



Impacts and implications of gender mainstreaming in rural transport in Tanzania

Final Report



HelpAge International

AfCAP Project Reference Number. TAN2044H

May 2017



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Cover Photo: A woman prepares food for sell by the roadside, Kibaha

(Photo: Sammy Tiriongo)

Quality assurance and review table							
Version	Author(s)	Reviewer(s)	Date				
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2	Gina Porter, Godfrey Mulongo and						
	Amleset Tewodros						
3	Gina Porter, Godfrey Mulongo and	Paul Starkey	14 April 2017				
	Amleset Tewodros						
4	Gina Porter, Godfrey Mulongo and	Paul Starkey	22 May 2017				
	Amleset Tewodros						
		Nkululeko Leta	20 June 2017				

AfCAP Database Details: Impacts and implications of gender mainstreaming in rural transport in Tanzania							
Reference No:	TAN2044H	Location	Tanzania				
Source of Proposal	PMU: Open call	Procurement Method	Open Procurement Method				
Theme	Cross-cutting issues	Sub-Theme	Gender equality, equity and social inclusion				
Lead Implementation Organisation	HelpAge International	Partner Organisation	N/A				
Total Approved Budget	£49,822.40	Total Used Budget	£37,366.80				
Start Date	1 st August 2016	End Date	31 st July 2017				
Report Due Date	31st March 2017	Date Received	24 th June 2017				

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Abstract

This report presents preliminary findings of a field study led by HelpAge International which assessed whether gender mainstreaming in rural transport programmes in Tanzania has had a transformative effect on women facing multiple forms of discrimination. The research sought views of communities, local authorities, national policy makers and development partners. An assessment of transformative change among women living in rural communities suggests a largely negative conclusion. Despite strong attention to gender in Rural Travel and Transport Programmes (RTTP) and Local Government Transport Programme (LGTP), much prejudice prevails at local level around women's potential to participate in the design and implementation of infrastructural activities. Men and women alike appear to have accepted these perspectives, to their personal detriment. However, once roads are constructed there are more mobility opportunities for women in accessing health care, income and improved travel safety (including for school-going girls). With better infrastructure, transport services have improved, leading to expansion in travel options for women who have more time to devote to family and to pursue multiple projects. People living with HIV and with disabilities reported their increased access to care services. However, for the majority of women with intersecting inequalities, benefits of transformative changes were not evident.

Key words

Gender mainstreaming, disability, mobility, transformative, intersecting inequalities, community access

AFRICA COMMUNITY ACCESS PARTNERSHIP (AfCAP) Safe and sustainable transport for rural communities

AfCAP is a research programme, funded by UK Aid, with the aim of promoting safe and sustainable transport for rural communities in Africa. The AfCAP partnership supports knowledge sharing between participating countries in order to enhance the uptake of low cost, proven solutions for rural access that maximise the use of local resources. The programme follows on from the AFCAP1 programme that ran from 2008 to 2014. AfCAP is brought together with the Asia Community Access Partnership (AsCAP) under the Research for Community Access Partnership (ReCAP), managed by Cardno Emerging Markets (UK) Ltd.

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Acknowledgements

HelpAge International wishes to acknowledge the support of the Kilolo and Kibaha District Executive Directors (DEDs), the Assistant District Planning Officer of Kibaha and the Community Development Officer of Kilolo District, for allowing the study to take place in their respective districts and for their support in the field data collection. We also thank the women and men who gave their time to the study by sharing their life stories and experiences which enriched the findings of the study.

Acronyms, Units and Currencies

\$ United States Dollar (US\$ 1.00 ≈ TSH 2,235)
£ British Pound (GBP £1.00 ≈ TSH 2,808.50)
AFCAP Africa Community Access Partnership

AfDB African Development Bank

ARV Antiretroviral

DED District Executive Director

DFID Department for International Development

FGD Focus Group Discussion

HIV/AIDS Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome

ICT Information Communications Technology

IMT Intermediate Means of Transport

KII Key Informant Interview

Km Kilometre

LGTP Local Government Transport Programme

M-PESA Mobile phone-based money transfer, financing, and micro-financing service

PO-RALG President's Office: Regional Administration and Local Government

PWD Persons with Disabilities
RTI Road Travel Injury

RTTP Rural Travel and Transport Programme

SME Small and Medium Enterprises

SMS Short Message Service

STDs Sexually Transmitted Diseases
TANROADS Tanzania National Roads Authority

TASAF Tanzania Social Action Fund

TSH Tanzanian shillings

UK United Kingdom (of Great Britain and Northern Ireland)

UKAid United Kingdom Aid (Department for International Development, UK)

URT United Republic of Tanzania

VTTP Village Travel and Transport Programme

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1. Executive Summary

Executive Summary

This preliminary field study report provides evidence on the extent to which women facing multiple vulnerabilities have benefited from transformative changes due to the mainstreaming of gender in transport policies. Focusing on communities living around recently completed projects in Kibaha and Kilolo districts, including Focus Group Discussions (FGDs) with 32 groups, Key Informant Interviews (KII) with district and central government authorities and donors and documentation of the daily life experiences of women using photo stories, the study gathered information to ascertain whether or not transformative changes took place among women with multiple vulnerabilities. Recognising women's active role in rural life, Tanzania has adopted a National Transport Policy to mainstream gender in rural transport. However, the extent to which the policy has resulted in transformative benefits, in particular for women experiencing intersectional vulnerabilities, remains largely unknown. The research sought to ascertain this by investigating five key questions as follows:

Women's involvement in road construction and benefits from new roads: Despite strong attention to gender in the RTTP and LGTP, and a positive response from women involved, women lack voice and participation in initial consultations due to their own lack of confidence and society's prejudice against women's public life. Their participation through direct employment in road construction is also limited. Only in Kilolo district was a case of equal gender balance in the Village Travel and Transport Programme (VTTP) project cited. When it comes to benefits among marginalised women, only the Tanzania Social Action Fund (TASAF) road projects seem to have achieved that. Prevailing negative perceptions of women's ability to participate in construction work, given their family duties, are telling. When it comes to benefits from new or improved roads, there is stronger evidence of benefits for women through improved access to health care, incomes from marketing of farm produce, particularly perishable products, and other goods and improved travel safety (resulting in girls' improved education). With improved infrastructure and some associated expansion of transport services, women have more disposable time to devote to family and pursue multiple projects. Better infrastructure has resulted in more competitive fares from minibuses (known locally as 'vans') and motorcycle taxis in the context of increased competition.

Having taken into account all three elements potentially affecting women's benefits from gender mainstreaming in transport programmes, an assessment of transformative change among women living in rural communities suggests a largely negative conclusion.

Benefits of women facing intersecting inequalities: There is even less evidence for women facing intersecting inequalities than for 'ordinary' women of any potential benefit from the gender mainstreaming programmes through employment in roadwork, with the exception of those targeted by TASAF. Some groups – notably people living with HIV and AIDS or with a severe disability – face particular prejudice. This is likely to be especially the case now that road contracts are tendered out by the district administrations to contractors whose goal is profit not social assistance. Once the road is built or improved, those facing multiple vulnerabilities may benefit as much as other women in those communities, due to improved access and the reduced time they and other family members spend reaching markets, health and education services. Those who are severely disabled and unable to travel alluded to the improved access to, for instance, HIV and AIDS testing and treatment services, while wheelchair users may benefit from smoother roads which improve their mobility. However, as with 'ordinary' women, benefits depend on the extent to which male family members allow them to travel, and also on other specific personal and family circumstances.

As the Director of President's Office Regional Authority for Local Government (PO-RALG) indicated, the lack of disaggregated data regarding impact of their programmes by age (and probably also, she thought, regarding disability) and with no capacity building such as training initiatives for women

facing intersecting inequalities, the real magnitude of benefits to vulnerable populations remains unknown.

Actions promoting transformative changes for women with multidimensional inequalities:

Suggestions on actions with potential to bring transformative changes to those experiencing multidimensional inequalities were provided by 'ordinary' male and female community respondents, by older people and people with disabilities, by local authorities and by respondents from central government as described below:

Suggestions ranged from increased involvement in consultations with women specifically commending the TASAF projects, which have demonstrated inclusion in various community projects to ensuring addressing the poor quality of roads in the wet season and the need for more tarmacking, reducing accidents caused by motorcycle taxis, tackling the high costs of travel in remoter locations and the need for improved transport services. Furthermore, community respondents reiterated the need to include men and women with disabilities and older men by offering transport to and from the site, offering lighter work closer to home, and providing flexible working arrangements for women to help balance with their family responsibilities. The majority suggested that authorities should make it 'mandatory' for women and other vulnerable groups to be involved in road work. District authorities, on the other hand, recommended the need to sensitise contractors on the importance of including women and other disadvantaged groups, regulating through formal guidelines and a budget to enforce the regulations. At the national level, policy makers pointed to the importance of ensuring that gender mainstreaming is fully incorporated at the very start of projects, calling for attention to ensuring these groups are adequately considered in policy and associated guidelines.

Constraints and enablers for transformative changes to disadvantaged women: Key constraints cited by many respondents were society's prejudice about the potential negative consequences of women's mobility associated with promiscuity, women's perceived inability to perform physical activities, and absence of professional women who could facilitate the implementation of gender mainstreaming, as well as the lack of regulation to enforce mainstreaming, monitor and follow-up the implementation of the policy.

A wide range of enabling factors was suggested by respondents. These included: training more women engineers and appointing women in decision-making positions in the road/transport sector to champion gender mainstreaming; recognising the voices of women facing multiple levels of exclusion; sensitisation of contractors, community and local leaders; securing budgets to support women facing multiple levels of exclusion; increasing the accountability of all actors to policies that promote gender mainstreaming; setting up grievance/feedback mechanisms at road project sites; offering child care and disability, gender and age adjusted latrines at project sites; flexible working times for women; promoting equal opportunities in recruitment, collection and reporting of age, gender and disability disaggregated project performance data and including specific data on women facing multiple levels of exclusion.

Disparities among disadvantaged women in access, use and benefit of digital technology: The evidence suggests that many women in this group appear to use and benefit more from mobile phones than the general population. The only exception is likely to be where the husbands of such women do not allow them access to a mobile phone. Mobile phones for this particular group create a particularly important connectivity both in terms of organising transport and as a substitute for journeys. While this group mostly has less access to financial resources, the massive improvement the phone offers for organising their lives encourages many women with intersecting inequalities to allocate a portion of their sparse resources to obtaining and maintaining their phone.

2. Background and Introduction

One of the recommendations made by the 1995 Beijing declaration was the need to focus on women's practical needs by reducing the burden placed on them by poverty and their multiple roles in society. For the majority of rural women who play vital roles in the survival of their households, access to farm areas and market is a key life line. Women and their children head load vast quantities of goods in Africa: across most sub-Saharan African societies, load-carrying for domestic purposes is regarded as a low status activity and assigned to females (Porter, Hampshire, Dunn, Hall, Levesley, Burton, Robson, Abane, Blell and Panther 2013). Studies conducted by HelpAge International in Kibaha (2012) and Kilolo (2015) established older women experience disproportionate disadvantages due to load carrying with negative consequences to their health (Porter, Tewodros, Bifandimu, Heslop and Gorman 2013). Widespread use of motorcycles and mobile phones is improving mobility and communication. However, ownership, access and use varied substantially between older men and women.

Gender issues associated with the mobility and transport of rural populations are well known but are rarely prioritised in transport planning and investment. When gender issues are discussed they also tend to focus on women of reproductive and productive age and fail to recognise that women experience gender discrimination at all stages of their lives. Gender mainstreaming should have a transformative impact to women of all ages and those facing intersecting inequalities due to age, gender, disability and widowhood who also face multiple barriers to realising their rights, and consequently experience disproportionately higher rates of poverty. The 2003, National Transport Policy Tanzania adopted mainstreamed gender in rural transport recognising women's active role in rural life, as 75% of their time is often consumed by walking long distances to and from farm and other production centres. Due to poor rural transport infrastructure, their farm production and ability to market is often constrained. The policy also recognised the potential role of non-motorised means of transport in improving rural infrastructure. As a result, the VTTP was introduced in 1994 in seven districts across Tanzania (Policy Forum, 2009), under the Prime Minister's Office Regional Administration and Local Government, (PM-RALG, subsequently renamed the PO-RALG). This enabled valuable micro-level assessments, but comprehensive analysis of the wider social and economic impact of this intervention is not available.

Responding to the research call, by ReCAP, HelpAge conducted this study with an **overall aim** of assessing whether gender mainstreaming in rural transport has had a transformative effect on women facing multiple forms of discrimination and exclusion. Specifically, the research was designed to respond to the following questions:

- a) Did gender mainstreaming in rural transport programmes in Tanzania result in transformative changes for women?
- b) Are women facing intersecting inequalities benefiting from the gender mainstreaming programmes?
- c) What are the transformative changes women with multidimensional inequalities specifically older women, women with disabilities and widows would like to see through gender mainstreaming programmes?
- d) What are some of the constraints and factors facilitating transformative changes for women facing multiple levels of exclusion in rural transport programmes such as VTTP and the LGTP?
- e) What disparities (if any) do women with intersecting inequalities have in access, use and benefit from the mobile phone/information communications technology (ICT) that is bridging the rural transport and communication gap?

The field research was focussed on Kibaha and Kilolo districts which were the sites for two earlier (complementary) research projects led by HelpAge International: *Learning with older people about their transport and mobility problems in rural Tanzania: focus on improving access to health services and livelihoods* conducted in 2012 in Kibaha (HelpAge, 2012), and in 2015 in Kilolo (HelpAge, 2015). Kibaha District is located 40 kilometres (km) west of Dar es Salaam, along the Dar es Salaam-Morogoro highway. Kilolo district is located at the north-eastern end of Iringa Region, about 37 km from the regional headquarters in Iringa Town. Additional field research involved interviews with national-level key informants in Dar es Salaam.

The research was conducted using methodologies that promote participation and inclusion. Focus group discussions took place with different groups of men and women within the communities while key informant interviews were held with district government authority representatives in particular those in charge of infrastructure development. Additional national level key informant interviews were held with policy makers and regulators, development partners and donors. The details of these are available in sections 3.1 and 3.2 below.

3. Approach and Methodology

3.1. Sampling Research Sites

Kibaha and Kilolo Districts were purposively selected to build on the transport and mobility studies previously conducted. The two districts fit well with our intention to sample two contrasting rural districts, Kilolo District which is remote rural and Kibaha District which is located closer to Dar es Salaam and (albeit principally rural in character) has strong connections to urban and peri-urban populations in the capital city and its vicinity.

