Country Report 13: Tanzania

GRTI Activities in Tanzania

In Tanzania, GRTI activities have been carried out since 2000. Tanzania has participated in all three phases of GRTI. In the first year, VTTP was funded to develop Gender Responsive Monitoring and Evaluation Indicators as the major output of a workshop. The indicators are currently used in monitoring and evaluating the on-going VTTP activities in pilot districts. A national level workshop was conducted whose participants included key officials from relevant ministries, participating districts and the private sector. At the district level two workshops were conducted which involved key implementers from the district to the village level. The overall objective of the workshops was to have a clear understanding of indicators to be used in monitoring and evaluating VTTP activities at all levels.

In Phase II, VTTP got additional funding for conducting demonstrations of IMTs for pilot districts. The key objective for organizing the demonstration event was to impart knowledge and skills on making and maintaining IMTs, and also on its usage for both women and men. The third funding from GRTI was directed to carrying out a study to investigate the impact of gender mainstreaming in VTTP activities, particularly gender-responsive rural travel and transport projects. Since 2000, all three implemented activities under the GRTI support aimed at gender mainstreaming in VTTP interventions.

Development Initiatives in Tanzania

To understand the present status of the Village Travel and Transport Programme (VTTP) and the position of GRTI in the activities of VTTP, it is necessary to view the past development activities with regard to transportation in the country. VTTP is among several initiatives in Tanzania which translate RTTP policies in practice. The Government of Tanzania in collaboration with the Sub-Sahara African Transport Programme (SSATP) formulated the programme in 1994 under the Integrated Road Project (IRP). The overall goal of VTTP is to improve the livelihoods of the rural population through making sustainable improvements in rural travel and transport situations. VTTP intervention is in three main areas:

1. Community participation in rehabilitation and maintenance of community roads/footpaths and tracks;
2. Community participation in rehabilitation and maintenance of basic services such as water sources, grinding mills and establishment of wood lots; and
3. Wide spread use of IMTs.

The VTT Programme has been implemented in seven pilot districts in Tanzania and receiving financial support from five development partners/donors. These are: Rufiji and Iringa Districts (DANIDA), Masasi District (FINNIDA), Mbozi and Muheza Districts (NORAD), Iramba District (World Bank) and Morogoro Rural District (Swiss Development Cooperation). Consequently, Tanzania has a longer history of rural transport sector interventions and can provide important lessons for other countries.

Developing Monitoring and Evaluation Indicators

Background to the Workshop

The Gender Responsive Monitoring and Evaluation Workshop was designed with the aim of creating monitoring and evaluation components to identify changes in gender issues within VTTP activities. This was a follow-up to the national workshop on "Developing VTTP and Gender Responsive Monitoring and Evaluation Indicators" which was held in July, 1999. The 1999 workshop was conducted in English. The follow-up 3-day workshop was co-sponsored by GRTI (as the Phase I activity) and RTTP and held in July, 2000. The workshop was organized by the Ministry of Regional Administration & Local Government with 31 participants, including government officials, representatives from the districts, private sector and NGOs. Seventeen of the participants were female. To ensure maximum local participation, the workshop was conducted in Kiswahili with more representation from the district level.

The main goals of the workshop were the following:

- Improved understanding of gender issues in rural travel and transport;
- Identification of gender issues in village travel and transport;
- Review of methods for evaluating or monitoring gender dimensions;
- Establishing and listing indicators for linking gender issues and transport interventions; and
- Improved understanding of monitoring and evaluation of gender issues.

The workshop began with an overview of gender issues which was followed by a session on gender, transport and welfare of the Tanzanian village. The need for monitoring and evaluation of gender impact of VTTP interventions was also considered. Data Collection methods were looked at and ways of analyzing M&E data discussed. Workplans for the establishment and operationalization of M&E systems for pilot districts were developed, based on the indicators proposed during the workshop.

Identification of Relevant Gender Issues

Participants from each district identified a number of gender issues relating to VTT programmes carried out in their locality. The commonly reported gender issues from the districts included:

- Distances for women to fetch water and firewood are very long,
- Social services like clinics, schools and markets are too distant,
- Roads are in poor condition and bridges are lacking in some areas,
- Customs and traditions limit women's social participation as well as their ownership of IMTs,
- Women do not participate in voluntary work and local participation is generally low,
- Poverty levels are high,
- Credit schemes are generally lacking,
- IMTs are not available or affordable, and local ownership is very low, and

- Local policy makers and officials do not understand the policy provisions or the need for local participation in VTTP.

