

# **WOMEN IN IRRIGATED AGRICULTURE AND AGRICULTURAL EXTENSION IN USANGU PLAINS MBEYA**

## **“A Case Study on Women In Irrigated Agriculture Project - Mbeya”**

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### **INTRODUCTION**

Usangu Plains are located in the South-Western part of Mbeya Region.

The plains are known for their high potential in agricultural production and irrigation development. Approximately two thirds of the land is suitable for irrigated agriculture. The soils are fertile and a number of rivers run through the plains enhancing the need for irrigation development.

The introduction or modernization of irrigation at the village level demands changes in the traditional farming system. In the past, project planners have assumed that these changes can be brought about by adding new technologies and inputs to the labour supplied by the farmers. However, what has often been ignored is the difference between the roles of men and women, and, hence, the different demands that these changes in the farming system will make on the sexes.

Recent studies have shown that, in Tanzania, there is division of agricultural labour between men and women. It is common for women to be the major producers of food crops, whereas male labour is primarily used in cash crop production.

Moreover, in addition to food crop production, women traditionally have other tasks which are not equally shared by men. These include; food processing and preparation, household management and fetching water and fuel. Pregnancy, child rearing and caring for the sick in the family are also women responsibility.

Under these circumstances, new technologies, for example irrigation development may lay an impossible burden on women or place into the hands of men the control of resources which are vital for women's activities.

Women in Irrigated Agriculture (WIA) Phase I came on stream in 1988 to complement the irrigation development activities of Usangu Village Irrigation Project (UVIP), by examining the impact of irrigation development on respective household members, and more importantly, the role of women farmers in relation to men. This paper will present the actual experience of WIA Phase I Project in the Usangu plains.

### **IMPLEMENTATION OF WOMEN IN IRRIGATED AGRICULTURE PROJECT (WIA)**

#### **Location and Project Area - Phase I**

The Women in Irrigated Agriculture Project is located in Mbeya rural district in Mbeya Region. WIA is at present active in eight villages with a population of 19,005 (9,492 females and 9,513 males).

## **The Objectives of WIA are as Follows:**

### *Long-term objectives*

To improve the living conditions of the marginal groups in the Usangu plains particularly women, through participation of family members in project matters.

### *Immediate objectives:*

- i) To examine the role of the individual family members in the present farming systems (rainfed and irrigated) in the Usangu Village Irrigation Project area; to identify the wishes and needs of intended beneficiaries of irrigation; to identify the main obstacles to their participation in irrigation development and management;
- ii) To assess the impact of irrigation development on the socio-economic nutrition status of the various groups of households of the Usangu Plains population, and make recommendations for future irrigation development and management.
- iii) To initiate the implementation of the measures recommended above.

## **Project Activities**

The Project carried out a number of activities. The primary activity was data collection, but also some pilot activities were carried out basing on the felt needs of women farmers.

### **Data Collection**

Data was collected through intra household surveys and growth studies to provide data base for assessing the needs, potential and obstacles to social, economic, educational and nutritional status of the project area.

### **Training**

Several workshops and seminars were organized for various groups of clientele on the project area. These includes; training of technicians and decision makers on gender issues and different aspects on agriculture training women leaders on leadership skills to enable them to run women groups and meetings. training on animal traction to encourage women to use animals in order to reduce their work load. Technical staff were also provided with six weeks on the job training on gender issues, rural planning and research methods.

### *Woodlot establishment*

The project felt the need to reduce women's labour devoted to fuel wood collection and processing. It established nurseries of fast growing trees for fuelwood and fruits.

Two tree nurseries were established in 1989/90 in which 25,000 seedlings were raised. About 22,000 seedlings were distributed to 5 women groups, 300 individual women group members, 5 primary schools and 1 dispensary.

income generating farming. WIA project conducted irrigation management training to women group at Kongolo Mswiswi village and assisted in constructing water intake canal leading to the women's 10 acre plot.