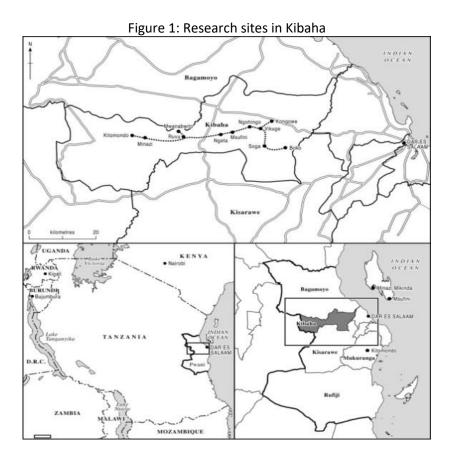
Sampling of project sites at the district level was based on the following inclusion criteria: completed project with sufficient length; on-going construction projects with sufficient length and; projects currently under probation with sufficient length. Moreover, each selected project should be serving an important socio-economic function and linking important centres/populations/villages. With these selection criteria in mind, the following sites/areas were included:

a) Kibaha District

Based on the project inclusion criteria, the following were the focal points for the research in Kibaha District are:

- i. Soga: Around Soga, Boko Mnemela, Msufini and Kongowe
- ii. **Mlandizi Center**: Around Kilangalanga, Madimla and Makazi Mapya and Ngeta (served the ongoing projects)
- iii. **Kwala**: Around the area including Msua bridge, Mperamumbi and Dutumi (served ongoing and projects on probation)

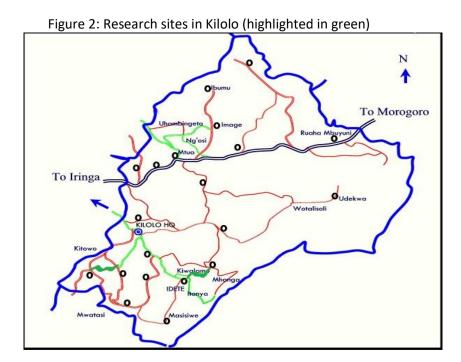
The research sites in Kibaha are shown in Figure 1



b) Kilolo District

- i. Idete: Around idete, Itonya, Kiwalamo and Mhanga
- ii. Kilolo Center: Kilolo Center, Kitowo/Mwatasi and Msonza Kimala (served the ongoing and recently completed projects)
- iii. Ilula: Served ongoing and projects on probation around the area.

The research corridor/sites in Kilolo are shown in Figure 2.



3.2. Methodology and Approach

This was a purely qualitative study adopting the following techniques:

- a) A rapid gender review of the key documents/policies/plans from the studied transport projects to assess how well gender was mainstreamed in the projects and to identify salient information that could guide our study particularly in the development of the study instruments was conducted;
- b) Adaptation of the Most Significant Change (MSG) methodology collected through storytelling exercises, life journeys/histories or testimonials in a format of participatory photo story (see Annexes 1 and 2);
- c) Key informant interviews at the national and district levels (the respondents are shown in Table 1);
- d) Focus group discussions with separate groups of women and men drawn from the research sites indicated in Figures 1 and 2. Participants in each group were purposively selected so that women and men facing various forms of discrimination and exclusion (otherwise referred to as 'special' group in this report) such as older people, people with disabilities, orphans, and widows/widowers, single women heading households were included. To enrich the data, 'ordinary' community members were also sampled to participate in the study through these focus group discussions. The researchers worked closely with the village elders to identify participants that fit this criterion.

The interviews and focus group discussions followed a check-list approach (for which examples are available in the training report, October 2016). In this approach, the aim is to cover a series of key questions, but not necessarily in a fixed order, and with the flexibility to follow new lines of enquiry, should issues emerge that appeared strongly relevant to the investigation.

Moreover, key to the research methodology in this project is its adoption of the co-investigation approach established in HelpAge's first Kibaha study, whereby older men and women (60+) from the community were recruited and trained as active researchers to work with the research team (Porter, Tewodros, Bifandimu, Gorman, Heslop, Sibale, Awadh, Kiswaga 2015; Porter 2016). Peer research of this type is rare, but it is vital for ensuring a full understanding of the perceptions and needs of commonly very marginalised people. A full report of the training programme (HelpAge, 2016) will be made available on the Research for Community Access Partnership (ReCAP) website. Five older

people were trained, together with younger research assistants. Unsuccessful efforts were also made to recruit a number of peer researchers living with disability.

Following the initial training of peer researchers and research assistants, a series of focus group discussions and key informant interviews were conducted in each of the two study districts, while additional key informant interviews with national level actors took place in Dar es Salaam (Table 1).

Table 1: Research Activities

	Kibaha District		Kilolo	Kilolo District	
Research activity	# of activities	Total # of participants	# of activities	Total # of participants	
Focus Group Discussion (FGD) with Special women	7	56	7	56	
FGD with Special men	3	24	3	27	
FGD with ordinary community women	3	26	3	24	
FGD with ordinary community men	3	25	3	24	
KII - District Contractor	2	2	2	3	
KII - District Engineer	1	1	1	1	
KII – Asst. District Planning Officer	1	1	0	0	
KII – District Community Development Officer	1	1	1	1	
KII – Community Development Officer	0	0	1	1	
KII – Ward Executive Officer	3	3	3	3	
KII – Village Leaders (VEO and Chairmen)	5	7	6	8	
KII – Village opinion leaders i.e.	2	2	2	2	
business women, women group leaders					
Total	30	147	32	150	

A total of 297 individuals participated in the study at the district level (147 in Kibaha and 150 in Kilolo) through 32 focus group discussions (16 apiece) and 30 key informant interviews (14 and 16 in Kibaha and Kilolo respectively. An additional five key informant interviews with national level actors were conducted: three at PO-RALG, one at the Directorate of Gender, Ministry of Community Development, Gender Women, the Elderly and Children, and one at the Tanzania Gender Networking Programme. Three further interviews were conducted with development partners, i.e. the World-bank, the African Development Bank (AfDB) and the Department for International Development (DFID). The focus group and interview guides are found in 3-7.

4. Review of Literature

4.1 Review of Academic Papers

4.1.1 Gender Integration Challenges in Rural Transport in Africa

Gender integration challenges in rural transport in Africa remain enormous despite a now substantial body of evidence outlining the scale and nature of women's transport and mobility needs (e.g. Urasa 1990; Malmberg-Calvo 1994a and b; Fernando and Porter ed. 2002; Porter 2008, 2011, 2014; Turner, Ntho and Tanzarn 2014). There are four areas worthy of consideration and are further explored below:

a. Gender as a factor affecting access to mobility and transport services

- b. Gender as a factor in transport services operation
- c. Gender as a factor in access to employment in the transport infrastructure sector
- d. Gender as a factor affecting vulnerability to road injury and its impacts

a. Gender as a factor affecting access to mobility and transport services

Gender shapes mobility and access to transport services – who goes where, when, by what means. Women's prevailing triple roles in rural Africa (entailing productive, reproductive and community maintenance work) impact substantially on their travel opportunities and practices because they affect their time availability, financial resources and the nature of travel. Across the world, in diverse contexts, there are significant differences in the patterns of travel of women and men: they travel by different modes to different places at different times, for different purposes. For instance, *trip-chaining* (whereby a number of tasks may be undertaken during one journey from home, prior to return) is common among women. Men are usually better resourced financially and have fewer time/socio-cultural constraints on their travel – they are more likely to be able to make single-purpose trips because they have no need to trip-chain.

Women's transport exclusions are often a) *time-based* (because of their multiple roles - domestic + caring constraints) b) *space/fear-based* (internalised fear in potentially hostile spaces; issues of surveillance). Women's suppressed demand for access to work, education, health and recreation is evident not only across Africa but in all world regions, ages and social classes. Moreover, it is important to note that *structural inequality is a relational issue* – men's cooperation is essential if women are to achieve empowerment! This is especially important in the transport sector where male domination is widespread.

Infrastructure and transport services commonly present significant, interlinked constraint on movement. *Infrastructure deficiencies* include poor roads, especially in remote rural areas with limited alternatives (little rail). Moreover, new/improved roads do not necessarily have universal benefit. They can encourage off-road market decline and neglect/deterioration of off-road services (schools and health centres) (Porter 1995, 1997, 2002). Meanwhile, at the improved road, populations concentrate and increased road traffic speeds/volume may lead to more accidents, with particularly heavy impacts on (commonly female) carers (Kwamusi 2002). There are also community severance issues when a settlement is split in two by the road. Roads are also recognised route-ways for the transmission of sexually transmitted disease (STDs): the expansion of sex work on busy routes increases the exposure of sex workers and their clients to STDs, with significant impact on (usually female) carers (Mashiri 2004).

Low-cost, regular, reliable transport services are essential too, of course: roads are not enough (Anyanwu et al. 2009; Bryceson et al. 2008: Dawson and Barwell 1993; Ellis and Hine 1998). Transport service deficiencies are widespread across Africa: poor availability, low reliability, poor safety and high cost. Their improvement is particularly crucial on feeder roads, where there may be potential for promoting women's group/community low-cost transport schemes. In much of rural Africa young men are now operating motorcycle-taxi services due to the availability of cheap imported Chinese motorcycles and high demand for these services (Starkey 2011; Porter et al. 2013, Porter 2014, 2016). Despite current accident rates, these offer the only door-to-door service in many locations and are now proving a lifeline for both genders in some remoter areas. The only way to keep more conventional motorised public transport services in operation in remote areas is likely to be by subsidy, as demonstrated in a World Bank pilot study in Malawi (Raballand et al. 2011).

Transport service deficiencies often impact more on many women and girls due to diverse constraints on their mobility: a) time and income poverty (caring duties, work tasks, carrying work, lower incomes, less credit), b) a widespread (male) association of female mobility with vulnerability

and promiscuity; associated (female) fear of harassment on journeys, c) cultural and financial constraints on women operating transport equipment.

Transport and mobility constraints shape access to services (especially education and health) and livelihoods, with major implications for the inter-generational transfer of poverty (Porter 2011). Poor access of women and girls to road transport services has major implications for development trajectories: it also impacts on female education, health and livelihoods and subsequently on families and communities.

Female education: Hazards affecting the journey to and from school include environmental conditions, such as rapidly rising rivers in the wet season (where girls' lower swimming competency sometimes impedes travel) and fear of verbal abuse, men/boys propositioning, even rape; heavy or time-consuming pre-school tasks such as water carrying or housework may add to such difficulties, and are commonly required especially of girls. Heavy loads (whether carried by boys or girls) can have a major impact on concentration in class etc. Late arrival at school, whatever the cause, commonly results in punishment (caning, barred entry etc.): Ultimately, a combination of poor performance in class and punishments for being late often result in truancy and early school dropout (Porter 2011; Porter et al. 2010, 2011, 2017).

Girls' and women's health: There is now a substantial literature concerning the way distance to services and transport failures are implicated in maternal mortality rates, obstetric fistula (from obstructed labour), and reduced uptake of pre-natal and other health services (Babinard and Roberts 2006). There are also possible health implications of load-carrying e.g. deformation of the vertebral column etc. (Bryceson and Howe 1993; Porter et al., 2013). Maternal deaths/chronic health problems in mothers are also implicated in the development of chronic poverty and intergenerational poverty transfers (Porter 2011).

Implications for women's livelihoods and poverty transmission: Constraints on women's opportunities for unfettered travel inevitably affect their livelihood opportunities, especially in rural areas. Market trading is a particularly common source of income and entrée to off-farm opportunities for rural women and girls, but various constraints are common. Road improvements can sometimes exacerbate these difficulties, since they encourage a concentration of markets in roadside locations easily accessible for urban-based traders and consequent decline/death of offroad markets (as occurred in 1980s/90s northern Nigeria). Women residing off-road may no longer be able to travel the longer distance entailed in reaching the nearest market (Porter 2002, 2011). Meanwhile, late market arrival from off-road areas is also common due to transport delays/failures and can lead to loss of 'customers' (who have already purchased from other producers). This results in lower prices and sometimes even total failure to sell (with produce deterioration likely before the next market). Women are also especially disadvantaged in the context of their limited funds for transport fares/goods haulage and time poverty, including requirements to head-load produce of male householders to road/market. Mobility constraints coupled with poor/delayed market access means they have less money for school fees and health care, limited social networks, and limited potential for off-farm diversification (ibid). Thus the cycle of poverty intensifies.

Diversity of transport and mobility needs among women, girls and other vulnerable groups: It is important to always keep in mind the crucial fact that women do not represent one homogenous category. Not all women suffer transport constraints to the same degree (given significant variations by socio-economic status, health status, age, marital status, etc.). Moreover, other vulnerable groups may suffer mobility disadvantage (notably people with disabilities, older people and children) (Porter 2013). Overall, however, adult males are usually better resourced financially (enabling greater potential to purchase transport equipment – bicycles, motorcycles, cars, etc.) but also have

fewer time/socio-cultural constraints on their travel time than women (though this also contributes to the higher vulnerability of young men to road traffic accidents).

b. Gender as a factor in transport services operation

Transport services often offer an employment niche for the poorest, including women. For women this usually involves porterage; for men it may involve porterage, intermediary means of transport (IMT) operation or motorised transport (as minibus call boys etc.). There is potential for IMT expansion in a carbon-constrained world: this suggests the need to build a more women-friendly IMT culture (Starkey et al 2002). Additionally, the strong connections between male identity and motor-mobility that shape current patterns of transport need dismantling, while also promoting women in non-traditional occupations like driving.

Domestic load carrying is seen as a female activity in many African cultures: males over the age of c.15 years often only head-load for *domestic* purposes in emergencies (as in coastal Ghana, where girls of c. 15 years and over regularly carry 20-30 kg). When transport technology is introduced, it is common for boys/men to take over transport tasks, as in North West Province, South Africa, where much domestic water transport is now by boys operating donkey carts (Porter, 2013; Porter et al 2017).

In rural transport services operations of all types, women have always faced significant stigma (whether with reference to cycling or driving a motor vehicle). They are also constrained by inadequate resources to learn to cycle or drive while purchase of a private vehicle is usually far beyond their wildest dreams. Thus, in rural areas it is still rare to see women drivers, whether in charge of a private vehicle or a commercial vehicle.