From these issues, a pressing need from each district was selected and a strategy for addressing the need was proposed. The analysis of the problem of lack of water in Rufiji District is presented here as an example of what was carried out for each district. Table 13.1 presents an analysis of the causes and consequences of the problem.

Table 13.1: Analysis of Causality on Problems of Water Provision in Rufiji District

Manifested Problem	***Immediate Cause or Determinants***	***Consequences***
Inadequate access to safe and clean water near community members' households	- Absence of wells or rivers near people's dwellings; - Most inhabitants are too poor to afford digging their wells; - Absence of research or studies on availability of water in most villages; - Most people are used to the present situation.	➢ Community members, especially women, attacked by crocodiles when they fetch water; ➢ Community members, especially women, falling into rivers; ➢ Prevalence of stomach disorders such as diarrhea and other infectious diseases; ➢ Women spending too much time in fetching water and not having enough time for other productive work; ➢ Female children not attending school properly due to fetching water; ➢ Digging of wells at wrong places; ➢ Community members wasting their time and energy.

Building Gender into M&E of VTTP

Participants at the workshop then went further to decide which gender issues they wanted to address and considered the measures that could be taken, the results expected from those actions, the likely impact as well as the techniques to carry out the measures and indicators to measure their impact. Among the specific gender issues for which indicators need to be developed to enhance the implementation of its strategy are the following:

- changes in the time women take in moving goods and reaching health clinics;
- changes in agricultural production, incomes in village and girl child's school attendance;
- increase in women's self reliance, involvement in decision-making and willingness in contributing to the village travel and transport activities;
- contributions of men's and women's involvement in decision-making; and
- involvement of women and men in VTT activities and reduction in poverty.

In Table 13.2, the case of Rufiji District is again here used as an example of the analysis carried out during the workshop.

Table 13.2: Suggested Measures, Expected Results and Indicators of Impact for Solving Water Problems in Rufiji District

Measures	*Expected Results*	*Impact*	*Techniques to measure Impact*	*Indicators of Impact*
• Promote construction and utilization of IMTs; • Look into the costs of making IMTs such as wheel-barrows, push/pull carts, bicycles, etc. • Creating groups with members from about 5 households each; • Groups to contribute part of the costs; • Request the District Council, Central Government & donors to facilitate purchase of IMTs by villagers; • Make IMTs; • Provide training to village technicians who will repair IMTs; and • Appoint dealers in IMTs.	➢ Decrease in time taken by women for fetching water; ➢ Women get more time for doing other activities besides fetching water all day; ➢ Increased production in all areas;	❖ Improved participation of girl children in school; ❖ Increased availability of surplus produce in most villages due to increased production; ❖ Increased incomes or earnings by most villagers.	✓ Preparation of a questionnaire for collecting data / information; ✓ Individual interviews with members from the Transport and Travel Committee and the Village Government ✓ Review of various records available in the Transport Committee and Village Government on transportation and travel; and ✓ Visit the concerned areas for direct observation.	Receipts on contributions from various stakeholders; Percentage of actual users of IMTs; Proportion on increase of average incomes of inhabitants; Change in time available for other activities; Fall in problems causes by use of unclean and unsafe water; Less complaints by female students on fatigue or bodily pains; Less incidents on diseases caused by poor hygiene; and Increased presence of repair shops for IMTs.

The workshop was very effective in not only sensitizing the participants about gender issues in the rural travel and transport programmes, but it also gave them insights into gender issues of larger development concerns and ideas as to how to address those issues for more gender-responsive activities. The importance of monitoring and evaluating the impact of the intervention was not only understood, but the process of analysis as well as the tools and methods of carrying the process out in their local activities was clearly explained.

Demonstration of IMTs

Organization of District Level Workshops to Demonstrate IMTs

From the findings of the workshop and other first phase activities, it was found that the wide spread use of IMTs needs a specific intervention in order to ensure optimum gender balance. Experience from the rural areas indicates that due to several factors, including culture, IMTs are used to a limited extent in almost all of the pilot areas. It was therefore proposed and later funded that a project was needed to create awareness and increase skills on the wide scale use of IMTs in pilot areas. The objective was to ensure that required skills would be developed in the villages that will need them for manufacturing, using and maintaining the IMTs. The intention was to carry out demonstration workshops on the use of IMTs and exchange experience and skills among pilot districts.

