

## Country Report 5: Ghana

### GRTI Activities in Ghana

The Ghanaian population is predominately rural with the rural population constituting about 60% of the total population. Under the Ghana Poverty Reduction Strategy Paper (GPRSP), rural development is determined as the bedrock of poverty reduction with a specific focus on agricultural development since it contributes about 70% of the occupations. Improved transportation is considered important to the reduction of poverty through its indirect impacts on economic growth or its direct impacts on personal welfare. In this respect, transport is identified as an integral component of agricultural development within the GPRSP towards ensuring efficient marketing of produce, access to inputs, reduction in storage losses, better pricing and the related increased production amongst others.

The study was informed by the realization that the drudgery of walking and head loading and the high cost of motorized transport has prompted the need for the promotion of an intermediary identified in the form of IMTs to bridge the gap between walking and motorized transport for rural transportation. However, despite the interventions made so far there are many obstacles towards the promotion of IMTs. This has partly been the result of inadequate attention underlying social dynamics affected by gender, age and social status. The widespread use of IMTs is also hampered by high purchase prices. This is typical of the situation in northern Ghana where the level of IMT ownership and usage is dominated by males due to the problem of the lack of affordability amongst the women folk. In recognition of these conditions, Ghana was funded to conduct a study on *How to Make IMTs Accessible to Northern Rural Women* in Phase II of GRTI. Due to unavoidable delays, the study was completed in Phase III.

### Background to the Study

Women are the principal producers and marketers of food and the key welfare providers for their families. Thus they bear about 80% of the transport work load with walking and headloading being the most common forms of transport. It is estimated that the daily transport effort of a typical adult female is equivalent to carrying a load of about 20-50kg over a distance of 1.5 to 5km with an accumulation of about 15-30 hours weekly. The sheer exhaustion of this means of transport is known to have unhealthy effects on the women.

The problem of insufficient transport means and services for women and their inability to pay for them has turned into a vicious circle of poverty since most women's social and economic responsibilities involve travel. The total time and effort spent on travel is a major constraint on women's access to resources and services and limits their opportunities for improving their economic conditions.

*Objectives of the Study:* The main objective of the study was to explore the means of making IMTs accessible to northern rural women on a large scale. The study included an

analysis of the social, economic/financial, technical and environmental factors impacting on the use of IMT's. The specific objectives included:

- ❑ Examining women's perceptions and understanding of mobility in relation to their socio economic status;
- ❑ Identifying the specific limitations to women in accessing IMTs;
- ❑ Reviewing systems that have been adopted for promoting the use of IMTs; and
- ❑ Exploring alternative options in the context of technical suitability and affordability as basis for developing a realistic and sustainable means for promoting the use of IMTs on a larger scale by northern rural women.

### **Methodology for the Study**

*Area of Study:* The study took place in Northern Ghana which includes the Guinea Savanna regions of the Northern, Upper-West and Upper-East regions. Geographically, Northern Ghana is an area that has been set apart from the rest of the country by climate, vegetation, ethnography, language, social, political and historical experience. The total land area for all the three regions is 97,539.9 sq. km. The Northern Region alone occupies about 70,250.1 sq km which is about a third of the total land area in the country. Most of the land area in all three regions is flat with gentle slopes ranging from 1% to 5% with a few uplands towards the Upper East portion with slopes more than 10%.

The area is characterized by relatively high temperatures of 24°C and 38°C since its northernmost point lies not more than 11.5° from the equator. The hottest months are generally March and April, with August being the coolest. The average annual rainfall is less than 1100mm per annum. The area has a long dry season between May and November resulting in scarcity of water with relatively long distances over which water and firewood must be collected and low agricultural production.

The total population of the three regions is 3,300,556 representing 17.5% of the national population at an estimated average of 1.8 growth rate per annum with the Northern and the Upper East Regions having the highest and lowest growth rates respectively in the whole country. The population of the study area is scattered among several small localities with an average of 54 persons per square km which is below the national average of 78 persons per sq. km. The Northern Region is the most sparsely populated region in the country with a density of 25.7 persons per sq. km

*Methods Used in the Study:* The findings of the study were based upon both secondary and primary data. The secondary data included existing research findings, published reports and documents as well as official records. For the collection of primary data, the study combined the use of quantitative and qualitative methods. A household survey was carried out that included 216 households. For the qualitative information, Focus Group Discussions (FGDs), In-depth Interviews (IDIs), direct observation, social mapping and case studies were conducted. Data were generally aggregated by household, rather than being gender disaggregated.