Women are only slowly entering the road sector as commercial drivers, though in South Africa some firms now target women drivers (perceived as safer, more conscientious, and exhibiting less risky behaviour) (Naysmith and Rubincam 2012). Training and employment of women in the rail sector across Africa continues to meet resistance.

c. Gender as a factor in access to employment in the transport infrastructure sector Employment in the transport infrastructure construction sector could offer substantial opportunities for women as well as men but currently there is much discrimination against women whether as contractors or employees as discussed below:

Employment: Road construction and maintenance operations now regularly employ women: there is growing acceptance of quotas for women road workers. However, discrimination against women ranges from lower pay and lack of skills training and promotion opportunities to sexual harassment and gender-based violence. Labour-based projects are often focused principally on temporary employment generation for vulnerable groups but it is still difficult to ensure women benefit, as exemplified by the Tshitwe road upgrading from gravel to bitumen surface, in South Africa (Mashiri and Mahapa 2002). This was a community project where women's work was largely menial (carrying stones etc.); men did the higher skilled jobs and women were paid much less than men. There were only short-lived benefits for the community as the road still attracted very little transport and men spent their road work earnings in the urban areas, not in the community. Future maintenance also remained an issue as women were not skilled and men were migrant workers. Women road workers need contracts, training, skills development, promotion, gender-friendly latrines and living quarters and other protection from potential harassment.

The Kamwenge- Kabarole road in Uganda provides an important lesson about the need to keep other vulnerable groups in mind, in addition to women, when road contracts are planned. This

project provided economic benefits to communities, including women in retail trade BUT boys dropped out of school to get employment on the road, while girls left school to work in petty trade in expanding local markets. There have been substantial issues around sexual abuse of girls by migratory road workers – for example, being targeted as they walk to school early in the morning or during night markets, with consequent increased teen pregnancy. The World Bank's safeguard policy did not explicitly cover children and thus recommendations had to be made subsequently to align World Bank safeguards with international legal and institutional frameworks on child rights and include guidelines in line with them (World Bank 2015). **Contracting**: Despite ongoing efforts to encourage more women-owned contracting businesses, especially labour-based Small and Medium Enterprises, (SMEs) progress to date is slow. Women need better access to technical training and to SME credit to enable them to move up the construction hierarchy. Even in South Africa where, over the past two decades the number of women-owned construction businesses has grown significantly with support from government, they still fail to win major contracts (Havemann n.d.).

d. Gender as a factor affecting vulnerability to road injury and its impacts

It is important to note a further aspect of gendered patterns of access to transport: sub-Saharan Africa has the highest **road fatality rates** of any world region (Marquez and Farrington 2013). Improved roads encourage population concentration and increased road traffic speeds/volume: this may lead to community severance issues and more accidents (Lamont 2010). Pedestrians, cyclists, and travellers on motorised 2/3 wheelers are at greatest risk of death and injury. A study by Boniface, Museru, Kiloloma and Munthali (2016) indicated that 76.6% of road accident patients in Tanzania were males aged between 18 - 45 years. The study further established that motorcycles were the leading cause of road traffic crashes (53.4%). It therefore appears that some of the key gender issues in road safety are associated with males (partly as a factor of their higher access to motor mobility, but also because males tend to be less cautious when on the road). However, women suffer in diverse ways from road accidents, not least as carers (Kwamusi 2002), but possibly also from reluctance to wearing helmets on motorcycles because of damage to hairstyles (an area where more research is needed).

Conclusions regarding gender integration challenges in rural transport in Africa

Given the significant gendered differences in mobility opportunities and employment in the transport sector reported above, systematic collection of gender-disaggregated data is essential before, during and after transport projects are implemented. The disaggregated data should also take into account potential differences within the individual gender categories (according to age, ethnicity, socio-economic status etc.). Consultations with diverse kinds of female users, contractors and employees (actual and potential) in the sector are crucial to good design and implementation yet have rarely been carried out, hence the importance of this research study. Meanwhile, wider consultations with government at local and national level can provide essential understanding regarding the broader political economy context in which transport projects take place – again this is absent from most transport studies. This project has offered an important opportunity to explore these issues in some depth.

4.1.2 Gender Integration Challenges in Rural Transport in Tanzania

Many of the issues raised above are relevant to Tanzania, but research to date on gender integration challenges in rural transport have been somewhat limited in this country, with the significant exception of the Makete studies noted below.

Tanzania's National Transport Policy Statement of 2002 sets the scene for this section, suggesting the country's long-standing recognition of the importance of meeting transport needs across the population, with reference to safety, sustainability and socio-economic development:

The Vision: "To have an efficient and cost effective domestic and international transport

services to all segments of the population and sectors of the national economy with maximum safety and minimum environmental degradations."

The Mission: "To develop safe, reliable, effective, efficient and fully integrated transport infrastructure and operations which will best meet the needs of travel and transport at improving levels of service at lower costs in a manner, which supports government strategies for socio-economic development, whilst being economically sustainable".

(Source: Ministry of Transport and communications, United Republic of Tanzania, National Transport Policy 2002, cited in Hine 2014.)

Discussion in this section follows the same arrangement as that taken in section 1 with reference to the African continent as a whole, namely:

- a. Gender as a factor affecting access to mobility and transport services
- b. Gender as a factor in transport services operation
- c. Gender as a factor in access to employment in Tanzanian transport infrastructure
- d. Gender as a factor affecting vulnerability to road injury and its impacts

a. Gender as a factor affecting access to mobility and transport services in Tanzania

Literature (and findings of this current research) indicates that the gender issues outlined in section 4.1.1 for rural Africa as a whole fit the situation in Tanzania extremely well. The Makete studies implemented in Makete District in Tanzania through the Makete Integrated Rural Transport Project (MIRTP, conducted between 1985 and 1996) provide some early key information with regard to factors affecting gendered access to mobility and transport services in Tanzania (Jennings 1992, Malmberg-Calvo 1994a, both references discussed further below). This programme examined new approaches to improving rural access, with a shift from an emphasis on provision of roads, towards understanding the travel characteristics and access needs of the rural communities, including women, and exploring various options of meeting them. A key innovation was the use of the household as an important unit of analysis, allowing some assessment of the domestic, social and economic transport demand in a household, including the infrastructure and means of transport available for households to perform their transport tasks. The transport burden for women, demonstrated through research in this project, clarifies significant variations in gender patterns of transport use (and associated time burdens) in the Makete district, and had widespread resonance across rural Tanzania. Elsewhere in Tanzania, Haram (2004), for instance, noted how women's spatial mobility was more constrained than men's as a result of traditional moral codes among rural Meru in northern Tanzania.

A review of Makete specifically focused on assessing project impacts on women raises a wider question around women's engagement with transport interventions, suggesting the possibility that problems which manifest themselves as transport issues are actually set within much wider contextual rural infrastructure constraints (Jennings 1992). The importance of understanding wider local context is also raised by Malmberg Calvo (1994a) in a study which includes work in two areas of Tanzania and further stresses the importance of women's involvement in project design and implementation (a point also emphasised by Mascarenhas 1994).

The socially defined roles of men and women and women's labour burden in Tanzania, reported widely in the literature (e.g. Ponte 2002, Mwankusye 2002, Ishengoma 2004, Ellis 2007, Green 2010) appears to have changed little in the two decades following the Makete project's completion. Starkey et al (2013) note in Kilolo district that while both men and women participate in farming and marketing, gender relations mean that men tend to have greater access to money and resources for transport. Tomatoes are an important crop and it is women who often transport these by the basket load to markets and buying points. However, since male traders are better resourced, it is the men who transport truck-loads of purchased tomatoes to Iringa and Dar es Salaam by motor vehicle. Inevitably, poorer access to markets must impact on women's opportunities to build better

livelihoods, with wider implications for health, education and poverty transmission. Similar conclusions regarding the transport implications of women's poorer access to resources arose from research with older people in Kibaha district (Porter, Tewodros et al 2013).

Mblinyi and Shechambo (2015) argue that conditions for Tanzanian women have deteriorated over a long period following structural adjustment in the 1980s: while privatisation and liberalisation of social and economic services and privatisation of land tenure affected men as well as women, women have suffered more through their vulnerability to land dispossession because of patriarchal property and inheritance systems, such that many women have had to seek precarious work as casual labourers in agriculture and other sectors. However, they also show how some grassroots women have sometimes come together to act against patriarchy when conditions have become too difficult, and cite the specific case of forcing local government to repair the Tondoroni road in Kiluvya ward which had become impassable, because this was essential to marketing their crops. The participatory action research with grassroots women's groups across Tanzania reported in this paper indicates the potential for transformative action to improve women's lives across diverse aspects, from agriculture and education to health and transportation. The authors argue that for this to be successful it is vital to study 'up' i.e. to understand the structures of power within which rural women have to operate. Such an approach resonates strongly not only with Green's (2010, 2012, 2014) examination of the workings of power in state and donor contexts in Tanzania but also with the approach and findings in our study of Tanzania's transport sector.

As Hine (2014) notes, the biggest change in rural transport taking place in Africa is the growth of motorcycle usage: Tanzania is no exception. In December 2005, there were 31,006 motorcycles registered in Tanzania and by December 2010, this number had risen to 323,192 (Ministry of Infrastructure Development, 2010), an annual growth rate of 60 percent per year (ibid). Recent surveys of 55 district and regional roads in Tanzania (IT Transport 2013) illustrate the growing importance of motorcycles and bicycles in rural transport, with motorcycles exceeding bicycles on 20 percent of the roads. Although they are not formally licensed for hire, many motorcycles are used in boda-boda taxi operations, to carry passengers and freight, on journeys between a bus stop and more remote locations away from conventional bus routes. Starkey et al (2013) found rural motorcycle passenger fares to be between 17 US cents and 34 US cents per km; in comparison rural bus fares were between 3.5 US cents and 4.7 US cents per km. The expense of travel impacts more on women than men: far fewer women than men are able to take advantage of boda-boda services - in Starkey et al's Kilolo survey (2013, table 3, p.12) no women were reported to use boda-boda. More recent study in three villages in this district (HelpAge 2015) finds some women now using boda-boda, but in lower numbers than men. In Kibaha district, however, women were already evidently using boda-boda extensively during the study conducted around older people's mobility in 2011-12 (Porter, Tewodros et al. 2013): The study established that 18% of older women (and 31% older men) had used one in the week before the survey (n=339). Nonetheless, it is also important to note that cost and fear of accidents limits usage and excludes the poorest and those with physical impairment in Kibaha (especially given high night time and rainy season charges and motorcycle operators behaviour).

There are both education- and health-focused studies in Tanzania that indicate significant female disadvantage in accessing services because of transport constraints. In the health sector, where such evidence is now particularly substantial, the Comprehensive Community Based Rehabilitation in Tanzania Disability Hospital *transportMYpatient* programme was introduced in 2009 to address transport costs, because these issues affect women seeking treatment for obstetric fistula. This problem is now being addressed with some success by the use of mobile phone technology to transfer funds (Fiander et al. 2013). The role of mobile phones as a support to transport access has been reviewed in our current study because this is a potentially key area for innovation (see also

Porter et al. 2013 and HelpAge 2015 regarding the linkage between transport and mobile phones in Kibaha and Kilolo districts respectively).

The diversity of women and girls' transport needs and the needs of other vulnerable groups such as those with disability have been recognised only to a limited degree as yet in studies conducted in Tanzania. The research on older people's mobility in Kibaha and Kilolo (Porter et al. 2013; HelpAge I. 2015) gave some indication of the extent of constraints faced by other vulnerable groups and has been followed up further in the current field studies reported here.

b. Gender as a factor in transport services operation in Tanzania

As noted for Africa more generally in section one, few women in Tanzania drive commercial vehicles. With reference to the most recent addition to the transport mix, *boda-boda* (motorcycle taxis) appear to be driven exclusively by men in Tanzania (Porter, Tewodros et al. 2013; Bishop and Jinadasa 2014).

Even IMTs are principally operated by males, though the promotion of IMTs (mainly donkeys and wheelbarrows) in the Makete project reportedly brought some women substantial time savings (albeit ownership remained in male hands, see Howe 1989, Mascarenhas 1994, Sieber 1998). In a review of IMT promotion in three villages participating in Tanzania's Village Travel and Transport Programme (VTTP), Mwankusye (2002) found few women in possession of IMTs such as bicycles: they were constrained not only by socio-cultural attitudes which see transport as men's business but also by a lack of resources and lack of knowledge and information about IMTs. They were also discouraged by hilly terrain.

Head loading, by contrast with motor transport and IMT operation, is principally a female burden. Mwankusye (2002) noted that women are responsible for the majority of firewood and water collection and play a major role in carrying agricultural produce in Tanzania, carrying up to 30 kg on their heads while walking distances of up to 20 km. Barwell and Malmberg Calvo (1988), working across 19 Makete villages found that 72% of the annual transport burden was shouldered by women, and that the majority of carrying (over 80%) concerned internal transport around the village: women spent 1,310 hours per year transporting 72 tonne-km. Bryceson and Howe (1993) point out that Makete men contributed only about 25% of the time that women contributed to transport and were performing only approximately 11% of the load carrying effort: the majority of their transport time was associated with agricultural activity, though they refrained from active involvement in harvested crop carrying. Women still appear to play a major role in pedestrian load carrying across all regions of Tanzania though there is an absence of recent data to confirm this perception.

c. Gender as a factor in access to employment in Tanzanian transport infrastructure sector. There is little published literature concerning gendered patterns of access to employment in the transport infrastructure sector in Tanzania. Early transport-focused literature (for instance Barwell 1985) makes little reference to gender in discussing patterns of contribution to road construction and maintenance. However, other (non-transport focused) published material available suggests that uptake of this employment depends substantially on the absence of profitable alternatives. Kabeer (2014) draws on a series of reports on Tanzania to show varying gender patterns of interest in road work (citing Kinkert 1983, Scheinman et al. 1989. Dejardin 1996). Thus, in the Ruvuma area, where good agricultural opportunities were poor, men ensured they took all road construction work available leaving nothing for women, whereas in Songea district, good tobacco growing opportunities for men meant that women were able to access road construction work. In Matengo district, neither men nor women were reportedly interested in road construction opportunities because of the potential that coffee cultivation offered both sexes. For poor, divorced women with children and parents to support, road construction is often the only stable secure form of income.

Better off women were only likely to participate when wages were increased given the low status of this occupation – and some men were reportedly embarrassed if their wives took road work.

d. Gender as a factor affecting vulnerability to road injury and its impacts in Tanzania Hine (2014) notes that while the Surface and Marine Transport Regulatory Authority (SUMATRA) regulates the frequency and fares of the larger buses operating in Tanzania's rural areas, there is much less control over the operations of smaller vehicles. Police enforcement of safety and licensing regulations, together with axle load control, is very common on major routes, but less common on those rural roads in Africa with little traffic.