The four main expected outputs of the workshops were that:

a. The demonstration would increase awareness on the use of IMTs for both men and women in the pilot villages.
b. Local artisans would gain more skills and increase their market and business opportunities.
c. There would be an increased use of IMTs by both men and women that would balance the transport burden among men and women.
d. The villagers in pilot villages would be able to use developed M&E indicators to measure the impact of the use of IMTs among men women.

The demonstrations were conducted in two phases in the Districts. The first phase of demonstrations involved four pilot districts (Morogoro, Mbozi, Iramba and Masasi). The second phase was conducted in the remaining four districts (Iringa, Rufiji, Muheza and Simanjiro). The demonstrations were organized and conducted by the VTTP National Coordination Unit in collaboration with instructors from Morogoro Vocational Education Training Authority (VETA). Local manufacturing companies of IMTs also provided technical experience on the manufacture, maintenance, usage and marketing of IMTs. The types of IMTs that were demonstrated included ambulance carts, push carts, donkey carts and bicycle carts.

The demonstration workshops strategically involved a cross section of participants including:

- two village gang leaders from each district in existing VTTP pilot villages – one man and one woman,
- the local program managers from pilot districts,

- one technician from each District Engineers Office,
- two local artisans from each pilot district,
- representatives from the National Coordination Unit, and
- three representatives of women groups from each pilot district.

Feedback from the Participants

The demonstration workshops included group discussions to identify obstacles and strengths in order to get a strategy for wide spread use of IMTs with a gender balance. Table 13.3 gives a summary of common issues raised in the district workshops.

Table 13.3: Summary of Strengths, Obstacles and Suggested Strategies to Enhance Gender-balanced Use of IMTs

Strengths	• Some women's groups already exist and a few are using IMTs as a group • Local artisans are located in the area that can manufacture and repair IMTs or can learn to do so. • VTTP already promotes the use of IMTs and has started enlightenment and awareness. • Some funds that can be used to purchase IMTs by groups or individuals are available at District Councils and/or VTTP. • A number of IMTs of various types are currently being used. • Women already use IMTs to a limited extent.
Obstacles	➢ Generally, there is a lack of information on the use of IMTs among women. ➢ Most artisans lack capital investment for IMT manufacturing and repair. ➢ IMTs are expensive. ➢ Traditional and cultural beliefs and practices prohibit women from using bicycles. ➢ Some areas have sandy or otherwise unsuitable terrain for the use of IMTs and people are discouraged from using them. ➢ VTTP funds largely restricted to demonstration not providing credit. ➢ IMTs need to be modified to be more suitable.
Strategies	✓ District Council / VTTP should promote training and patronage of local artisans. ✓ Women's groups need to be established where lacking or strengthened where existing. ✓ Special funds should be set up for women's groups to secure IMTs. ✓ Special demonstrations / training should be targeted to women on the use of IMTs.

	✓ IMTs should be modified to be more appropriate to users' needs and to the terrain. ✓ Gender awareness training should focus attention on ownership and use of IMTs. ✓ Visits to areas where men and women are successfully using IMTs should be taken.

One of the outputs of the workshop was the perspectives of the participants on the need for the IMTs to be modified. The four types of IMTs and their modifications are listed below:

i. Sledges were modified by adding brakes,
ii. Bicycles were extended to carry more weight,
iii. Hand carts were reduced in weight and provided with stronger tires to make them easier to carry more weight especially in sandy areas, and
iv. Donkey carts were reduced in weight and provided with modified panners to make them easier to use, especially for women.

Planned Monitoring of Impact of the IMT Demonstrations

An important follow-up of the demonstration was the planned monitoring of the impact. At the district level, information on number and type of manufactured IMTs would be collected by the Local Program Manager on a quarterly basis. In the pilot villages, the VTTP committees at the villages and ward level would collect information on the use of IMTs. This information would be gender-disaggregated to find out the impact on both men and women. Monitoring on the activities of the trained artisans and the quality of their outputs would similarly be carried out. In this way, the activities in Tanzania took into consideration the importance of monitoring for the sustainability of their intervention.

Study on the Impact of Gender Mainstreaming in RTT Activities.