*Sampling Procedure for the study:* The study areas were selected on proportional based on the number of political districts in a region. It covered nine district assemblies selected from a total of twenty-three district assemblies in all the three regions representing a sample size of about 40% and comprised of four out of the thirteen districts assemblies in the Northern Region, three out of six in the Upper East Region and two out of four in the Upper West Region. A total of four villages were selected from a sample of 18 based on their location along road corridors within the selected districts comprised of two roads in good or fair condition and two in poor condition as indicated in Table 5.1. In all a total of 216 households were selected at random from 18 road corridors within 9 political districts for the household interviews for representative information on the socio economic profile of the three northern regions.

**Table 5.1: Selected Districts and Villages by Road Conditions in Ghana**

REGION	DISTRICT	VILLAGE	
		Good/Fair Road Condition	Poor Road Condition
<i>Northern</i>	Tamale Municipality	Yong Gbalahi	Nwozie Dagborshie
	Savelugu-Nanton	Bihanayilli Yilikpani	Langa Moglaa
	Tolon-Kumbungu	Lashiegu Nwodua	Asiyilli Wantongu
	Gushiegu-Karaga	Karaga Kpatinga	Sandua Nabule
<i>Upper East</i>	Bolgatanga	Kalbeo Shia	Tongo Sheaga
	Bongo	Kongo Yorogo	Sumbulugu Mayoro
	Kassena-Nankana	Kubia Anateem	Kologo Sirigu
<i>Upper West</i>	Wa	Busa Gbare	Wechiau Tankosa
	Nadowli	Ombo Tabease Kaleo	Issa Tangasia

## Major Findings of the Study

### *Findings from the Review of Secondary Data:*

One of the significant lessons from the literature review is that a comprehensive background work has been done on aspects of IMTs in Ghana. The aspects that have received attention are the need and importance for IMTs, vehicle types and utilization, IMT supply manufacturing and repair, production capacity and potentials and marketing and distribution.

A common factor to all the efforts made so far is the issue of lack of affordability attributed to low-income levels / low economic status of rural women and sophisticated technical specifications, which determine the high cost of the IMT. This therefore

provides the setting for defining the approach to the promotion of the use of IMTs which is the aim of this study. The collection of primary data, therefore, did not dwell extensively on factors already addressed in literature but rather provided an overview of these issues as an input for exploring the issue of affordability. This was with the view to defining mechanisms for affordable IMT acquisition to promote its extended use among Northern rural women in Ghana.

### ***Findings from the Primary Data***

#### *Personal and Household Characteristics*

The proportion of adult literacy is estimated at 45% per males and 25% per females. School attendance rate by boys is 60% and 40% for girls respectively. This indicates a very low literacy rate among females, which is attributed to early girl child marriages and a high preference for boys' education to girls when limited resources are available.

While there is a significant proportion of Christians in Northern Ghana, the area is predominantly Muslim as shown in Figure 5.1. There is also a significant proportion of traditional worshippers in the area. This is important as religious beliefs are usually related to gender relationships.