A study of injury including two rural districts (Hai and Morogoro) in Tanzania found age-standardised injury death rates three times higher among men than among women, and noted that such injury is principally a factor of road accidents (Moshiro et al. 2001). Later work (Ae-Ngibise, Masanja, Kellerman and Owusu-Agyei 2012) confirms this figure for rural Rufiji district, again emphasising road accidents as the main cause of injury, and notes that the elderly (65+) are 2.8 times more likely to die from injuries compared to children under the age of 15.

A small survey of 63 users of motorcycles, minibuses, midi-bus and buses interviewed in relation to the Iringa-Kilolo Road (Starkey et al. 2013) found that both men and women were dissatisfied with the safety risk across all modes, with motorcycle being perceived as the riskiest mode. In Kibaha district, a survey in 2012-13 indicated that older people's biggest dislike of *boda-boda* was the speed of travel (noted as the principal disadvantage for 39% older women, 36% older men). Moreover, 2.5% of older women and 4% of older men in the survey reported they had had a motorcycle accident, even though the *boda-boda* had only been in operation at this time for a few years. Additionally, there is the discomfort of dust, vibration etc. and the dangers for the sick/very old who have to be wedged between the driver and a 2nd passenger. Passenger helmets are often unavailable and fears of 'fungus' (and occasionally also fear of witchcraft) add to the dangers and discomfort. There are additional dangers for pedestrians. Studies of road safety in the motorcycle sector in Tanzania by the NGO AMEND (Bishop and Jinadasa 2014) indicate the level of risk of accident when travelling by motorcycle, with road travel injury (RTI) rates among drivers as high as 63 per 100 drivers per year.

4.2 Review of Policy Papers

In this section we provide an overview of some of the policy instruments developed to guide gender mainstreaming in the Transport Sector.

United Republic of Tanzania 2011 -The National Transport Policy of 2011: One of the most important policies as far as the transport sector in Tanzania is concerned is the Transport Policy of 2011. The policy was developed by the Ministry of Works, Transport and Communication. The main objective of the Policy is to mainstream gender in transport infrastructure as well as in services and operation. The policy recognises the importance of gender mainstreaming in transport and infrastructure projects. For instance, one of its policy statements emphasises the need to ensure gender policies are mainstreamed in the development of transport infrastructure and the provision of services to enable women have equal access to economic opportunities and guarantee their social inclusion.

However, further analysis indicates that the policy does not provide adequate strategies and instruments to ensure that gender balance is achieved in all transport sub- sectors and hence gender mainstreaming. A few guidelines have been formulated in some sub- sectors such as the road sub

sector and the construction/ building industry but these have not been adequate to embed gender mainstreaming including their enforcement in infrastructure development. Therefore, the gender gap still exists as can be evidenced for instance from the number of women holding leadership positions within the sector which is less than – 25% (The Transport Sector Review 2013 (*AfDB, 2013*). Moreover, although the policy document recognises the needs of the vulnerable groups, it neither gives emphasis nor references to women with multi-dimensional vulnerabilities (such as widows, older persons, those with disability, orphaned etc.) but it seems the focus has been on women in the work force.

United Republic of Tanzania 2003- The Construction Industry Policy 2003: The policy aims at involving women in road works by setting a target of at least 25% of women to benefit from road works and related infrastructure development activities. Unfortunately, this target is not supported by law. For instance, during road construction, contractors are not obliged to recruit women. Therefore, in most cases contractors employ more men than women. The situation is even worse for women with multi-dimensional vulnerabilities. This issue has been confirmed by the findings of this research.

The Tanzania National Roads Agency 2000-National Roads Agency Strategic Plans 2000–2013 and 2014–2018: To ensure Gender Mainstreaming is included among the key cross cutting issues the National Roads Agency developed these two strategic plans. Although gender is highlighted as one of the key cross cutting issues, the strategies do not provide systematic approaches to guide the mainstreaming of gender and did not offer indicators by how these will be measured and enforced. Additionally, there are no deliberate efforts to sensitise contractors and consultants to involve women and to hold them accountable to their actions. Therefore, women's involvement in road works is not happening by design.

United Republic of Tanzania 1992- Women Development Policy of 1992: This policy was developed under by the Ministry of Health Community Development, Gender, Elderly and Children. The objective of this policy is to provide guidance in mainstreaming gender in all sectors and ensure women's participation and empowerment. The policy sets a minimum participation threshold of 25% for women in all decision-making positions - from the grass root (local government) to the national level. The policy aspires that Tanzania will reach the 50:50 women/men representation by 2025 as per the UN 2015 Resolution. However, as already seen, this aspiration is still lagging, with the current research showing that women seldom participate in decision making as far as road construction is concerned. There is equally disproportionate participation of women in actual road construction projects.

Despite the commendable efforts in policy formulation in Tanzania, only a few strategies were put in place to support the operationalisation of the policies. This includes the placement of designated gender focal persons in every sector to foresee gender issues and ensure gender mainstreaming. However, this measure has not been very effective except for a few cases such as the Police Gender Desk. More analysis is required to find out which method could be effective in supporting this strategy.

The African Development Bank 2009-The Checklist for Gender Mainstreaming in the Infrastructure Sector:

Developed with the support of the African Development Bank Gender Group, this Checklist provides a tool for gender mainstreaming in infrastructure projects. Evidence indicated that infrastructure projects in Tanzania are often insensitive and often assumed that women and men will automatically benefit equally from infrastructure projects. Despite being very useful in mainstreaming gender, the Checklist has however been project based. Government funded projects do not necessarily utilise the Checklist. As such the impact of this Checklist has been realised in a few areas. In most cases

positive outcomes were experienced by women though such projects have been unplanned, a fact that has been reinforced by the current study.

In addition to these strategies, there have been other initiatives addressing gender gaps in infrastructure and road construction projects as follows:

- a) In 2011, the Ministry of Works Transport and Communications in collaboration with the African Development Fund (ADF), developed the Road Sector Support Project II; Project Appraisal. The project had a gender component where it incorporated the need for stakeholders and community sensitisation to appreciate the need for gender mainstreaming. The initiative was good but since it was project based, was not sustainable.
- b) The President's Office, Regional Administration and Local Government through the Department of Infrastructure Development developed the Local Government Transport Programme LGTP I-2007-2012 and LGTP II 2013-2018 which is ongoing. Both Programmes mention gender as one of the cross-cutting issues. LGTP aims at:
 - Ensuring that women's voices are heard and they participate fully in the decision-making process
 - Ensuring that women are given opportunities with men to participate in potential employment opportunities resulting from the programme
 - Undertaking studies on gender disaggregation in the transport sector and advising the Ministry of Infrastructure Development accordingly
 - Enabling vulnerable groups to participate effectively in the transport activities so as to improve their income
 - Increasing the percentage of women in management and decision making positions in the transport sector
 - Promoting the use of Non-Motorised Means of Transport as cost effective local transport
 - establishing monitoring indicators to assess the progress on gender mainstreaming
- c) The World Bank developed a guide for its transport and gender specialists on how to mainstream gender in road transport (The World Bank, 2004). The guide provided examples of how women are impacted by disproportionate household transport burden and access to transport needs. It further provided some of the constraints women face in rural transport programmes including transport by foot/head loading, infrequent and unreliable public transport, lack of accessible roads and poor pathway conditions and limited access to IMTs (carts, bicycles, animals,) may be limited due to cultural norms. Despite the good analysis and showing importance of gender mainstreaming in rural transport programmes, the guide does not have a national orientation but rather focuses on specific institutions. Moreover, the guide considers women in general terms without exploring multidimensional inequalities specifically as it related to older women, women with disabilities and widows. Additionally, the guide does not provide a framework to ascertain the extent to which implementation has facilitated transformative changes for women facing multiple levels of exclusion.

Overall, despite a few gaps and weaknesses, Tanzania has made significant progress as far as policy formulation to mainstream gender in the transport sector is concerned. However, the strategies and programmes meant to facilitate gender integration in infrastructure projects have had mixed results and outcomes. For instance, the LGTP I and II whose aim is to empower the PO-RALG to mainstream gender within the Rural Transport Sub Sector, have not been implemented adequately. A lot of gaps still exist, for instance, at the district level, there are no gender specialists to guide the gender mainstreaming process. Moreover, just like the current study has demonstrated, other studies conducted in the country on this topic have returned a similar verdict, perhaps serving to indicate the disconnect between policy, practice and impacts. For instance, a study by Members of the

Tanzania National Forum for Rural Transport and Development conducted in 2012 (TFG, 2012) established that there is still a huge gender gap in rural transport and that rural women are not included in planning for transport related initiatives. Another study conducted in 2013 by the Ministry of Works Transport and Communication in collaboration with AfDB (MWCT and AfDB, 2013) to review the transport sector emphasised the need to mainstream gender within the Transport sector. This recommendation served to indicate that gender mainstreaming in the transport sector was not taking place as envisioned.

5. Research Findings

Findings are discussed with reference to the two districts, firstly Kibaha, then Kilolo, before considering the national level. In each of the two districts we start at community level (considering the experiences of both ordinary community women and men, and then those women with multidimensional inequalities), then move upwards to village leaders and Ward level officers and finally to District level. Findings are reviewed firstly with specific reference to the road construction process, then with reference to the broader impacts of road improvement on the lives of people living in these communities.

5.1 Findings in Kibaha District

In Kibaha district, community views were obtained through individual in-depth interviews (complemented with a photo diary – see Annex 1) and 16 focus groups (each with six-eight people). It is important to compare perceptions among diverse groups. Thus, of the 16 focus groups, three were with 'ordinary' community women, three with 'ordinary' community men, seven with 'special' women and three with 'special' men. 'Special' refers to the special needs of the respondents: girls and women who are disabled, widows, or orphans or suffering from HIV and AIDS; older men and men who are disabled or suffering from HIV and AIDS. However, in analysing the data, discussions draw on information across both 'ordinary' and 'special' groups, because so-called 'ordinary' community men and women also sometimes refer to specific issues associated with age, disability etc., while 'special' men and women often refer to issues associated with the wider community, as opposed to their own specific disadvantages, because they usually also have able-bodied family members and the experiences of those family members may help shape views of the road work and road improvements among the 'special' group.

The community interviews and focus groups in Kibaha district took place in Soga, Mlandizi and Kwala. They thus relate to people living along two roads where infrastructure projects have taken place in the Mlandizi area (Mlandizi-Madimla and Mlandizi-Makazi Mapya -Ngeta and Kongowe-Soga roads). Both are earth roads that were improved under the district and community road programmes. The latter was funded under the TASAF projects.

Unfortunately, local community members interviewed were often unclear about the specific road programmes affecting their communities and when these took place, which makes analysis of specific impacts associated with the VTTP and LGTP programmes difficult. However, it is clear that roads located in the region where these communities live have improved and that transport services have consequently improved. Thus the roads to which community members in Kibaha referred were observed to be now always passable in the dry season, despite dust levels which greatly inconvenience users. In the rainy season, rolling topography and poor drainage facilities, including some cases of poorly constructed culverts and bridges bring occasional disruption to traffic. The roads are predominantly used by motorcycle transport operators and pedestrians accessing markets, health centres, hospitals and social facilities located in the Mlandizi and Ngeta areas.

Additional interviews also took place in Kibaha at district level with (3) Ward-level officers and with staff at the district office: their perceptions are reported separately.

5.1.1 Kibaha district inputs into road construction work

Men's views: The 'ordinary' men interviewed at Makazi Mapya referred to the contribution they made in improving the road, along with government, about a decade ago. They reported volunteering for this work, and men and women being involved equally: only children were excluded because of the heavy nature of the work, digging ditches by hand etc. However, further probing led to some modification which suggested that women were involved by cooking for their husbands and looking after the family at home! One man at Kwala even suggested that women may spend about two days attending traditional dances; therefore, it will be impossible for most of them to attend road construction activities going on at the same time.

Women's views: 'Ordinary' women at Makazi Mapya clarified their role in the road improvement work, which seems to have varied, depending on the specific phase of road improvement. In the early phase, prior to the arrival of machinery, it would seem that some women participated, as one older woman firmly stated: When the construction of this road began, women were involved/included. This was as a result of being informed that land was being given for free at a certain location. I dug from Msongola. At that time the road was just a pathway. It was in the year 1998 that this road became official...We dug this road for two weeks from here up to Msongola. In the third week we built thatched houses. In the fourth week the national torch came to officially launch the opening of the road. There were two of us: me and another lady who has relocated from here.

Other women however argued they were 'not involved'. One observed, we just saw it excavated; Another clarified, our benefit was during the meeting phase. These supervisors do not involve women. There are jobs of uprooting tree stumps and digging trenches but we are told us women are not capable and they take male youth. So for those of us who were able to go to the meetings, we are just informed that the road will be dug in addition to trenches that will be able to provide drinking water. We just see male youth digging the foundation whilst we are capable but are denied employment which we need. A third added, they tell us that we women cannot dig ditches, we cannot uproot tree stumps, cannot assemble pipes, not taking into consideration every woman as an individual's capabilities and requirement. She emphasised again that while women are able to dig ditches they were neither involved nor consulted. This evidence appears to relate to more recent phases of the road improvement (in particular, work in 2014).

Especially disadvantaged groups: Men and women in both the 'ordinary' and 'special' groups were asked about the involvement of disadvantaged people, such as widows and the disabled. Some rare, recent positive experiences of women's work in road construction were reported, under the TASAF: the poverty alleviation programme which included temporary employment opportunities in public works for men and women). This included the following experience of a 46-year-old woman, a widow who has two children and is physically disabled. She had worked for 3 to 4 months under the TASAF programme on the road from Bagamoyo – Ruvu junction (upgraded in 2015) and two others (all in 2015). She had been selected through TASAF 'but as for me they considered my condition of disability and poverty' and was assigned to help with taking measurements and digging, for which she had been paid TSH 2,300 (USD 1.03) per day, with payments made every 15 days. However, she said there were no other people with disability employed in that project and emphasised further: except the roads which are maintained locally by the community through TASAF, we the marginalised groups are not involved at all in road projects...we only get to know about them when the authorities come to officially open. We wonder why they call us to the opening ceremonies and why in our community yet they don't involve us from the beginning.