Background to the Study

In Tanzania, resources for the transport sector have basically been directed to the rehabilitation of the national road network, other classified roads and some of the essential feeder roads while the poor state of access roads which link villages to district centers still present a major obstacle to rural dwellers. As a result, the majority of villages in rural Tanzania are inaccessible, which weakens the connections between producers, consumers and marketing centers located in sub-urban and urban areas. The activities of VTTP have concentrated on improving the travel and transport conditions of rural areas in Tanzania.

The need for the study was a direct result of earlier GRTI activities in Tanzania. The specific objectives of the study were as follows:

- Determine the impact of gender mainstreaming in RTT through the established M&E indicators;
- Identify the gender gaps in VTTP implementation;
- Establish lessons learnt in gender mainstreaming; and

- Propose a strategic study for dissemination of lessons learned.

Methodology of the Study

The study was carried out in a very participatory manner. The main approach used was aimed at ensuring equal participation and contribution of all individuals in the study villages, local authorities and district levels. During the FGDs, women and men in separate groups were provided with opportunities to share their experiences from the projects. In workshops, the selection of participants was done in such a way as to ensure equal representation of women, men, youth and other special groups in respective villages. Experiences from village government leaders and influential people in the village were obtained through in-depth interviews. Wherever possible, these key informants were invited to the workshops.

At the district level, senior level directors and project staff were interviewed. Project staff members at the district level were also invited to form part of the study team. The goal was not only to obtain information from these officials, but also to ensure that their capacity was built in conducting such studies and in creating their awareness of experiences on the ground.

Various methods of data collection were adopted to achieve the objectives of the study, including both quantitative, with the use of a limited survey, and qualitative methods, including FGDs, IDIs with community leaders, project staff and other stakeholders, as well as direct observation and traffic counts. A review of district action plans, VTTP progress reports, papers, policies, strategies and other secondary data was also carried out. To analyze the information, triangulation was used to verify the quality and consistency of information gathered. The study was carried out in three of the VTTP pilot districts.

Findings of the Study:

The findings of the study covered a wide range of issues pertaining to the VTTP. The section not only reports on current conditions, but attempts to assess the impact of the VTTP activities upon the local population generally and more specifically, from a gender perspective.

Findings on Community Participation and Local Capacity Building

The findings of the study revealed that members of the communities actively participated in road projects. At the same time, however, there were also identified constraints to local participation.

- Seasonal calendars showed that it is only during the dry season that community members can come out and participate in road projects. During the rain season people are busy with farming activities and the flooding that occurs at this time makes the roads impassable and impossible to rehabilitate using labor-intensive technology.
- The gender division of labor contributes to the mode of participation.

- The dependency syndrome following the historical hangover of free service delivery by the Government has somewhat hindered the spirit of voluntarism.
- Most male respondents said that high poverty levels have limited incomes at the household level, leading people to look for paid employment with little time for community activities.
- Time spent in daily activities such as fetching water and firewood reduced the time available for participation in community development work, particularly for women.
- Some of the local development projects pay wages to encourage participation. This creates a disincentive to local residents to volunteer their labor.

It was found that participation in self-help programs for VTT activities has involved both males and females. Women form a significant proportion of participants, out numbering their male counterparts by 15% overall. Table 13.4 provides an example of the level of participation of males and female in road construction activities in Rufiji District.

Table 13.4: Participation in road construction by men and women in Rufiji District

Road constructed (km)	*PARTICIPATION*			Duration (days)	Estimated cost (Mil.TShs)
	Total	Men	Women		
157.2	1740	810 (46.6%)	930 (53.4%)	224	584.64

A number of VTTP committees at village level have women members which helps to bridge gender inequalities. Women in these committees are very active members and they seem to contribute fully in decisions that are made. However, the study revealed that in some cases women are not confident enough to voice out their own interests and those of the other women they are representing. They became members due to the requirements set by the project but they often do not have actual decisión making power in practice. In the wider community, however, women have become more aware of their needs, problems and potential. Workshops and conferences were conducted to raise communities' awareness on VTTP. This awareness creation has led women to begin speaking out their concerns and interests. The freedom of the speech for groups including youth has now started to improve.

In Muheza District, village communities have achieved significantly higher levels of skills and competence to improve their capability on VTT activities. This was reported by the staff at the district level. For instance two technical members of staff from each of the pilot villages in each district were sponsored for three months training in labor-based technology to certificate level in Mbeya. The staff composition was gender balanced with 50% being women. As an impact of the capacity building intervention, it was observed that districts were able to formulate the district gender teams. The DGTs are charged with the responsibility to facilitate gender mainstreaming.