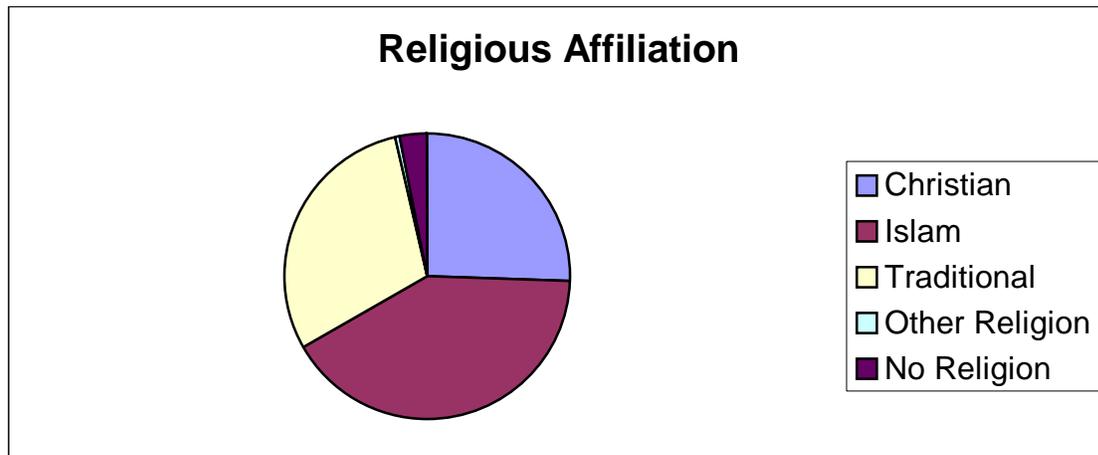


Figure 5.1: Distribution of Population by Religion in Northern Ghana

Generally the area is characterised by medium to large household sizes attributed to the traditional extended family system and the predominance of polygamous marriages. The average household size is about 7 with the percentage of female headed households being below 10% and made up of mostly those households with smaller sizes.

#### *Dependence upon Agricultural Activities for Livelihoods*

Agriculture is the most dominant activity engaging the working population. About 76% of the male population and 70% of the female population engage in agriculture. Trading

activities are mostly dominated by women while more men are engaged in formal employment than women. Table 5.2 and Figure 5.2 provide the findings on the occupational distribution of respondents in Northern Ghana.

#### OCCUPATIONAL DISTRIBUTION

Occupation	Population
Professional & Technical	28,370
Admin and Managerial	793
Clerical & Related Workers	5,888
Sales Workers	28,542
Service Workers	17,613
Agric/Forestry	314,998
Production and related Workers	35,322
Others	17,756

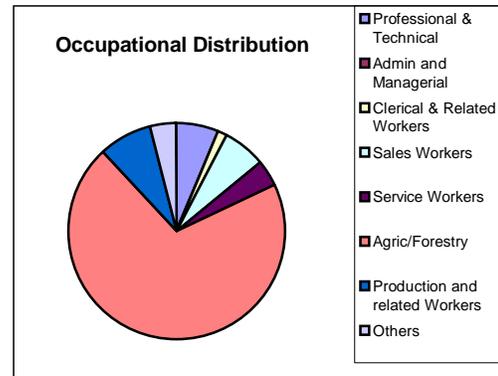


Figure 5.2 Occupation of Rural Dwellers in Northern Ghana

Table 5.2: Population by Occupation

#### *Gender Division of Responsibilities*

Numerous women interviewed reported being engaged in other income generating activities in addition to agriculture including the collection of firewood, trading in small items, food processing, charcoal burning, brewing of pito, handicraft such as baskets and leather works. At the household level, women also have clearly defined responsibilities. Women in Northern Ghana have the responsibility of providing soup ingredients for the preparation of family meals while men provide the grains including millet and maize. The women also shoulder other responsibilities such as school fees, medical expenses, clothing for the children and other household necessities such as soap from their meager earnings. This compels most mothers to encourage their daughters to migrate to the southern part of the country to work as potters to reduce the burden of fending for their upkeep.

#### *Gender and Rural Transport*

Travel in the area is generally characterised by walking with some level of IMT use and a very limited travel by motorized means mostly for long distance journeys. The most common mode of travel is walking, while about 14% of the respondents use IMTs and 8% use motorized transport. There is limited economic travel and passenger and freight travel are normally combined. The volume of freight ranges between 20-50kg per day over an average distance of about 10km for a return journey. Consequently, it will require an average of 5 days to carry the produce of a hectare of millet, which could be carted by any of the identified IMTs in less than a day.

The study found clear differences in the mode of transport by gender in Northern Ghana as shown in Table 5.3. Men are more likely to use motorized vehicles or IMTs, while women are more likely to walk and carry their loads.