The TASAF programme has specifically targeted older people and others on low incomes. An elderly woman (78y) reported how she had earned a monthly stipend of TSH 30,000 (USD 13.42) for working on local roads, while a widow cleaned trenches and dug and sealed potholes on the Bagamoyo road for TSH 2,300 (USD 1.03) per day. In both of these cases the earnings made a crucial contribution to the purchase of household food.

Both men and women were also asked about how the involvement of women and disadvantaged groups might be improved in the road construction arena. The main contribution came from men with disability at Kwala village who suggested that women's contribution would be aided by scheduling the work so that women leave the site earlier than men, so they can prepare the food at home as traditional convention requires and that women with disability and widows could be assisted with transport to the construction site or offered lighter work closer to home.

Perspectives of local community leaders and Ward administrators: Village and Ward officers provide some additional reflection on local perspectives. In Ruvu Madinla we were told that neither men nor women (able-bodied or those with disability) from the community were consulted or involved in recent road improvements —they were just startled to find a bulldozer coming to dig without asking where the road is damaged.... Nobody was involved. The bulldozer just comes and excavates and that is all... Decisions are made at the City Council. You find that you do not even know what the contractor looks like. Similar perspectives on the remoteness of decisions relating to road improvement came from community leaders in Mperamumbi: non-resident councillor's direct contractors without consulting the community about current problems and don't inspect the contractors' work when completed.

Despite lack of community involvement, the improved roads are seen to benefit all in the communities substantially in terms of improved access in the dry season. However, in the wet season poor work becomes evident and the road may even become intermittently impassable. In Mperamumbi, following the interviews, the (male) community leaders reflected: we should have a committee responsible with road construction issues within the village; it should include both genders- men and women, and it should also be involved with employment and supervising all the project activities without bias.

An interview with (all male) ward officers for Kwala confirmed many of the observations made above, but also demonstrated the level of prejudice that prevails regarding women and other disadvantaged groups. Thus, they noted that women tend to exceed men when meetings are called (and whatever their focus, this is usually not revealed till the meeting is convened), but this high attendance of women was attributed, in the discussion, to women sitting at home, thus having time to participate, while men were busy as bread-winners for the family!

The Kwala ward social development officer (female), interviewed separately, referred to requests for identification of areas of roads most in need of attention involving 'older men with good reputation in the Ward'! She further observed that although meetings may be composed of 80% women, 70% of responses come from men, because of the cultural practices in our society that empower men to contribute more than women. She further noted that those tasks that require great manpower are given to men and the rest to women, and argued that announcements about potential opportunities are made in the evening when most people are at home, but did not comment as to whether there were variable wage rates according to task [and thus possibly also gender]. When asked about opportunities for disabled and older people, she observed that if people have difficulty in walking so even though they may want to come, they find it difficult to attend these meetings and therefore decide to just stay at home and wait for feedback from others.

It was agreed among the ward officers at Kwala that it is mostly men who are employed on road maintenance (such as clearing roadside vegetation) and construction, with the justification that women will benefit as much as men in the longer term, once the road is constructed/improved. Reference was made to one-woman engineer helping supervise road work. This turned out to be a woman road technician (who has been working in that role since 1985 – see further below). There are also special programmes when particularly disadvantaged people such as orphans are employed for manual work such as digging out tree stumps but the following comment helps to clarify some of the problems that are evident on the ground: It is possible that amongst the leaders, there could still be persons that still regard people with disability as not helpful. So, awareness and sensitisation must first begin with us the leaders, when we make decisions we must also be considerate of people with disability among us. We need to be sensitised to involve people with disability in decision making. After we are empowered with the awareness that the people with disability are also needed, then we will be able to consider them with priority. Because some of us do understand that, but there are those among us who are not aware that even people with disability are part of us and we need their inputs and views.

Another respondent in this group suggested that it will require the government to 'formulate policies and regulations' to ensure that disadvantaged groups are specifically involved in decision-making.

District office perspectives: The assistant planning officer for Kibaha district clearly set out both the rules and the reality of gendered participation in road construction work. Projects which originate from community requests mainly require unskilled labour, so both men and women can participate equally for wages.... At the same time, marginalised (disabled/older) women are given priority. However, he also noted that, whenever we visit the sites we mostly find the men as the main labour force due to the nature of the works - which require strength. Kibaha, being a coastal district, women are not considered active due to the stereotype that coastal women prefer light house-hold chores. However, there are areas in the country where the women to men ratio are equal.

Larger projects involving contractors are put out to tender – clearly these go almost entirely to male contractors (who will recruit as they wish), though the officer remembered one-woman contractor once winning a tender! (She was subsequently located and interviewed as discussed further below.) We were also able to interview one-woman road technician who supervises such contractors. At the time of interview, she had two ongoing projects, one 5.6 km Soga-Msufini grading and maintenance contract, the second 2 km of work including terracing, slashing and grading along the Mpera-RuvuKitamondo road. She observed that the contractors mostly employ casual labour and on the two projects concerned there are, as yet, no women workers (though two older men were being employed clearing the road of tree stumps and debris). However, there had been a woman operating the rolling machine on one of the projects; both the machine and operator had been hired from Dar es Salaam. On previous projects she has supervised, women (mostly young c. 25-30-years old) have been employed, mainly for bush clearing and digging terraces, while men mixed and poured concrete and constructed culverts. Where women were employed, she observed, they do a good job, when properly supervised:

They are more patient than men and take instructions kindly. Men are a little chauvinistic especially if a woman is the one leading a project. They struggle to take instructions. Moreover, men are hardly satisfied with pay. Another difference is the way women handle money; women spend their little income on their families, but most men drink it away... I think with confidence and self-belief; women can achieve much. All they need is capacity building and sensitisation... I find women more trustworthy on construction jobs better than men. For instance, the women I worked with on the Msua Bridge-Kwala-Dutumi, they were exceptional. They took instructions happily and they are today always happy whenever they see me. They can't wait for another project.

However, this woman road technician (a woman in her late 50s with much experience in the sector) also gave some very clear pointers as to why so few women are able to build livelihoods (as she has managed to do) in this field:

To be honest, this job is hard. It requires a lot of determination. However, the main reason I excel in this job is because I am single and don't have children. I can therefore work anywhere; I am flexible 24/7. I imagine that married women will find it difficult to do this job. For instance, this job requires that you travel long days away from home, sometimes staying with men in camps deep inside forests. Not many husbands will allow their wives to live such a life. They fear that their wives will be too exposed for promiscuity. For women to break into this career, a lot of sensitisation and capacity building will be required. Men have to be educated to change their perceptions.

Women contractors have also been trained and there is still at least one successful female

Women contractors have also been trained and there is still at least one successful female contractor working in the sector (confirmed through our interview with her).

Of the two contractors interviewed in the district, the first, a man, observed that while women were committed and hardworking, and are invited to participate in projects, it is usually men who come forward. So far as disadvantaged groups are concerned, the realities of their likely potential opportunities come out clearly in his subsequent reflections: We involve people in projects without discriminating against their disability or pre-existing conditions but rather we provide jobs due to ability and strength to do the jobs. As contractors, we are always time bound; we need to deliver on time and work has to be done! We cannot therefore be too benevolent waiting for an incapable widow to finish a job in three days just because she is a widow. If this job has to be done in a day, we need someone who can do that in a day. The task cannot delay for such reasons.

The second contractor interviewed in Kibaha, however, was a middle-aged woman in her early 40s (and the only female contractor we encountered throughout the two study districts). She runs a small company employing seven other people, four of whom are also women (a quantity surveyor, an IT specialist, an office secretary and an office assistant) and three of whom are men (two civil engineers, one of whom is her son, and one quantity surveyor). This remarkable woman (who has a PhD in finance and also runs a micro-finance enterprise lending to women's groups) was, unsurprisingly much more positive about women's potential to participate in road construction. She observed:

With appropriate sensitisation, women are capable of undertaking construction work just like men! Their role should not be limited to cooking for male labourers. A case in mind, are the women in Dutumi. During our project (Kwala-Mperamumbi-Dutumi and Mtua gravel road), the women in Dutumi were outstanding. I have not seen even men mix concrete (kumwaga zege) like the women in Dutumi. I attribute this to sensitisation. I was very happy with these women...I believe women are equally capable (as men). But I don't want women who want sympathy instead of working. A hardworking woman will benefit from her sweat. I want women who come out in search of opportunities. I will counsel such women, then give them chance so they grow. I will then monitor their output closely and retain those that are genuinely committed and hardworking. Having said that, I do believe that more women will benefit if more contractors were women! This is because we understand more the issues that affect women.

She pointed out how these women had gained from the experience, learning from the engineering supervisors. Encouragingly, while this contractor has not, as yet, given work to any woman facing multiple inequalities, she suggested that, if they were hardworking, committed and 'explained their case', she would take them on, even giving them priority over others.

5.1.2 Kibaha district benefits of road improvement

Men's views: Men at Makazi Mapya reported the benefits of the improved road as including improved evacuation of farm produce, the arrival of new services including visits from health staff based in Mlandizi town, construction of a school, and some inward movement of younger people. They also emphasised difficulties they encountered on the road in the rainy season and the high cost of motorcycle transport for moving produce and carrying their children to secondary school in town. A man with disability in Kwala village also observed the additional advantage that the improved road brings, visitors – this is clearly of particular importance to those who are often least able to travel freely. Some men across rural Kibaha also now earn an income as motorcycle taxi (boda-boda) drivers. Even so, men widely argued that both men and women have benefitted equally from the road improvements. In Makazi Mapya, for instance, they are extremely keen to see it paved, or at least gravelled, so that larger vehicles can ply the road, and all men in this group ranked that improvement as their top development priority. They also raised the issue of potential employment in construction if the roads were to be improved.

Women's views: 'Ordinary' women at Makazi Mapya reiterated the 'ordinary' men's points about benefits from the motorcycle transport now plying the route, which supports those involved in petty trade whose business has improved. In a few more accessible locations like Soga, the arrival of minibuses ('vans') has brought reduced transport fares; TSH 1,500 (USD 0.67) compared to TSH 2,500 (USD 1.12) for a standard drop on a motorcycle taxi), while Kwala now has buses to Dar es Salaam. One widow at Soga reported that her trading takings have consequently increased from TSH 5-6,000 (USD 2.24-2.68) per day to TSH10-20,000 (USD 4.47-8.95), which has enabled her to invest in two saving groups (one for widows, one for agro-forestry staff) and this gives her access to loans. However, shortage of capital still constrains the ability of many women to expand their businesses substantially, especially the residents in remote locations.

The clearing of dense vegetation around the road and the increased frequency of road use is also seen to specifically improve travel safety for women who walk along the road. However, they emphasised the high cost of motorcycle taxi fares, especially in the wet season, and the dangers of motorcycle travel on rough roads (a participant observed that "the difficulty is that the road is spoilt. As of now I have injured my waist because of falling three times while on a motorcycle": this led to requests mirroring those made by the men's group that the road should be paved. Distance to services (particularly the 12 km to the hospital and secondary school at Mlandizi) also remains an issue, although they now have better access to transport (if funds are available to pay fares). One of the respondents had helped to deliver a baby at the roadside in the dark, the evening prior to this focus group meeting.

Women at Kwala village, by contrast, reported that services had improved substantially with the road improvement: I would say that there is an improvement in social services. Especially in the health sector; for instance, those living with HIV used to get their Anti-Retroviral (ARV) supplies at Mlandizi, but after seeing that there is an improved road, albeit (only) little improvement, that service has been brought closer here at the local health centre. Here too, however, emphasis is placed on the need for tarring of the road, to reduce dust in the dry season and potholes and travel disruption in the wet season.

Especially disadvantaged groups: In many respects the benefits of improved road access reported by more marginalised people (widows, older people, people with disability) in the Kibaha communities mirror those reported by 'ordinary' groups: young men working as motorcycle taxi drivers obtain income for the family, improved access to health services and more regular supply of medicines at the dispensaries, improved trading opportunities along the roadsides, improved movement of goods into the villages, better education because teachers are more willing to come to

work in the villages when they can travel from homes outside. Perhaps the group least likely to benefit from road improvements are children with disability who are often hidden from view and thus unlikely to access either education or health services even if these are easily accessible by road.

Perspectives from the (male) local community leaders and administrations: The dry season benefits of recent road improvements are widely recognised by community leaders across Kibaha and considered to benefit all sectors of the population. This includes improved access to health and education services etc. in nearby towns, better rural services because health and education staff will reside in the villages, wider in-migration, improved produce evacuation, improved road-side trade for local dealers. In the wet season, however, the limitations associated with poorly planned construction of earth roads become evident, especially when roads become entirely impassable.

Perspectives from the (female) local community leaders and administrations: The women community leaders appeared to agree with their male counterparts that the dry season benefits from road improvements were cross-cutting, regardless of sex. A woman social development officer in Kwala observed that in one way or the other, they all benefit, because these roads are used to evacuate patients to the dispensary or for referral at the Mlandizi Hospital. So even orphans or disabled women use them (roads) because if the roads were bad, there is the possibility that they could die while on transit. An elected woman political leader in Kilangalanga Madimla, Kibaha further observed that once a road project is completed, it opens the area for development, which benefit all, regardless of sex. However, the women leaders indicated that women experienced more difficulties than men during wet seasons. For instance, the political leader averred that during the rainy season, the roads become impassable and the motorcycle taxis hardly operate. Therefore, pregnant women suffer a lot. Moreover, because men are strong and daring, whenever they fall sick during this (wet) season, they try their level best to walk until they get assistance. But not so for the women, because they are timid. In terms of employment opportunities, the women leaders indicated that men benefitted most during road constructions. A respondent observed that all machine operators are men, all drivers are men (Woman politician, Kilangalanga Madimla). A women village elder agreed with sentiments and postulated that men benefit more, especially when it comes to employment in physically involving labour, but women only benefit by selling soft drinks or food to the road workers.

Perspectives from the district office: The assistant planning officer asserted that although women in general did not benefit greatly from construction works, they benefitted most from the improved roads, *since they are the engines of family life*.

Annex 1 presents a series of photo stories from Kibaha district which provide very effective specific case studies of impacts of road improvement projects on women and other disadvantaged groups.

5.2 Findings in Kilolo District

Road conditions in much of this district (especially Kimara ward) are even more challenging than in Kibaha district, with heavily dissected topography and high rainfall requiring many bridges over deep river valleys and associated drainage work. Most of the roads are unsurfaced and often impassable during the rainy season. Road contractors tend to avoid work in this district because of the topographic challenges and high cost of transporting road construction material to the area. Health facilities across the district are sparse, but there appears to be better educational provision than in Kibaha, with basic schools in every village (and two schools for people with special needs, one with boarding facilities; the majority of pupils in these schools are male, which raises questions about attitudes to girls with special needs).