## **METHODOLOGY USED BY PROJECT TO REACH WOMEN IN VILLAGES**

### **Group Development**

At the instigation of the WIA and with the assistance of the Community Development Department (CDD), women's irrigation committees (called village women irrigation committee - VWICs) were formed mainly to provide a mechanism for more effective participation of women in ongoing mainstream irrigation activities, as well as a means for women to discuss agricultural, food and nutritional constraints and problems, and to participate in developing possible solutions.

Positive participation of women was obtained when it became clear that project was carrying out activities which were in their interest as well as their families.

Agricultural extension workers could pass on information to women farmers, thus helping to alleviate the difficulties of personnel transport shortages, as well as enabling male extension workers to interact freely with female farmers.

### **Tours for Women Farmers**

The project organised some tours for women farmers elected from six villages accessing Majengo Scheme. The women, with the company of project staff officially visited the Majengo Scheme to see the development of irrigation. Almost 95% of the women who went there had never seen the scheme before. Another visit was organized to Mbarali Rice Farm where apart from seeing irrigation system the women had a discussion with their hosts, the women group members of Mbarali Rice Farm in order to exchange ideas and learn from each other. The group at Mbarali was more advanced in terms of organisation and management.

### **Using Existing Government Staff**

Civil servants at Regional down to village levels from various relevant departments have been assigned to the project either full or part time. Departments covered to perform a team work are: Planning, Agriculture/ Livestock, Natural Resources, Community Development, Irrigation and Health.

The use of a community development assistant has contributed to a great extent to the success of WIA project. After seeing the degree of achievement, the District Community Development Officer assigned more staff to the project (as requested by the project) in order to have a greater impact in terms of mobilization and sensitization. Likewise the DALDO has assured the project to assign an extension worker to each village in order to have a greater impact in terms of extension services.

## **PROJECT FINDINGS/ACHIEVEMENTS - PHASE I**

Based on project findings, the following key issues emerged which should be targeted for possible second phase activities. These findings are tentative pending the completion of the analysis of the data.

### **Subsistence Food Production**

Existing irrigation intervention and support were marginal or non-existent for subsistence food crop production. All supports were targeted to the main cash crop, rice. While rice yields have improved, in the rehabilitated Majengo irrigation Scheme a major constraint has been that low temperatures in the area limit production to one crop per year.

The main food crop of maize, as well as other, supplementary food crops, are grown under rainfed conditions, and rainfall is unreliable. Access to irrigated water for these crops is limited owing to the absence of general irrigation facilities and support.

### **Women's Workload**

The project's findings point out implications regarding an uneven and traditional gender division of labour within households.

Overall, there is a high female to male ratio (1988 Population Census Data), and in villages where this prevails there is also a high dependency ratio. Given women's role in providing for the subsistence of dependants in the household, they will have to work harder or more than men in order to produce more.

Ninety-seven percent of households surveyed reported family members being ill in the period January to March 1989. Eighty percent of women in the households reported that they alone care for the sick family members, with 18 percent reporting they were assisted by other household members.

The clearing and levelling of lands for rice fields remove traditional wood resources, necessitating women going further upland to fetch firewood. Firewood is collected on an average of three days per week, and this work takes four to six hours.

Transplanting of rice, weeding, and ploughing fields for maize and rice are major, time-consuming and difficult tasks. Rice transplanting, weeding and manual ploughing for maize are primarily women farmers' responsibilities. Existing support for labour saving technology concentrates on devices for ploughing, and then mainly for rice production. Early-planting and the transplanting of rice are two activities being promoted for increased rice production. Both necessitate female labour intensification, especially the additional weeding needed for early planting of rice.

### **Nutritional Status**

There is malnutrition in the project area, and the preliminary findings of the WIA growth study survey indicated that 4% to 9% of under-fives were severely malnourished (60% weight for age) and 35% to 50% moderately malnourished (60% to 80% of weight for age).

