, the gravity water supply project in Rukwa and the afforestation cum housing project in Ruvuma, all of which are significantly related to women's traditional activities. However, due to time, climatic and transport constraints, we had to limit our coverage to two projects. We visited Mto-wa-Mbu in May after the long rainy season and Rukwa in October just before the short rainy season to conduct one round of structured interviews.

First, a questionnaire was prepared at ILO Headquarters and was sent to the ILO Project Office in Dar es Salaam for review. Having all assembled in Dar es Salaam, we revised it after very thorough discussions. The revised questionnaire was subsequently translated, tested and finalised in Mto-wa-Mbu. Basically, the same questionnaire was used later in Rukwa, except for minor additions and deletion of certain items to make it more suitable for the region where a different project is under operation.

It would have been better if we had had the same enumerators in both regions to minimise biases on their part. However, the transport constraint made it almost impossible to have such arrangements. With the assistance of PMO and the Regional Agricultural Development Office (RADO), Arusha, we managed to recruit 4 enumerators in the region. In Rukwa, on the other hand, we were able to obtain 6 enumerators with the help also of PMO and the Regional Water Department (RWD). As Miss Myovela of MCD CYS and Miss Maro then of PMO from Dar es Salaam joined the enumerators in Mto-wa-Mbu, the interviews were carried out by 6 field workers, while in Rukwa they were done by 7 including Ms. Myovela.

One of the problems we encountered in both regions was not having a sufficient number of qualified women who could work for us. Since we were to have only women in our sample, it was imperative that field workers be women, too. While details of survey operations were being arranged, we requested PMO to arrange the recruitment of 6 or 7 women among local government officials. While still in Dar es Salaam, we were informed that at least 6 women had been selected and that they would be waiting for our arrival in Arusha. However, we met only one woman from MCD CYS the day after our arrival and two agricultural extension officers the following day. By the third day we had another agricultural extension officer, 4 altogether. Apparently, there was a communication gap between RADO and the women who had supposedly been chosen by RADO.

Transportation and communication problems were partly responsible for the difficulty we encountered since the selected women had to be brought in from Monduli, the seat of the district headquarters two hours by car from Mto-wa-Mbu. Without telephone communication, it was impossible to well-organise the time and the pick-up point, thus our project car had to make several journeys between Mto-wa-Mbu and Monduli to collect 4 women. This initial hindrance took away a considerable amount of time that had been allocated for training. Also, because they arrived in Mto-wa-Mbu on different days, some had less training less than others. Fortunately, the enumerators were all relatively young and sufficiently fluent in English to quickly learn what needed to be learned.

In Rukwa, on the other hand, five enumerators selected by RWD were waiting for us upon our arrival in Sumbawanga, and another joined us the next day. Since they were all residents of the town and since the training was conducted at RWD in town, we had no difficulty in getting them organised and starting the training immediately. We had been informed, while in Dar es Salaam, that "senior women officials with lots of experience in surveys had been selected and that training and actual data collection should go smoothly". However, it turned out that they had hardly had any survey experience. To make matters worse, all of them had considerable difficulty in communicating in English. Being older and less fluent in English than those in Mto-wa-Mbu, the enumerators in Rukwa in general were quite slow in understanding the questionnaire, learning the interview techniques and coding method. The training was, thus, conducted very slowly, the same topics being repeated several times. During the training exercises, the assistance of Ms. Myovela and Mr. Shirima, regional water engineer, in Swahili was absolutely indispensable.

Another problem we had during our survey work in both Mto-wa-Mbu and Rukwa was the poor health of some of the enumerators. At the initial meeting, they all appeared to be relatively healthy. However, during the course of data collection, two or three persons were sick at different time, perhaps suffering from malaria, anaemia, intestinal disorder, etc.

This situation placed extra pressure on the rest of us trying to complete the planned number of interviews under the time constraint, especially in Mto-wa-Mbu due to our delayed start. At the worst, we could have extended our stay in Mto-wa-Mbu to complete the field work. However, telephone communication from there was almost impossible to cancel and rebook our flight from Arusha to Dar es Salaam. Thus, we all toiled and cooperated with one another to finish it according to our schedule. Because of this lesson, we allowed extra days for our field work in Rukwa. Besides, our having our own transport from Dar es Salaam to Sumbawanga made it possible for us to be flexible with the schedule.