In Kilolo district, the community interviews and focus group discussions took place in Idete, Kilolo centre and Ilula. Community views were obtained through 16 focus groups (each with 6-8 people). Of the focus groups (as in Kibaha district) three were with 'ordinary' community women, three with 'ordinary' community men, seven with 'special' women and three with 'special' men (see Table 1). As in the Kibaha review above, 'special' refers to the special needs of the respondents: girls and women who have disability, widows, or orphans; men with disability or face some form of discrimination. However, in analysing the focus group data, as with reference to Kibaha, discussions draw on information across both 'ordinary' and 'special' groups, because so-called 'ordinary' community men and women also sometimes refer to specific issues associated with age, disability etc., while 'special' men and women often refer to issues associated with the wider community as opposed to their own specific disadvantages, because they also have able-bodied family members who may help shape their experiences of the road improvements.

5.2.1 Kilolo district inputs into road construction work

Men's views: Men in the Idete area (with focus group discussions drawing on participants from Magome, Idete, Madege and Kiwalamo) observed that all men and women (able-bodied and those with disability alike) in the communities were involved in basic road maintenance work under the village authorities i.e. until the government came in to improve the roads, bringing 'the caterpillars/equipment and machines'. While this has led to some improvement of local roads, they complain that local people are not consulted and the construction mode/supervision is inappropriate – this is, still a narrow earth road and sections get washed away in the wet season. They are looking for a wider two-lane road with a good surface, ideally tarmacked; they also point to lack of attention to their own priorities regarding which roads should be improved. When the construction team comes in, intermittently and without prior warning, they don't involve villagers (of either gender): Nobody knows what contract and what standards are required or agreed upon. Normally as villagers we are supposed to know the standards of the road agreed so we are close to the project and can monitor somehow the progress and the quality of the road. With lack of involvement, the villagers are there to stand and watch the workers do their thing (runs the graders/equipment and spread pile of sand on the road) and disappear; nobody asks them a thing. The money goes to their pockets.'

Some men observed that women's input may be constrained by pregnancy and family caring duties and the length of the working day on road sites, so 'men can be given priority'. When asked whether caring tasks could be transferred to men, they referred to male inadequacies in this arena. Others, however, suggested that the main issue was women's lack of confidence and that this was where they needed educational support and awareness raising: Really the challenge is to the women themselves to see a change has to happen from within them, they should see that they are capable of working as men, sometimes opportunities arise and you find just few women show up to take it. It is only that their self-esteem is low, they see themselves not worth, they are not as fit as men. It is psychological to them.

Women feel that men see them as unfit so they create that sense of fear, whereas men just see themselves that they can do it - that is the difference.

However, the following comment suggests that women's fear of involvement in road works may result from external threats, not their own lack of confidence: Women have been threatened to get involved in these tasks. Women are scared to get involved in these things.

Similar stories to those at Idete about the lack of consultation with local communities on and consequent negative impact on the improvements made, when road projects take place, came from men in the Luganga area (Kitowo, Ng'uruhe and Luganga). Here, in addition to issues around poor

road quality (in part due to lack of local consultation) and lack of recruitment of local labour, there were complaints about loss of land, houses and trees to the road works, without compensation (despite district executive directives to the contrary). They also observed that contractor labour brought into the area (and bringing Sexually Transmitted Diseases (STDs) with them) largely consisted of able-bodied men and few women (with no 'special needs' people of any type were involved in the project – widows, older people, people with a disability, orphans and people living with HIV and AIDS):

Men are given higher priority in project execution because by nature, these tasks require much strength.

In reality, most roads here are constructed by men. [Prompt] This is due to our beliefs that men are born to work, forgetting that even women can work as well; sometimes you would realise that actually women can work better than men.

However, these men also referred back to the VTTP project where road work ensured equal gender balance and the coordinator of the project was a woman from the local community. These roads had both men and women involved – the roads connected Pomelini also known as Nguruwe to Ukumbi. When asked how local women and other vulnerable groups might be brought into work on the roads, they referred to the need for 'higher authorities' to provide sensitisation and adequate budgets so they can 'make it mandatory'.

This focus group was asked specifically about the construction of the Kitoo-Mwatasi Road, because all of them had been involved in clearing [slashing] the vegetation. Here women only represented one sixth of the beneficiaries. One of the members of the group presented his personal experience: this man arrived at Kitoo and asked me to get him workers, unfortunately only two ladies accepted while others rejected. Perhaps most of them don't like hard work.... There is a belief that physical labour is specifically for men while soft works are for women. But times have changed, which calls for equal hard working!

Another in the group interposed: It is like our customs dictate that hard works are for men and not women, but times have changed; especially in urban areas you will realise that women are highly involved in different works such as construction. Therefore, sensitisation is required to awaken women in our localities.

Women's views: 'Ordinary' community women drawn from Luganga, Kitou and Pomelini villages in Kilolo District indicated that there were no cultural practices in the area that constrain women from participating and therefore benefiting from road construction projects. However, they indicated that benefits related to actual road construction were still skewed in favour of men because men are given higher priority even though women are also capable of doing those jobs. The women also felt the need for better community participation in road projects. A respondent observed the following: We would like to see the community more involved in the design and decisions such as where to put road bumps so as to reduce road accidents because we know which areas are highly populated or have many children. Also the community should get involved in the execution of the project. In terms of general benefits of completed road projects, the respondents affirmed strongly that the roads had benefitted all community members. A female respondent from Pomelini village noted: It has significantly improved transportation such that I can easily rush to the village dispensary, Ipamba, or the Iringa referral hospital whenever there is need. Last Thursday, I took my very sick daughter to Pomelini dispensary [and] was referred to Iringa hospital; I was able to rush her in a hired car where she got timely treatment.

While some women feel that they are disadvantaged when it comes to community consultations and the opportunities for paid roadwork, it is clear that other women here have imbued male concepts that women are weaker and thus cannot participate in the benefits associated with (paid) roadwork (despite the heavy household chores they perform and their inputs into community road work!). In this vein, women interviewed at Idete observed:

We are weak which is recorded in religious books that we are from men and cannot equal them in any way.

Men and women are not equal in terms of strength since we get to be pregnant or breastfeeding at times.

Especially disadvantaged groups: The main contribution of disadvantaged groups to road construction projects appears to come at the consultation stage where elders are invited to give advice (as in Kibaha district):

As for the elders, they are required to participate since their wisdom is important. (Women at Idete). Men with 'special needs' in many respects presented precisely the same perspectives as 'ordinary' men in terms of labour participation, though one interviewee observed that at least women benefitted because they cooked for the contractor's labourers, but those with disabilities were entirely without benefit:

In the villages, we are abandoned/forgotten especially for us with disabilities. In Iringa town, there is an organisation called CHAWATA but for us, we have been forgotten!

They suggested that disadvantaged women and older people could be given priority in duties such as clearing the land at the start of projects, helping with measurements (holding tape measures) and that local representatives should be identified by the district authorities to ensure that communication between contractors and local stakeholders was effective. Vulnerable women interviewed at Idete meanwhile confirmed the views that women had worked alongside men on community road works (as opposed to district roads). However, they also suggested that there should have been a little more community consultation between men and women in the case of the road works where demolition was involved, since couples needed to take a common position on their property concerning the proposed demolition. One woman's comment about people living with HIV and AIDS here was particularly telling:

Leaders view it as a humiliation, hence [they] prefer the physically fit in their place.

Perspectives from the local community leaders and administrations: In Kilolo, a number of village executive officers were interviewed about road works and offered very similar perspectives to those in Kibaha. In essence, while village officers may prepare plans for evaluation at ward level, share these at community meetings (with men and women) and note community feedback, the district offices organise the road projects, contractors (mostly men) tender to the district office and are appointed, and no consultation takes place with local communities. The village officers say this leads to poor road development; moreover, local communities gain no benefit in terms of employment in the road works:

Concerning the road issue in general; the final decisions on all the road plans are carried out at the district level. So even the contractors that are contracted deal with the district office. Because of this, when they start the road construction in respective areas they don't even bother to notify us. We find out by seeing graders, compactors and other facilities used for road construction parked on the sides of the roads without any sort of information.... They don't inform us and, they don't employ the

natives as well, even if they do they don't give them employment contracts.... The contractors usually come with finalised road maps and directives from higher authorities, so it becomes difficult to offer any sort of advice or assistance.

Even at consultation level, women reportedly play a smaller role, which is attributed mainly to their lack of self-confidence: I think they get scared and naturally they are shy; the fact that they have to stand and share their opinion in public terrifies them and makes them pull back.

However, as one of the officers observed, women should be able to contribute to road projects at all stage, including in the construction element: I personally think we should be fair because there are limitations too for men on some jobs. But on road construction, women just like men can carry concrete so there is no job that a woman can't do. I think there should be equality. Ward level officers (one male, two females from Ukumbi and Muruhe wards) confirmed that community men predominate in consultations and in district road projects where they are employed by contractors; women are more reticent, they suggested. They contrast that with the VTTP project earlier: in the VTTP project here, women attended in great numbers and were really committed to the work'. Similarly, in the community projects, women are involved substantially in clearing vegetation and building bridges. No particular effort is made to encourage older and disabled people to participate in consultations and they are not involved in road works, though orphans may clear the roadside vegetation. The lack of involvement of disadvantaged groups in consultations is seen as an issue that should be remedied, at least through appointing some representatives.

District office perspectives: a senior district development officer and the district community development officer confirmed much of the above. The district community development officer emphasised that the communities are little involved in district projects and thus are not committed to subsequent maintenance because they have no sense of ownership of the road. Where the community does get involved in a road project, it is principally men who do so and, with district projects, it is only when the community complains vociferously about the contractor's work that they will be listened to. Thus, the senior development officer noted that while women are involved in some village projects, they are less involved than men, while those with a disability are least likely to be involved of all. Involving women in projects at district level is not, he observed, a current top priority:

"At local village council, the situation happens as stipulated by the guidelines. At Ward level, likewise the gender consideration is truly followed. But at the district council level, despite the fact that the law requires certain gender representation in decision making, this does not happen; there are more men than women involved, which is against the requirements of the law."

Here he contrasted limited capacity of the district and the modest scale of district projects compared with the national level projects such as those implemented by Tanzania National Roads Agency (TANROADS), citing the case of the Iringa to Idete project for construction of a paved road: [it] involved the community development department to educate the community and prepare it on the gender issues. This was so successful and was implemented well. However, projects supervised by the district council are usually smaller projects and gender issues cannot be fully implemented. He then gave further examples where women's contribution was substantial and highly beneficial:

"We have projects that have been planned by women and overseen by them. We only offer little supervision and the rest the women do the work. The road from Nguruwe village to Mikumi was constructed through the efforts of women. They built a huge bridge across the river which was previously a challenge for women accessing a health facility. The construction was overseen by a woman. The same applies to the bridge constructed at Mhanga village. Despite the fact, the bridge was installed by the district council, the road was dug by the women to link Tupendane village to

Itonya and Mhanga villages. In Ihimbo village, there is a large bridge that was built by women. With support from the district council in terms of purchase of requisite materials (ballast, sand etc.), women carried concrete and laid it on the bridge. From my experience when women do the works themselves, no complaints emerge such as on rain flash water draining into their farms and causing erosion.... we have previously implemented the Village Travel Transportation Programme (VTTP). On the current project, there are two bridges being constructed located in Ihumbi and Ikumbo villages. For Mhanga village the road is long and still under construction at the moment and villagers are still working on it. What is taking long in this project is the construction of key bridges."

However, only one of the district's four engineers is currently female, and he suggested that this affects participation at planning, design and implementation of district projects. Moreover, in the district guidelines for appointment of contractors there is no reference to gender. He thus suggested the need for education of contractors on the importance of involving women and other disadvantaged groups, supported by formal guidelines and a budget to enable their application. The two small road contractors interviewed gave slightly different accounts: one told us that 80 to 85% of his labourers are female, but this includes labour outside direct construction work such as cooking food and water-carrying i.e. jobs commonly assigned to women:

For the process of preparing and laying concrete, this job is hard and only men can do it. But in fetching water and sand, this job is carried out by women... Jobs like checking on deliveries, a woman can do this since it involves simply counting the number of trips that the trucks have done in delivering materials like sand and heaps of soil. Men are only picked to do such jobs when there is no woman present. Activities like cooking food on site for the workers, delivering water and sand can be done by women. But situations would vary form one site to another.

Importantly, he said that he only takes workers to site who have specific skills such as welders and specialists in concrete handling. Otherwise he employs local unskilled labour. Where women are involved, it tends to be local women because it would be costly to bring them from his office base and conditions on site might well not be suitable for women from elsewhere. He also listed the advantages of employing women over men, including less alcoholism, less tendency to pilfer, they will take instructions and are punctual. He is reluctant to employ disadvantaged groups such as older people who may slow the work down because this will reduce his profits: "If a person with disability can deliver only 10% or only less output for me it's better I hand him TSH 10,000 (USD 4.47) and ask him to go eat [i.e. go buy food] and never get involved in my project."

A TANROADS contractor, interviewed at the district offices, observed that their unskilled workers on the current project are all local and all male (apart from their cook): They are all male due to the nature of our work which requires muscles... I opted for men only to avoid running into delays. They are recruited through local elders. Interestingly, however, he draws a contrast between the current and other sites, particularly Mtwara where they had a 50:50 gender ration for culvert construction: Mtwara, women are always more responsive and available for work... men are very selective about jobs and are somehow lazy!

5.2.2 Kilolo district benefits of road improvement

Men's views: Male perspectives on the advantages of improved roads in the district largely mirrored those of Kibaha: there are opportunities to earn an income from running motorcycle taxis and selling timber, also sale of cooked foods and other goods to passing travellers, improved access to farm produce markets and to dealers from distant areas, resulting in higher incomes (some dealers reportedly now come in even from Tanga and Kenya to buy crops), better supply of products such as groceries to the village, improved access to health services (especially in emergencies, but also in terms of health staff visiting the villages to provide information on prevention of AIDS and better

stocked health centres, ambulances in some settlements) and to education services. The fact that teachers are now willing to reside in the villages because of the improved accessibility is greatly appreciated. In the wet season, such advantages decline, especially when road sections become impassable. Unfortunately, it is at this time that the people would have harvested pears and legumes to take to market. Nevertheless, the respondents indicated that the improved road is often still better than what was there before. While transport services need further improvement (motorcycle fares are expensive and bus services sparse), they are substantially better than before the road improvements: from Iringa, for instance, it is now possible to make a trip to Kilolo town and return the same day. Some disadvantages of the road improvements were also noted at Idete – notably road accidents and increased robbery (with motorcycles allowing rapid removal of stolen goods).