**Table 5.3: Mode of Travel by Sex**

Mode	Male (%)	Female (%)
Motorized	10	3.5
Bicycles	35	5.2
Donkeys	10	4.0
Walking	45	83
	100	100

About 80% of women's transport activities is by walking and head loading and a considerably amount of productive time is used for traveling. Table 5.4 provides further findings on the purpose of travel related to the mode and frequency of travel.

**Table 5.4: Purpose of Travel by Rural Women in Northern Ghana**

ACTIVITY	DISTANCE (%)			MODE (%)			FREQUENCY		
	1-5km	5-10km	>10km	Walking	IMT	Motorized	Daily	Wkly (Periodic MKT.)	Mthly
Market	50	37	13	76	18	16	1	2	
Health	10	27	63	78	10	12	(As	and	When)
Water	57	33	0	96	6	-	3		
Firewood	65	35	0	75	23	2		3	
Grinding Mill	91	9	0	80					
Social Activities	55	40	5	65	24	11			2

Women are mostly responsible for transporting water and firewood as well as agricultural produce to the homestead, village market or roadside. About 60% of the activities are located within a 5km distance and below whilst 30% is within a distance of about 5 – 10km with about 10% beyond a distance of 10km.

There are no cultural barriers to the use of IMTs by women as of now. However, men are acknowledged as household heads with sole prerogative for decision-making and control of property. In this regard, an IMT acquired by a woman is considered her husband's property. Women folk are not joint owners of their husband's assets since this is frowned upon by relatives. Thus the husband can deny the woman of assets jointly acquired. This is related to the fact that the study area is largely Muslim. Therefore, most women are interested in accumulating assets in terms of clothing and utensils rather than the

acquisition of IMTs. IMTs are considered more of a luxury item to the women. The use of bicycles is the common type of IMT in the area. It is identified with the social status of a male adult in the community.

### *Use and Local Production of IMTs in Ghana*

Ghana is an example of a country that is actively producing IMTs locally, rather than depending solely upon importation. While bicycles are commonly owned and usually of an imported type, the main categories of other IMTs identified during the study in the northern regions of the country including bicycle trailers, push carts, some types of wheel barrows and donkey carts are locally produced. Most of these products are based on adapted external technical designs while the two and four wheeled trucks are based upon completely indigenous designs. The Ghana Regional Appropriate Technology Industries Service (GRATIS) designs prototype samples for actual production by the Intermediate Technology Transfer Unit (ITTU) which is represented in all three regional capitals in the study area.

Currently, there are a number of medium to small scale enterprises undertaking a wide range of work from the assembling of bicycles and even simple, motorized vehicles such as the power tiller down to the manufacture of accessories including load carrying racks and platforms for bicycles, push carts and wheelbarrows. Most of the locally made products are built from scrap metal, old pick-up axles, mass steel and galvanized iron. Others such as donkey carts and the cycle trailers are built with wooden super structures and base structure while the locally developed wheeled trucks are constructed purely with wood. The latter are cheaper and easily constructed, but the structure has limited durability.

The sustenance of IMT promotion depends upon supporting repair services. All the manufacturers and suppliers interviewed indicated that there is adequate production capacity and maintenance of IMTs as well as their supply in the country. There is generally easy access to spare parts for all different types of IMTs in the country with a wide range of repair services in the study area. In the northern regions of Ghana, there are numerous local repair shops, stocking items such as bearings, spanners, inner tubes and fan belts that are needed for servicing and repair of IMTs. In some cases, locally designed components are available. These spare parts are often more accessible, cheaper and more durable. Repair shops are found in nearly every community in the locality. None of the surveyed respondents complained about the inaccessibility of maintenance services. The major concern common to all the manufacturers and suppliers, in both public and private enterprises, was the problem of low capacity utilization. There is yet to be a critical mass of IMT users.

The animals needed for use with the carts are also locally available. Donkeys are bred at institutions such as the Animal Research Station at the University of Ghana, Legon and

the Nyankplala Agricultural Research Institute, Tamale as well as by a host of individual farmers.

### **Recommendations from the Findings**

The following are the recommendations that were formulated as a result of the findings of the study.