The fact that some enumerators were not in the best physical condition during the field work and that the rest under certain time pressure may have contributed to some biases in the results. Another factor that may have added to the biases in the survey outcome was the limited knowledge of English among the enumerators in Rukwa. They all conducted interviews in Swahili, but the responses to the open-end questions had to be translated into English when transferring to the coding sheet. Though every coding sheet was carefully checked afterwards to minimise errors and biases, there were limitations on our part.

2. Sampling Design

a. Villages Covered:

Mto-wa-Mbu	Rukwa	
	Kate sub-project	Mwazye sub-project
1. Barabarani	1. Chonga	1. Mpenje
2. Majengo	2. Kate	2. Msoma
3. Migombani	3. Nchange	3. Mwazye
	4. Ntalamila	

b. Data Collection Method: one round of structured interview with the use of a questionnaire.

c. Type of Sampling and Sample Size:

With the help of village authorities, the local project team in Mto-wa-Mbu prepared the lists of women who had participated in the flood control cum irrigation project as wage labourers. From these lists a total of 76 women from three villages were randomly selected. They are referred to as "participants" throughout this report. As opposed to the participants, a total of 75 women who had never been involved in the project were also randomly selected on the day of data collection. The women interviewed were mostly the head of the household or the spouse of the head of the household. In some cases, however, single women with or without children, who were not the head of the household but were living with their families were also included. In total, 151 women from 151 households were interviewed, meaning that 6.6 per cent of the households in the area were covered.

In Rukwa, too, the lists of women were prepared by the local project staff in collaboration with the village authorities. Under this project the number of female wage labourers was extremely limited, while many participated as self-help workers. Thus, we had three categories of women in the sample: wage labourers, self-help workers and non-participants. Since some of those who had worked for wages were no longer living in the area, their number was even smaller. All of them who were still in the area were thus located and interviewed, 17 in total. As far as the self-help workers and the non-participants were concerned, we made random selection of 73 from the former and 64 from the latter out of the lists prepared beforehand. Thus, the

total sample size in Rukwa was 154, representing 9.7 per cent of the households in the villages covered (The total number of households in 7 villages was 1,586 in 1985, according to the information provided by the village authorities.). As in Mto-wa-Mbu, the sample were mostly the head of the household or the spouse of the head of the household, though some single women with or without children living with their families were included.

3. Other Forms of Data Collection

In addition to the sample survey carried out with the use of a questionnaire, the village chairmen, the regional officials dealing with the project, the local project staff, gang leaders, ranking UWT officials, etc. were interviewed on many aspects of the project implementation, such as recruitment practices of wage labourers, the arrangement of self-help work, wages, how and why certain types of work were assigned to women, etc. The UWT officials provided information on women's groups existing in the region and their activities as well as their aspirations. The information obtained through interviews of these individuals was very useful in counterchecking some of the data obtained from the survey. In Rukwa we also visited the local dispensaries and talked with the medical or paramedical staff who supplied us with valuable pieces of information regarding health conditions in the villages.

B. Questionnaire

The Role of Women in and the Impacts of SPWP in Tanzania:
a study in the Mto-wa-Mbu flood control cum irrigation
project and the Rukwa water supply project

(In principle, the same questionnaire was used in both regions; however, some minor changes were made for the survey in Rukwa. The items that had been added or deleted are so mentioned after each item.)

Name of Village _____ Date _____
Name of Respondent _____ No. of Enumerator _____

1. Age _____
2. Education: what grade have you finished?
Standard _____
Form _____
Adult Education _____
3. Religion: (1) Christian
(2) Moslem
(3) other (specify)
4. Marital Status: (1) Single with no children
(2) Single with children
(3) Married(monogamy)
(4) Married(polygamy)
(5) Divorced
(6) Widowed

5. Family

- 5.1. Give age, sex, level of education and relationship of your family members.*

relationship** age sex education***

-
- 1.
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.
 - 7.
 - 8.

*Family refers to a group of persons normally living together in one housing unit.

**Use the following codes: (a) parents, (b) spouse, (c) siblings, (d) children, and (e) other.

***Indicate the grade one has completed.

- 5.2. What is the occupation(main work) of your father (if you are single) or your (present, former or late) husband?