Findings on Use of IMTs by Gender

Results of the traffic count conducted for six days and the use of motorized means of transport revealed low levels of utilization. Only three pickups were recorded in the entire duration of the traffic counts. Two pickups were recorded in the market "*Gulio*" day, giving the impression that these were traders looking for produce while bringing some from outside the village. The results on motorized transport show that more lorries and trucks are using the regional road.

In terms of non-motorized transport on rural paths, the findings of the traffic counts further show that to secure the needed goods and services basic for their livelihoods both women and men mostly walk. However, women walk more than men by 16%. On the average, about 40 women per day were observed walking on the constructed paths as compared to only 29 men. With regard to regional roads, however, the findings of the study indicate that more men than women travel on these roads and usually go on foot. This is further indicated that on average 76 men and 69 women were seen on these roads per day and they were walking as a means of transport.

In Rufiji District it was found that no women owned IMTs or other productive resources. In this case, men owned all IMTs and other resources. Gender awareness is needed to promote ownership and use of IMTs by women. In general, it was found that men take advantage of the cultural barrier for women to use bicycles for small medium enterprises. Nevertheless, the fact that there is a possibility and demand to hire out bicycles gives an indication that there will be improved transport in the area. The analysis of bicycle users indicates that for every five bicycle users on the regional road, only one user is a woman.

VTTP efforts concerning IMTs mainly involved the introduction and use of animal power and carts. So far in Muheza District a total of 8 donkeys and 8 carts have been distributed to the piloting villages. However, villagers claimed that the prices for obtaining these IMTs and their accessories were exorbitant. For example, the prices were 70,000; 65,000 and 80,000 TShs for a female donkey, male donkey and donkey with a cart respectively. The prices and costs for IMTs also discouraged adoption of draught power technology. The problem is more serious for women who have lower income levels, limited ownership to resources including means of production. The project has attempted to reduce this gender gap through its efforts to provide a donkey and a cart to be shared by two people per pilot villages as long as the recipients are able to meet the minimum maintenance costs.

Evidence from the survey indicates that villagers have benefited from the program. IMTs for providing draught power are now more in use with a decline in traditional beliefs that opposed the practice. In the past, using draught power was considered to be cruel since it was believed that animals were not meant to do such menial jobs.

The findings in Muheza District also indicate that IMTs transformed the lives of people in the district. Women are now using bicycles and carts to access basic services such as maternal health clinic services and others. A mother of six children reported that …*"with VTTP we now enjoy taking our children and babies to health centers. There are minimal*

risks regarding maternal and delivery services. In fact we are accessing services from modern health system. Transport burden, which used to consume most of our efforts has also decreased significantly, as these days we are accessible to markets and marketing, grinding mills, farms, fuel wood, water and …..…"

Furthermore, the findings in Muheza indicate that there were some cases where households' time previously used to fetch firewood has declined significantly. This is particularly true for those who have begun to hire animals, especially donkeys and pull carts supplied to a few individuals within the pilot villages.

With regard to the control and ownership of IMTs in Rufiji District, the impact has been that number of IMTs has increased and the quality of available IMTs has improved. Another effect has been that women are more likely to voice out their concerns and demand for their rights to control and own IMTs and other resources. A few women in Rufiji now own bicycles and use them for carrying goods and accessing services, which was culturally prohibited before the project. Women are now using constructed roads and footpaths to trade with fellow women from other villages. Shop owners and pretty traders are increasingly entering the villages, bringing various commodities for sell.

Findings on Roads Construction and Rehabilitation

Rural road networks have been increased and improved under VTTP. A total of 57.8km of roads have been rehabilitated, 27.8 km in Muheza District and 30km in Iramba District. In addition, drainage structures have been constructed on a 37.5 km road in Muheza District. Also, a total of 2.6km of paths were constructed while 4.1km of paths have been improved.

The impact of rehabilitation and construction of rural roads on the lives of the people is multi-sectoral. Table 13.5 shows the assessment of the situation before and after in Iramba district following the rehabilitation of the village road.