*Need for gender sensitization:* The local production of IMTs with greater availability and lower cost is very significant for the rural population. At the same time, women's access to these IMTs may be limited by socio cultural restrictions. Without gender sensitization and concerted efforts to target rural women, IMTs may still be out of the reach of females. It is in the interest of local producers and marketers to encourage the social changes needed for women to make use of the opportunities to reduce their transport burden. The designs of IMTs might similarly have to be modified for the female users. The desired critical mass of users could be reached if the female population is adequately represented. This will require gender training in relevant technical and social areas.

One contributing factor to the successful use of IMTs in the area is the training provided by the Village Infrastructure Program (VIP) and NGOs including the Africa 2000 Network. The VIP training program includes routine maintenance training for bicycles, donkey and carts, and power tillers in each of the regional capitals for all categories of people. In an attempt to increase the use of IMTs by women, Africa 2000 Network also trains women in bicycle riding.

*Need for further research:* The cost of the product is determined largely by the design and type of materials used. Strong indications were expressed about the need for further research into current design technology to reduce cost without compromising on quality. There is therefore a need for some interface between the indigenous units and the western adopted designs for efficiency and cost reduction. There were indications that further research into engineering and technical design could reduce production cost and consequently reduce the unit price of the IMTs to stimulate increased patronage.

*Need for Appropriate Transport Policy:* The study conducted a review of ways and means of acquiring IMTs from projects. There were essentially two main ways of acquiring IMTs. The first means is through targeted efforts, which is a direct financial assistance to a community or an individual or group for the acquisition of IMTs. This may be solely dedicated to the promotion of IMT usage or IMTs being a complementary component of a larger development project. The second way is through non-targeted efforts where IMTs have been acquired out of people's own need and initiatives – perhaps by individual securing or through charitable offers. In general, it was found that there is no general policy framework on IMT usage in the country. All the activities on the promotion of IMTs are being implemented to suit specific project objectives with no focused strategy for ensuring its expanded use.

*Need for Easier Acquisition of IMTs for women:* From examples of different types of acquisition, the following are categorized as possible modes for women to acquire IMTs:

- group-based long-term credit,
- community based short-term credit,
- group based short term credit supported by economic activity,
- private short-term credit by individuals,
- subsidized offers,
- non credit one-off procurement,
- hired services, and
- charitable offers.

Provision and access to credit by rural women, with limited resources for the purchase of IMTs is the most feasible and common means of IMT acquisition. The types of credit vary in terms of effective interest rates ranging from 10 – 20% and experience so far indicates a limited rate of default. The responses from most of the women indicated that credit facilities tied to support for income generation are much preferred since their major concern is to acquire capital for economic gains that will also enable them to secure IMTs or access to its use to complement their income generating activities for increased returns.

The use of some initial seed fund to initiate the process for obtaining credit is necessary since income levels are so low and most of the women cannot afford to buy from their own resources. However, previous experience indicates that the use of subsidies has the potential to create distortions since it normally interferes with the functioning of markets and may be counter-productive.

*Group vs. Individual Ownership:* Group ownership is more likely to facilitate shorter term payment duration than individual ownership since the cost burden is spread amongst the group members as compared to individual ownership where each person has to generate resources to single-handedly purchase a unit. However, group membership requires a very efficient schedule of utilization and maintenance responsibilities to avoid conflicts. Most of the women preferred individual ownership for simple units such as bicycles and donkey carts and group ownership for others such as power tillers. However, until the economic power of the women increases appreciably, group ownership of even the simple units is the most practicable option.

## **Conclusion**

The women in the rural areas of northern Ghana have extremely limited mobility beyond their immediate settlement due to geographical isolation and the high cost of motorized transport. With low population densities and dispersed settlements, there is a real need for IMTs especially by women who bear most of the transport responsibilities in the areas.

The women do not have sufficient resources to meet basic human needs and are unable to acquire IMTs from their own resources. There is therefore a need to enhance and accelerate the usage of IMTs to facilitate the poverty reduction program as defined in the GPRSP. In the same way as programs with financial budgets have been defined towards the implementation of the defined activities, the necessary resources and strategies should

also be provided for improved IMT transport services for rural women especially those with little or no access to motorized transport as in the case of the northern rural women.