It was apparent, however, that men with special needs rated all these advantages of the improved road even more than their 'ordinary' peers, not least for access to health services but even the smoother surface of the road when walking was appreciated (though they also noted negative issues, such as the fact that livestock and donkey carts are restricted on some new roads and the more rapid spread of STDs).

Women's views: for women, such as the widowed business woman in her late 30s interviewed at Ilula market, the improved roads and expanded motorcycle services are vital for marketing of perishable goods such as bananas, which she obtains from Ukoka and Udekwa: her profits have greatly increased, especially as she organises her trade by phone and using M-Pesa [discussed in a later section]. Many women talked about their improved businesses associated with reduced transport costs and speedier access to markets, while farmers talked about the benefits of improved and speedy access to their farms:

"Before the road, we used bicycles as mode of transportation. But now the road is good and we use vehicles and motorcycles to reach here. I spend about TSH 2000 (USD 0.89) as fare and it is worth it because I was spending about 4 hours on the road before it was constructed. I therefore can access my business premises early and with much ease. This enables me to serve more customers and therefore improving my income and business in general." Another business woman respondent from Luganga observed as follows:

"It helps us in our businesses as we are now able to travel to (Iringa) town and back to buy commodities, even twice a day. Moreover, we can now use cars to transport patients to the village dispensary even if they are not going to the regional hospitals; unlike back then when we used bicycles."

"On my part, I will talk about the Mwabingeta road which was constructed last year. Now we use TSH 2000 (USD 0.89) for the bus and TSH 3000 (USD 1.34) for motorcycle. So now it is better! Before, we would pay about TSH 50,000 (USD 22.37) to transport our agricultural goods, but now we pay only TSH 30,000 (USD 13.42) because the road is good."

Four women at Idete, however, observed that –despite the availability of improved transport services - some men do not allow their wives to take advantage of this potential for improved mobility:

"There are some husbands who do not like the idea of their wives travelling out. Some men do not like to travel along with their wives.

I am a victim of barring. My husband does not let me travel even for purchasing of personal items. My husband also doesn't allow me to travel. He chooses to go in my place whenever I want to. I am less informed of happenings out there.

We have no rights; our husbands decide for us. We are threatened with termination of our marriages should we choose to ignore their restrictions. We choose marriage over travel."

One comment made in a men's group at Luganga station indicates one reason why such restrictions are often applied: *It seems that women are easily tempted compared to men*. Women's potential promiscuity is a common reason presented by men across diverse African societies for not allowing their wives freedom of movement, whatever the availability of transport services (Porter 2011). A Community Development Officer in Kilolo District confirms this and avers that this cultural practice is common amongst all communities in the Iringa region. The Officer further observed that he had only ever seen one female *boda boda* operator. He said this was in Dar es Salaam and attributed it to "westernisation civilisation that is taking root in the city".

Especially disadvantaged groups: Many such women (and men) reiterated the advantages that 'ordinary' men and 'women' had raised, mostly associated with expanded and improved regularity of transport services, with knock-on impacts such as improved access to education for their children, to health services and to improved availability of household commodities which are now brought into the villages (and one woman now relies on her children to purchase goods from town for her because there is reliable transport to her village). They also noted, as did the 'disadvantaged' in Kibaha, that more visitors came to the villages. Additionally, the improved infrastructure has meant that women can save time on travel. With the discretionary time as a result of saving time, the women are able to engage in multiple sources of income or devote the time for their families. A 40-year-old primary school teacher who is also an HIV infected widow observed:

"I yesterday went to the farm and used only half an hour! I used my colleague's motorcycle. He has a farm adjacent to mine. So we often contribute fuel, TSH 1,000 (USD 0.45) each, round trip. By 2.00pm we were back to prepare meals for my children and to attend to other duties at home. Saving time enables me as a single mother to spend more time with my children and help them in many other ways such as homework."

A 16-year-old orphaned school girl from Ilula indicated that the improved roads had made traveling to school safer by reducing motorcycle accidents: "as a student, we use the road to school. The road is vastly improved and wide enough. We no longer compete with motorcycles for space on the road. This makes us feel safe."

For women who use wheelchairs, the road improvements have greatly improved their ability to travel within the settlement: at Ilula, one 50-year old woman who has been disabled since she contracted polio as a child reported as follows:

"It was really hard, I used to crawl because the tricycle could not pass through this bad road. The road was very rugged and one could get fall off the tricycle. The problem was compounded during the wet season because traction was poor and I had to get someone to push my wheelchair from the rear. [Prompt] Now I am very mobile; I use the tricycle to obtain my essentials from the market and can do petty business (I sell nuts, sugar-cane and ubuyu) with the tricycle.

She continued: For the disabled people, it is somehow easy now to do petty business and even carry

water from one place to another. I now can ferry my own water for domestic use and don't have to depend on middle men [prompt: How much do you save when you carry water yourself?] Often the bucket costs TSH 100 (USD 0.04) at the point of sale. But if you buy it [from middle men – our emphasis], it costs TSH 500 (USD 0.22). So, I save up to TSH 400 (USD 0.18)."

Annex 2 presents a series of photo stories from Kilolo district which provide very telling specific case studies of impacts of road improvement projects on women and other disadvantaged groups.

Perspectives from the local community leaders and Ward administrations:

The village executive officers reiterated the general benefits of the improved roads for men and women in terms of improved access to transport and other services. The Ward officers, however, pointed to the particular benefits men gain in terms of widespread travel, whether as passengers on public transport or as cyclists and drivers of motor vehicles, including motorcycle taxis. They thus suggested that 75% of the benefits accrue to men, and only 25% to women, who travel much less frequently, with the exception of a few women traders.

Perspectives from the district office:

The district officers restricted their comments to the road construction process only.

5.3 National level views on gender and other inequalities

At national level, key interviews took place at the President's Office: Regional Administration and Local Government [PO-RALG] and at the Ministry of Community Development, Gender, Women, the Elderly and Children. Others interviews were conducted subsequently with staff at the World Bank, African Development Bank (AfDB) and DFID.

PO-RALG plays a key role in the direction of district council road construction activities. *The Director of Infrastructure* at PO-RALG is a woman engineer, which augurs well for the advancement of gender issues in the organisation. Her expertise includes specific experience in one of our study districts, Kibaha, where she oversaw TANROADS activities. She emphasised the importance at PO-RALG of starting the planning process at the grass roots and identifying demand for roadwork. However, she also observed how budget constraints limit these activities. There are also now no gender experts at PO-RALG – they have been mainstreamed in other activities. When it comes to people with disabilities, she indicated that there is no breakdown of data regarding involvement in road programmes by age (and probably not, she thought, regarding disability) and no capacity building such as training initiatives for women facing intersecting inequalities: 'we are improving but we have not reached where we want to be'. Unfortunately, some of the very useful initiatives to promote women's involvement in the VVTP and LGTP have not been sustainable.

Thus, in terms of current gender inputs into road programmes, she noted that while women are represented in community level consultations, their voices sometimes tend to have less priority and their needs are not adequately addressed: 'it is normal for women to be marginalised in the society'. Thus, their involvement in road works is limited, despite guidelines that youth and women are to form at least 10% of the workforce for labour-based activities. The contractors are required to report quarterly on how many women have been involved in their project and their expenditure on women and HIV-related activities. However, she doubted the veracity of some of these reports. In procurement of contractors, meanwhile, the emphasis is on 'quality and experience'; she thought there is thus no gender requirement. The Director recalled that when she was working at Kibaha, women contractors were trained 'and some of them are going on well, they are big contractors now' but there is no specific programme to train women any longer. She suggested that it could be worthwhile revisiting the idea of positive discrimination to promote women as contractors. The Director thus concluded that more women are needed in senior positions in society, especially women technically trained as engineers. The fact that, at district level, there are very few women engineers (under 20 in total) does not help matters and needs attention. Nonetheless, the fact that there is now a woman chair of the Contractors' Registration Board, that there are a good number of women directors at this ministry, and that there are women parliamentarians and a woman Vice-President, are all very encouraging developments for women.

A **senior engineer at PO-RALG** emphasised that, for all the districts, it is a requirement that 20% of any budget has to be allocated to labour-based work 'to ensure that gender is considered'. When

asked whether they also conduct gender analysis, he replied 'we have reports [based on a form that contractors must complete regarding how many men and women have been employed on their project] but I am not sure if they are accurate'. Thus, the issue seems to be one of enforcement rather than regulation. The engineer thought this needed to be done jointly with the ministry responsible for gender issues but 'we don't have [any] kind of training'. In terms of monitoring, 'on the checklist there is something you need to fill up on gender issues' but in terms of reporting from the districts, 'it's not something which has been given weight to be considered'. Although the number of women is, he suggested, increasing in the roads sector, he argued that there is currently no gender focal person at the headquarters (unlike the situation at district level where community officers are expected to cover those issues) but he considered that it would be useful to have someone specifically in this role. (By contrast, the African Development Bank social development specialist, as noted below, talked about gender focal points in all donor funded projects). On new developments specifically to support marginalised groups like orphans, widows, disabled and older people, the senior engineer assessed, 'we are far away', but argued that they, like everyone else, benefitted when roads are improved.

A senior economist also interviewed at PO-RALG seemed to have little direct experience of dealing with road issues associated with gender and vulnerable populations and was unclear about conditions on the ground in the districts. He suggested that women can be engaged in clearing roadside vegetation during routine maintenance of roads but seemed to question their ability to contribute to other tasks: 'I don't think they are involved because they may lack technical knowhow'. In some of the projects, like TASAF, by contrast, he observed that the communities are 'actively involved', but thought the precise allocation of work to women had 'not yet been decided' but this would be put in the tender document for labour-based work.

A member of the Africa Community Access Partnership (AfCAP) steering committee, who knows both of the two study districts and Tanzania's road programmes well, helped clarify some points. He observed that appointment of road contractors is undertaken by the Public Works department and has to follow government procurement guidelines. The contractors are encouraged to recruit skilled and semi-skilled labourers from the areas where they are working and there are performance agreements which 'require contractors to be gender sensitive'. They are also required to consider 'handicapped' people in some areas of their projects. However, regarding women's specific road needs in these projects, he observes that it is the women officials in the district council who should draw attention to these issues; there are also community welfare officers and social and civil law officers. Overall, he presents a picture of ad hoc attention to gender issues in the district projects, by contrast with the focus on women's and children's needs in the planning process in the VTTP projects. Apparently, the Ministry of Works has also had a women's participation unit to promote women's involvement in projects, including road maintenance, but 'I am not sure how effective it is now'. At the national level there are efforts to produce more women engineers and there is now a Women's Chapter of the Institution of Engineers, but he suggested that more could be done at the community and district level, including establishing specific forums for women and other disadvantaged groups to ensure that they have a voice in planning.

A Senior Transport Specialist at the World Bank office reiterated many of the points made above. He had little specific working experience of district level activities (and no experience in our two study districts) but, with reference to the LGTP programme, he observed the challenges that the district administrations face in terms of capacity, even for implementing basic engineering components. Lack of a legal framework and inadequate resources further constrain such projects. Moreover, having a policy is one thing, implementation is another and monitoring the implementation is a different issue altogether. He suggested that it would be necessary to incentivise contractors to recruit with reference to gender composition of the workforce. In terms of production of road plans fully sensitive to the needs of women facing multidimensional inequalities, this would

require adequate resources, investment in socio-economic studies from the very inception of the project (as the Bank is now doing with reference to addressing female travel harassment in urban areas), disaggregated data collection on road contracts, and careful monitoring throughout such work.

Programme Manager and Infrastructure and Trade Adviser at DFID explained how they are compelled to ensure gender equality in all the work they do due to the UK's Gender Equality Act and DFID's internal requirement that every business case must contain gender equality. They explained that they do repair bottle necks of roads and restore access to villagers bringing economic benefits to every one. They added that as common sense tells women also benefit as their journey times are shorter. There are also indirect benefits for women who do vending during the construction work. Mostly support to road repair is given based on the prioritisation done by the PO-RALG. The prioritised support is then verified by TAs who check the choices are not politicised. "The system is not terribly scientific", added one of the respondents. Most bridges do not have feasibility studies so prior analysis of population needs is not available. There is limited gender specific analysis and enforcement of the gender policies in the road construction. This is also the management of the construction work and contractors is entirely done by the District Engineers who manage 300-500 roads.

In terms of the types of reports that DFID receives from the Government, the interviewees admitted that the reports are not explicit on the level of inclusion but DFID does check during monitoring visits although the focus tends to be on youth. Often issues raised by youth are on relationship between community and contractors and whether or not the contractors have consulted them.

Commenting on what can be done to increase better enforcement of the gender mainstreaming in transport sector the respondents added that more investment is needed to improve evidence gathering through effective monitoring, evaluation and research to understand better how gender is included in the transport sector. They also acknowledged the need to increase awareness among different sectors as the issues of older women and those with disability need to be addressed through multi-sectoral approaches. They identified the need for innovation in motorcycles so they include side sittings for the sick and weak. It is also important to strengthen links between technical people and social workers so the solution for those with limited mobility is holistic including improving care at home.

Furthermore, they added, based on the common-sense fact that women are benefiting from rural roads, we need to go beyond and improve our scientific analysis. '…In phase 2 we can learn and include in our business case. We can include some people and questions we can consider during our visits to make sure there is good representation of respondents when we conduct monitoring….' They welcomed ideas from HelpAge to improve the monitoring work.

The Director of Gender, Ministry of Health, Community Development, Gender, Children and Elderly: This official is familiar with Kibaha district but not Kilolo. He emphasised the value of engaging with communities from the very start when new projects are planned, through the entire project process, starting with the community leadership. However, he also observed that, because this takes time, people who are keen to develop a project may avoid such full engagement. On the importance of gender and gender analysis, he noted at one point in the discussion that 'having a policy itself is an achievement'. However, he also emphasised, at other points, the lack of adequate appreciation of the importance of gender analysis among some groups — not only within the communities but including some professionals in both the public and private sector, and stressed that further training will be needed because it takes time to change behaviour. He made a general observation that some people still consider gender mainstreaming as a separate process. The moment you integrate gender concerns you won't fail with any stage of your project implementation cycle: the identification, design, communication, if those issues are addressed from the onset. But if

gender continues to be treated as a separate item, you will say in the middle that no, no, no maybe let us just add the word women and see how it works. That's what most of the people do to create an impression that yes, gender issues have been mainstreamed, whereas in actual sense the whole thing was not evoked from the beginning, it was not taken on board. At various points in the discussion, this point about the importance not merely of Guidelines but their implementation and enforcement was further emphasised. The Director also commented on gender budgeting issues, arguing that 'if we don't allocate enough resources, then how are we going to do it. We need to mobilise resources'.