Table 13.5: Impact of Rehabilitation of Roads and Footpaths of Mwangeza-Endasiku Village in Iramba District

Beneficiary	**Impact of VTTP**	
	Before	**With**
women	Impassable roads	Passable roads i.e. bridges and footbridges constructed
	Head and back loading	Reduced human carrying
	Sick persons carried on beds	Vehicles, carts, bicycles and donkeys used to carry sick people to health centres
	No grinding machines	Grinding machines present
	Walking for 12 hours	9-10 hours spent on foot

Beneficiary	Impact of VTTP	
	Before	**With**
	Vehicle transport absent to urban center not seen in village	Road users and use of transport facilities present 3 hours used at present
Men	Roads were impassable to vehicles, walking and ridding took 10-12 hours	Passable to vehicles and carts; ridding and walking take 3-10 hours
	Carrying sick people and pregnant women for delivery on bed	Vehicles, carts and bicycles for 3-10 hours
Village	Impassable road	Passable 3-10 hours at village
	Expensive goods and services	Reasonable prices
	Poor communication	Relatively good communication
	Basic needs absent	Vaccines, grinding machines, etc are present in the village.
	Low life standards	Improved life standards by most villagers
	Muddy, leaves thatched houses	Iron sheet thatched houses are increasingly built
	Poor implementation of development activities and plans in the village	Communication improves with implementation of development plans

One man reported on how VTTP activities have affected his village. ***"…*** *accessibility has made agricultural produce more valuable from one "**debe**" of maize previously sold at 800 Shillings to 1200 Shillings but also we get agricultural inputs and extension services"*. He continued that *"these days even leaders come to our areas to attend their problems."*

Exciting findings were reported in Muheza district where a journey of 100km distance between two settlements was reduced to 3km through VTTP activities. Villagers in Kichangani sub-village formerly reached Bamba-Mavengero Village through a 100km road before construction of a bridge, which now connects the two places with only a distance of 3 km. This has made accessibility and transportation between the two communities much easier and cheaper. In Rufiji remarkable success in bridge building is been witnessed in Kiongoroni Ward where various sized bridges ranging from 30 to 130m long have been constructed as a result of the project. The effect of these activities is illustrated in the following case study.

Box 13.1: Better roads and bridges save lives

The benefits of improved roads and more bridges include not only easier and faster travel, but also greater safety. Particularly with the bridges, the villagers can now enjoy a safer crossing of rivers away from the crocodiles.

- An adult female respondent from Muheza reported, *"…thanks to God VTTP has been timely, prior to the new bridge, the situation was precarious, maternal and child death cases were also common in our village. Attacks from wild animals like crocodiles, snakes, elephants and others were also common to our area."*
- One villager had this to say to a team of surveyors **…** *"here we have lost several people due to crocodile attacks, while others have lost their limbs while crossing or washing in the river. One villager had a lucky escape when a crocodile snatched a shirt from his hands while washing…"*
- In Salale Ward, a female school teacher stated that *"in 2002, four school children were attacked by crocodiles on their way back to home.*
- *"In Chumbi Ward during 1998/1999 seven people had been attacked by crocodiles due to poor crossing. To day, footbridges have been constructed at Mwembwe Kete and Msumuni Kanga."* Said young male respondent during the focused group discussion.
- In addition, an adult male respondent informed the researchers that, 10 pupils died leaving several injuries in Chumbi. Prior to the project between 1994 and 1998, 3 people had died of crocodiles in Kiongoroni while crossing rivers and water ways in the Delta. The problems persist in the Delta adding to the need for security in the area.

Generally, VTTP intervention has been successful in saving many lives.

Impact of the Rehabilitation and Maintenance of Basic Services:

Prior to VTTP, water sources in Muheza district were virtually absent in some villages such as Matemboni where villagers used to walk 5km to Maramba Village to fetch water. However, with construction of shallow wells, villagers now enjoy fetching water closer to their homes. The district officials point out this as a notable achievement as it has improved hygiene of the local people and they have increased the frequency of washing and cleaning.

Women have for quite a long time carried the major part of the rural transport and travel burden. Consequently, the District VTT programmes have paid particular attention to gender concerns. For example, women in Iramba District can now access goods and services closer to their households due to improved conditions. Also in Iramba District, one well was rehabilitated and 1 new hand pump installed at Mwangeza Village. The construction of a well at Mwangeza now ensures availability of potable water to the local communities. This was reported to save time, which is now spent in other development activities. The household survey on access to basic services conducted in Chumbi Village provides a comparison of the present to the period before VTTP. Generally, the trend shows a positive impact as it shown in Table 13.6.