### **Participation in Irrigation Intervention**

Irrigation support has been organized on the concept of the family, with a husband being the head of the household. This results in limited benefits (tools and technology inputs, etc.) accruing to women farmers who are wives of farmers allocated land under the scheme, ownership of rehabilitated irrigated land limited to single women farmers, and limited participation in training and receipt of extension services. On the other hand, canal rights for unmarried women improve under irrigation support scheme.

### **Gender Awareness and Leadership**

There is limited knowledge and awareness among government leaders, decision makers, planners and administrators, regarding the implications of gender division of labour in agriculture development.

There is a general lack of leadership skills among women, as well as little experience of competing in integrated group settings for scarce agricultural support and benefits.

The impact of the project have lead to the following:

- Village leaders have been convinced to provide permanent plots to women groups.
- Male extension staff are more confident than before in dealing with women groups.
- Assistance in construction of an intake of a traditional canal of about 6km. As a result of this the women group were able to produce rice on their field.
- Women farmers knowledgeable on irrigation management and animal traction (two non traditional activities).

### **PROBLEMS ENCOUNTERED**

#### **Misunderstanding of Project Objectives**

Many people interpreted the project in different ways. For example, some related it to UWT (Union of Women in Tanzania), while others thought it was for providing loans to women; some thought it was a nutrition project whereby women would be given things like milk for their children. Some people thought it would provide transport for women to transport their crops, while others expected that the project could assist in building dispensaries to help reduce women problems related to childbearing.

#### **Lack of Understanding of the Concept of "Gender Issues"**

There was/is a general lack of understanding (among technicians and decision makers) on the concept of 'gender' and gender roles of men and women as related to agriculture. This was initially a major obstacle towards smooth operation of the project, for most of the key persons/officials could not know how to deal with the project. Discussions and meetings/seminars/workshops helped to reduce the problem.

#### **Husbands' Resistance**

Some men were not ready to release their wives to attend project meetings and/or women activities. Some of the main reasons were that, their wives would be spoilt and they would not respect them.

#### **Need for Tangible Benefits**

Despite the fact that the project was primarily research oriented basing on data collection, women put much pressure on the project demanding tangible things like loan for inputs, transport facilities, canal improvement, woodlots and group leadership training. Due to the pressure the project performed some

activities related to the demands, for example, planting trees, training women leaders, improving a traditional canal.

#### **WIA'S EFFORTS TO STRENGTHEN EXTENSION**

##### **Transport**

Based on the findings - Phase I, extension services are crucial to female farmers development. In this regard WIA has identified the need to strengthen extension services by provision of transport (bicycles) to all extension staff to enable them to reach more female farmers. Existing groups are being strengthened while new ones are being formed.

##### **Short-Term Training**

In consultation with Uyolet Agricultural Centre (UAC) the project plans to organise short-term training for Agricultural Field Officers (AFOs) in order to strengthen their skills and update their knowledge.

##### **Demonstration Plots**

The project plans to strengthen the extension demonstration plots through provision of inputs like seeds, fertilizers, and pesticides.

#### **LESSONS TO BE LEARNT FROM WIA PROJECT**

- Continuous sensitization of both women and men farmers and government officials (technicians and decision makers) regarding gender issues can be done through informal and formal discussions, meetings and seminars/workshops.
- Extension workers should work in close collaboration with village leaders and other technicians especially community development workers and be patient and flexible when dealing with women.
- Good data is needed in order to know situation between women and men rather than working on assumptions.
- Intersectoral collaboration with other Agencies especially Community Development is important for successful project implementation.
- Women should not be assumed as a weaker sex. With time, a woman can change towards new development styles but the approach for changing her has to be carefully analysed and frequently reviewed. One needs to be extra patient and flexible when dealing with women.
- In order to educate women, men should be sensitized first, for they can be the major obstacles for women development.

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