5.3. Where does he work? _____

6. Residential Mobility

- 6.1. If you were born in a place other than where you live now, indicate the village/town/district/region of your birth. _____
- 6.2. (For the married) If your husband was born in a village other than where you live now, indicate the village/town/district/region of his birth. _____
- 6.3. If you were not born here, indicate the number of years you have lived at the present village. ____ yrs
- 6.4. If you were not born here in this village, what made you move here? Reason: _____
-

7. Participation in the ILO Project

- 7.1. Have you ever been involved in any way with the ILO project? yes/no

If yes, answer the questions 7.1.1.-7.1.25.

- 7.1.1. In which work? (1) flood control
(2) irrigation scheme
(This was deleted for the Rukwa survey since we covered only the water supply project there.)
- 7.1.2. Did you participate in any way in the selection of the ILO project? yes/no
- 7.1.3. Did you participate in any way in the planning of the ILO project? yes/no
- 7.1.4. If yes for either one(7.1.2. and/or 7.1.3.), through what group have you participated?
(1) village council
(2) village assembly
(3) women's group
(4) other (specify) _____

(The questions 7.1.2, 7.1.3 and 7.1.4 were replaced by the following questions for the Rukwa survey:

- * If yes, (a) in selection? yes/no
(b) in planning? yes/no
(c) as wage labourer? yes/no
(d) in operation? yes/no
(e) in self-help work? yes/no

* For each "yes" answer to the above question, through which group have you participated?

- (a) _____ (1) village council/assembly
 (b) _____ (2) women's group
 (c) _____ (3) village chairman
 (d) _____ (4) project technician
 (e) _____ (5) gang leader
 (6) other

7.1.5. How do you rate the selection and the planning of the project?

	selection	planning
(1) very good	_____	_____
(2) somewhat good	_____	_____
(3) not good	_____	_____

7.1.6. What* is(was) your work?

- (1) excavation work
 (2) embankment formation
 (3) stone collection
 (4) river clearing
 (5) sand carrying
 (6) water carrying
 (7) first aid assistance
 (8) other (specify) _____

*Multiple answers are possible.

(For the questionnaire used in Rukwa, the items

(1) - (8) above were changed as follows:

- (1) clearing of site
 (2) excavation of drainage/trenches
 (3) collection of sand/stone/gravel
 (4) transport of cement/steel/timber
 (5) aggregate/block making
 (6) pipe laying and back filling
 (7) construction of tank/intake/domestic points
 (8) first aid assistance
 (9) other(specify): _____

7.1.7. Did you have any choice in the kind of work you do(did)? yes/no

7.1.8. If not, what work* do(did) you prefer to do?
 *Use the code from 7.1.6. _____

7.1.9. As you might know, the flood control system and the irrigation scheme under the ILO project are partly completed and will be totally completed in the near future. Please indicate what you think will be necessary for the systems to function properly in the long run. _____

 ("flood control system and irrigation system" above was replaced by "water supply scheme" for the Rukwa case study)

7.1.23. What do(did) you do with the money you earned?
 (1) purchase consumer goods (specify): _____

- (2) save
 (3) reimburse debts
 (4) other (specify): _____

7.1.24. Can(could) you decide by yourself what to do
 with the money you earned? yes/no

7.1.25. If not, who decides(d) it? _____

7.2. If you have never been involved in any way with
 the ILO project, answer the questions 7.2.1. -
 7.2.3.

7.2.1. Indicate the reason why you did not participate.

- (1) poor working conditions
 (2) I was sick
 (3) not allowed to participate
 (4) too busy with other work
 (5) not interested in the project
 (6) other (specify): _____

7.2.2. If not allowed to work, whose decision was it?

- (1) father
 (2) mother
 (3) husband
 (4) other (specify): _____

7.2.3. If you did not participate because of poor work-
 ing conditions, what conditions would you like
 to see improved? (e.g. shorter working hours,
 higher wages, etc) _____

The following questions are for both the participants
 and the non-participants in the ILO project.