Table 13.6: The impact of VTTP initiative in Chumbi Village in Rufiji District

Type of activity	Impact (measured in median)		Remarks
	Situation before	Situation after	
Fetching water (effort)	3.5buckets/day	5 buckets/day	Significant change
Walking to farms (time)	2 hours	2.5 hours on foot and 0.5 with bicycle	Significant change i.e. less time walking to farms
Walking to market place (effort)	2.5 trips/month	3 trips/month	More trips now/month i.e. easier access

Women were reported to have been more relieved from the work burden compared to men. Table 13.7 indicates the significant savings in time and energy for undertaking economic and domestic chores.

Table 13.7: Impact of VTTP by average of saved time and distance in Muheza District

Activity	Unit	Impacts of the achievement (average time)	
		Before	With
Fetching water	Distance	4km	0.5km
Fetching water	Time	2 hours	30 minutes
Health center	Time	12 hours	6 hours
Market	Time	2 days	6 hours

Lessons learned from VTTP Activities

From the results of the study, a number of lessons have been learned from the VTTP.

- The use of a well moderated participatory approach created a sense of ownership and accountability within the community.
- Labor based technology has proven to be an effective approach in maintenance of community roads and has imparted technical skills particularly on bridge construction.
- Skills gained from the paid labor helped youths to acquire employment.
- Rehabilitated roads and the use of IMTs have reduced time and effort used in accessing rural travel and transport demands.
- Maintenance of water sources and milling machines has reduced the amount of time and effort women normally spent in accessing such needs and services.
- Mobilization of self-help activities at the community level requires a high degree of coordination and linkage between different development programs.
- There is a need to continue with capacity building of local communities to manage activities, to promote accountability and to ensure sustainability.
- There is a need to formalize institutional set-ups from the community to the national level.

- Some neighboring villages to VTTP pilot villages have replicated VTT activities. Two examples were found in Muheza that has now joined the program. This indicates the relevance of VTTP.
- There is still dependency on donor funding support on the side of the communities, which necessitates addressing behavioral change.
- Tailoring credit schemes to the communities will make IMT usage a reality. The reputable credit associations with effective credit facility can be contacted to venture in the VTTP with a particular bias in financing the purchase of IMTs.
- To realize deeper impact from VTTP, deliberate efforts must be taken to incorporate community sensitization on markets and marketing. Improvement of markets and marketing may catalyze community participation in improving and adopting technologies brought to them provided they focus on felt needs of local people.
- Civic education and PRA teams should include a sociologist to identify the opposing beliefs and strategies to professionally address them at the early stages of the project to encourage gender balancing and to promote voluntarism.
- Concerted efforts need to be made to ensure equity between women and men in VTT activities.
- Unplanned desirable and undesirable effects may be born out of travel and transport projects. Desirable impacts may include stimulation of economic and social opportuntities, while undesirable ones may include deforestation or other ecological degradation. As much as possible, undesirable effects should be avoided.
- Other potential social effects may include acculturation and transculturation of local communities through interaction. The room for spread of pandemic diseases such as HIV/AIDS may ensue. Hardest hit have in most cases been women, children and the aged who are less mobile. Community training, awareness raising campaigns and maintaining of valuable social values and norms as well as change in behavioral are instrumental in this regard.

Overall, VTTP has resulted in positive effects and should continue to be implemented. Owing to its success, deliberate plans for replication of VTTP to other areas in the country should be put in place. The plan for wider dissemination is in line with the on-going decentralization at the local government level. The end result of which will be appropriate policy and institutional strategy for wider application and coverage of VTP.

Conclusions

Based on lessons learned from the implementation of VTTP activities, it is obvious that poor access and isolation need to be looked at as a development problem in economic as well as social parameters. Most villagers are too poor to own and manage the IMTs. Villagers considered IMTs as added costs. For instance, a donkey requires shelter, feed, and veterinary services which may lead to compromising the needs of the families. Affordable and appropriate IMTs to communities should be developed and advocated for use.

The VTTP is a practical philosophy for the country's development. In this regard, the project has empowered village communities with the capacity to plan and own their development programs. Above all the participation of local communities from planning to implementation level as well as sustained resource mobilization system are essential in providing basic access and eventually improving the livelihood of rural dwellers.