7.2.4. Would you like to see a particular ILO project
 implemented in your area in the future?

yes/no

7.2.5. If yes, what kind of project?

7.2.6. How would you like to participate in this
 project? _____

7.2.7. Has anyone (else) in your family been involved
 in any way with the ILO project? yes/no

7.2.8. If yes, who? _____

7.2.9. How important is(was) the income for the family?

- (1) very important
 (2) somewhat important
 (3) not important

8.3.3. What do you do with the money earned under this activity?

(1) purchase consumer goods(specify): _____

(2) save _____

(3) reimburse debts _____

(4) other(specify): _____

8.3.4. Can you decide by yourself what to do with the money? yes/no

8.3.5. If not, who decides it or must agree to it?

8.4. Livestock:

Does your family own livestock? yes/no

8.4.1. If yes, what kind, how many and who feed them?

	kind of livestock	number	cared by whom*
(1)	_____	_____	_____
(2)	_____	_____	_____
(3)	_____	_____	_____
(4)	_____	_____	_____
(5)	_____	_____	_____

*Use the codes from 5.1. for the members of the family other than the respondent.

8.4.2. Are any of them or any of their products(e.g. eggs, milk, meat, etc.) sold? yes/no

8.4.3. If yes, how important is this income for your family?

- (1) very important
(2) somewhat important
(3) not important

8.4.4. What does your family do with the money earned from this activity?

(1) purchase consumer goods(specify): _____

(2) save _____

(3) reimburse debts _____

(4) other(specify): _____

8.4.5. Who in your family decides on the expenditure?

8.5. Please indicate the order of the importance of the following sources of cash income for your family.

sources of income	order
(a) income from the ILO project	_____
(b) income earned from wage labour	_____
(c) income earned from family farm	_____
(d) income from production	_____
(e) income from livestock	_____

9. Household Chores:

(For wage labourers and self-help workers) For which of the following chores were you responsible before you started working in the project?

(For non-participants) For which of the following chores are you responsible?

chores	yes/no
(1) food preparation	_____
(2) washing clothes	_____
(3) fetching water	_____
(4) collecting firewood	_____
(5) repairing the house	_____
(6) cleaning the house	_____
(7) child care	_____

9.1. (For wage labourers and self-help workers) Has your participation in the project affected in any way those chores?

chores	yes/no	if yes,	
		(a)* time spent by you decreased	(b)** chore taken over by others
(1)	_____	_____	_____
(2)	_____	_____	_____
(3)	_____	_____	_____
(4)	_____	_____	_____
(5)	_____	_____	_____
(6)	_____	_____	_____
(7)	_____	_____	_____

*Note that both (a) and (b) are possible.

**Use the codes from 5.1.

9.2. On Water Collection

(The items under 9.2. were added in the Rukwa survey.)

9.2.1. How far did you have to walk to get water before the water supply project started?

(a) in rainy season _____ km
(b) in dry season _____ km

9.2.2. How far do you walk to get water now? _____ km

9.2.3. How has the water supply project changed your life and work patterns?

- (a) less amount of time required for water collection now and I can relax more
(b) can allocate more time for other work
(c) cooking, washing, etc. have become easier
(d) improved health and sanitary conditions
(e) other(specify): _____
(multiple answers)

10. Social Activities:

Are you a member of any group in your village?
yes/no

10.1. If yes, please indicate which group you are member of, whether it is a women's group or not, the size(the membership) of the group, the frequency of the group meeting, your post or responsibility in the group, the activities of the group, and the skills you acquired from the group.

group	women's group?	size of group	freq./ meeting	post	activi- ties	skills acquired
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

10.2. If you are not a member of any group, why not?

- (1) not interested
- (2) cannot pay membership fees
- (3) not allowed to join
- (4) don't want discuss problems with others
- (5) meeting held in places so far away
- (6) have no time
- (7) other(specify): _____

11. Economic indicators:

In what kind of house do you live?
(Select one each from (a) and (b).)

- (a): (1) mud house
- (2) brick house
- (b): (1) thatched roof
- (2) galvanised iron sheets on the roof

11.1. Please indicate how many of the following items your family owns.

items	no.
(1) radio	_____
(2) bicycle	_____
(3) motorbike	_____
(4) tractor	_____
(5) kind of tools(specify):	_____
_____	_____
_____	_____
_____	_____
_____	_____

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