There is a Women's Information Centre in the Ministry headquarters (which the Director suggested is now used extensively and might be usefully replicated widely across the country). There are also gender focal points across government sectors and the Ministry has a gender micro working group where gender focal points are invited to report quarterly on gender empowerment and gender mainstreaming in their sector: this 'underground' work is extremely valuable. The Director also noted that they have a close working relationship with Tamisemi [PO-RALG] and further suggested that the good thing of Tamisemi is that they are committed people, from district to ward level, and gender is currently integrated in training curricula.

Regarding the needs of other marginalised groups (older people, widows, people with a disability) the Director has fewer observations but emphasised the importance of direct engagement in communities: the need to 'capture their voices' at project design stage, and to ensure these groups were adequately considered in policy and associated guidelines.

A social development specialist working for the African Development Bank: like the Director of Gender (above), focused on broad gender issues as a development challenge in Tanzania. He has no special knowledge of the transport sector in general or the VTTP in particular. Instead, he emphasised AfDB's wider gender strategy (including its appointment of a Gender Special Envoy at the bank's headquarters in Abidjan), their efforts to build a strong gender strategy in the programmes in Tanzania, and the challenges they faced. He identified the need for a comprehensive legal framework plus adequate resources to support initial training, capacity building and implementation of policy to support women facing multidimensional inequalities (as did the World Bank representative). Other points made by the social development specialist included the importance of better harmonisation between the 'mother' ministry and associated ministries, and the need for continuous comprehensive monitoring and production of relevant realistic indicators to ensure carefully disaggregated data (which takes time and resources). He further emphasised the necessity of much stronger sensitisation to gender issues among village governments, councils and ward executive officers (estimating 80% in these groups to be 'infected by negative gender stereotypes'); some Members of Parliament need such training too.

5.4 Findings: Phones as a complementary/alternative connector

5.4.1 Kibaha district

Phones are widely used across Kibaha district, though the network coverage of individual providers varies:

Even the older people own phones. They carry the phones in their pouches and seldom stay without phones...we are all at par; the disabled have them [too] [Kwala village leader].

Those who do not own phones can usually find one to borrow from a family member, neighbour or friend, though one interviewee spoke feelingly about how those who don't have a working phone available have to 'bow down and beg.'

Community members interviewed in Kibaha district for the most part spoke in very general but extremely positive terms about the importance of phones and how they intersect with physical transport arrangements:

There is no other thing like a phone. It facilitates quick access to money and solutions to challenges. [Community leader, Mperamumbi]

They observed how phones are used for organising transport (especially motorcycle taxis) for diverse activities, but particularly moving farm produce to market and for calling an ambulance from the nearest hospital (at Mlandizi) when people are very sick. They are also used for communicating messages as a substitute for travel (as in the case of the Kwala ward community development officer who contacts community members by phone when loans become available for women's groups). Increasingly they also substitute for travel in the case of transfer and receipt of money via M-Pesa (especially older people receiving money from their children in town). The female contractor interviewed in Kibaha who also runs a microfinance company lending to women's groups observed that phones have grown the size of women's networks and that, in her groups, members plan together mostly through the phone; some are also M-Pesa (mobile money transfer) agents. We encountered many people who earn an income from dealing in phone services such as mobile money transfer, charging and mending phones (a wholly male occupation), and selling airtime. Many women as well as men have access to mobile phones, though some younger men are reportedly concerned that if their wives have a phone they may use this to communicate with other men (again, raising the issue of women's potential promiscuity noted earlier). The main disadvantages of using a phone they identified were the costs of airtime and difficulties (and cost) of charging it in areas without access to mains electricity.

In accordance with our earlier study in Kibaha district (Porter, Tewodros et al. 2013), a village executive suggested that most (around 90%) of the older people and disabled have access to mobile phones 'and all the telephone towers are here in the village'. These are especially beneficial he suggested (and as our earlier work showed) in enabling older people to call their children and ask them to send money. Some 'ordinary' respondents also specifically recognised the value of mobile phones to many disadvantaged groups such as older people and the disabled, but queried the value of phones to those who are deaf or blind. However, as others pointed out, the deaf can use SMS if they can read, or put their phone on vibrate and get someone else to read the message, while the blind can use voice messaging.

Interestingly, the strongest discussion of their personal specific phone use and benefits came from the 'special' women – older women, disabled and widows. A 78-year-old widow, for instance, observed how the phone helps with her charcoal business: since the road is in good state I just make a call to my vendor who delivers in time, on a bicycle. [P: how beneficial is the phone to your business?] Very important! Even when you don't have one, you can easily use a neighbour's. I use it to call my supplier. I also send him M-Pesa. Another younger woman, a widow in her late 40s who has two children in secondary school and is involved in two self-help groups similarly uses the phone extensively in her business:

Phones have very much simplified our lives, for instance myself, as a business woman, I usually make calls to inquire about availability of groceries and their prices at the market before I go there. I make my purchases on phone.... I use the phone daily. I even had a business call a few minutes ago, I am sure you saw me walk out.

A third, a 40-year-old widow and single mother who has been selling fish successfully on the main Ruvu-Mlandizi road for some years similarly reported, the phone helps me in my fish business to inquire on prices from my vendors. So I call in advance to ascertain the situation on the ground to determine whether to make the journey to Bagamoyo or not. I don't therefore need to travel only to come back empty handed; I call before I travel. This saves time and money.

Although the phone can help substantially, in terms of time and money, in many circumstances it cannot substitute entirely for physical travel and the road quality thus remains significant. The fish monger who is benefitting so much from reduced travel observed, 'They need to improve the local roads. Last year my son fell sick and I had to call for transportation. We got an ambulance from the health centre but it took long to get to Tumbi hospital'. However, even when road problems arise, mobile phones can help in their solution, as demonstrated in one example given concerning a heavy compactor that broke a culvert and thus closed a road. The operator was able to call charcoal traders in the neighbourhood who came and fixed it temporarily so that everyone could pass.

5.4.2 Kilolo district

Kilolo district provided very similar stories and views, although our data for Kilolo (2015) indicated that, at the time of the survey, there was less access among older people than in Kibaha district. Now however, informants suggested that almost all people, across the district, including older people (and with the sole exception of children under around 5 years of age and possibly some deaf or blind people), have access to mobile phones and benefit from that, whether their access is by ownership or borrowing (though young people were assessed to obtain the greatest benefit from their use). In many cases older people are given phones by their children living in town. However, as in Kibaha there was also one reference to men limiting women's access to phones; in this case it came from the focus group with vulnerable women at Idete.

The same range of uses was reported as in Kibaha: for organising transport (in particular, calling motorcycle taxis, but also ambulances (especially in emergencies), organising to receive mobile money from children in town and substituting for transport, as in the case of tracking goods sent to the city or sending information to relatives and others. The vital importance for disabled people of being able to call motorcycle transport to their door was also recognised. There was also reference to the reduction of travel as a result of access to phones.

As in Kibaha district, most of the discussion was in very general terms. One male participant gave the example of how he communicates with a deaf plumber: I just text him when I need him, and he comes and does the job here. However, one of the most detailed examples of phone use came from a woman trader in her late 30s who is a widow and sells vegetables in Ilula market. She now obtains produce such as bananas and carrots from farmers without travelling to meet them, working through dealer contacts to whom she sends money. This is usually done by M-Pesa, but sometimes sends the money through a motorcycle taxi driver. She gives the driver the local dealer's phone contact so that when he arrives in the producing area he will call them and they will hand over the goods they have purchased for her. This has substantially improved her profits and saved her time. When business is good she does this twice per week and now has a good link with a dealer in Mbeya. The Mbeya dealer buys carrots for her, and in exchange she buys tomatoes locally and sends them up to that woman.

Initially, I was very sceptical about using my little saving to buy a phone. I would often argue that I had no one to communicate with and therefore no need for a phone. But a friend insisted that a phone would help improve my business. Now I am glad that I did! One, it saves time, and two, costs. Now my purchases are just a phone call away!... Bus fare would cost me TSH 10,000 – 12,000 (USD 4.47-5.37) to Mbeya, shipping a bag of fresh produce would consume a further TSH 6,000 (USD 2.68). Furthermore, it would take me two days to deliver the produce. But now, I just send money through M-Pesa and receive the goods the next day, no travel costs, not time wastage. I also make more money because I don't have to shut my shop or request my daughter to miss school for me to travel to Mbeya. ... Cheaper and efficient!

The greatest challenge of phone use in this district is the network. Vast areas in Kilolo are not covered by any network and participants thus indicated that they have to travel long distances to access a network and make calls/send Short Messages (SMS). (While some Kibaha respondents pointed to a similar challenge, the network coverage is better than in Kilolo.) Other challenges in Kilolo include the costs of buying airtime and charging the phone (the latter only feasible in town or with village solar power units). This will be a particular challenge for those with limited ability to walk and with very low incomes. Despite these constraints, efforts are made to acquire and maintain phones. As the district community development officer observed:

We are meant to be in interaction with other people. Regardless of age or disability, the phones bring them close and comfort. Also they learn and get entertained

6. Summary of Findings

As mentioned in the introductions, the research was set out to investigate five key questions. This concluding section draws on the findings presented above to answer each in turn.

1) Did gender mainstreaming in rural transport programmes in Tanzania result in transformative changes for women?

This question requires reflection firstly regarding the potential transformations associated with women's involvement in road construction and maintenance programmes, secondly regarding wider impacts and potential transformations following the completion of road improvements.

In terms of potential transformations associated with women's involvement in the road construction process, the evidence is diverse but overall is not encouraging. Firstly, even with regard to consultations with women at community level, these seem to have been limited and to have had little impact with respect to women's empowerment. Evidence from both districts suggests that whenever community members are called to meetings, women come forward in larger numbers than their male counterparts. However, their contributions are sparse and there is no clear indication that their voices are heard. Rather, we have comments from Kibaha district Ward officials, for instance, that suggest there is a high level of prejudice against women's potential to contribute (notably, the observation that they are only there at the meetings because they have more spare time than men!). So, as one woman Ward social development officer (interviewed separately) observed, although women may represent 80% of the community participants at such meetings, most of the responses in discussion will come from the men: women are not encouraged to speak out.

In Kilolo district, village officers made similar observations about women's fear of making contributions during the consultation process, and how this can be attributed to their lack of self-confidence. However, it is important to bear in mind that much district-based road work tendered out to contractors in both districts appears to occur without consultations with any community members, women or men, despite requirements that they should be 'gender-sensitive' (according to information from an AFCAP steering committee member).

These observations were further confirmed at national level, where the woman Director of Infrastructure at PO-RALG observed that while women are represented in community-level consultations, their voices may 'tend to have less priority', while another senior engineer commented that lack of a gender focal person at headquarters hindered enforcement of current regulations regarding gender inputs.

All of this seemingly contrasts with the report from the Kilolo district community development officer that in major projects such as TANROADS, villagers were very effectively sensitised to gender issues from the start: unfortunately, the researchers met no women who recounted such experiences.

When it comes to potential transformations through direct employment of women in road construction, the story is little more encouraging. Very few of the village women interviewed had any recent experience of contributing to road projects (except unpaid community road work, including clearing vegetation, where they are still extensively involved). However, many of them expressed their keen interest in being recruited for construction work, and a few had very positive experiences of working on labour-based road projects in the past, notably a woman who was recruited in the late 1990s to work on the road in Makazi Mapya, Kibaha district and, according to Ward officers and the District Development Officer in Kilolo district, the many women who participated in the VTTP project in the district and were 'really committed' to that work, planning and overseeing their inputs and even building bridges. Men interviewed in Luganga area, in Kilolo district, also referred back to the equal gender balance observed in the VTTP project in which they participated and the fact that it had been coordinated by a local woman. Generally, in both Kibaha and Kilolo, the TASAF road projects seem to have involved and benefited marginalised women the most.

However, both community men and the ward officers observed that, on the district-administered projects, once contractors are appointed at the district level and bring in their heavy machinery to work on the roads, almost all skilled and semi-skilled labour employed on the project comes from outside the community, and largely consists of men. The male contractors who were interviewed confirmed this, observing that, at most, locals could only benefit from a small amount of work as casual un-skilled manual labour. The one exception came from the woman director of a small construction company in Kibaha district who has a team of professionals which includes a woman quantity surveyor and also employs women in road works, including mixing concrete. Her story gives testimony to the potential for women to contribute significantly and successfully at diverse levels in road construction. This view was further reinforced by the woman road technician interviewed in Kibaha district who has worked very successfully with women in the past when they have been employed on contracts.

For the most part, however, local (negative) perspectives on women's attributes – in this case regarding their strength, ability and keenness to participate in hard physical work - are telling. Village men in both districts talked about women's incapacity and unwillingness to undertake the heavy work required in road construction, and alternative distractions such as social activities and family duties. Ward officials, meanwhile, suggested women are simply more reticent. In Kilolo district, some women had clearly imbibed and accepted male views, suggesting that they are weaker than men (despite the extensive inputs that women can be observed making into extremely heavy agricultural and household work).

With reference to the impact of completed/improved roads, the evidence of benefits accrued by women is far stronger, though whether this is transformative for the individual woman is likely to depend substantially on her specific circumstances. Moreover, it is likely that many of the improvements experienced owe little to specific gender mainstreaming efforts.

Many women in both Kibaha and Kilolo districts report the advantages they have gained from improved transport services that have followed road improvement. Even though motorcycle taxis are not well-liked by women, being potentially dangerous when driven at high speed, they bring access to key services in emergencies, particularly health services. Motorcycle taxi fares are expensive, but in some locations, transport fares have reportedly reduced due to the arrival of

minibuses ('vans') and buses. The 'van' services offer much better connection to market centres than was hitherto the case. Many women in both districts thus reported improved incomes from marketing farm produce, particularly perishable products, and other goods. However, shortage of capital often remains a constraint on business expansion for women, while men's reluctance to allow their womenfolk to travel appeared to be a substantial constraint for some women in Kilolo district (see section on women's views).

Having taken into account all three elements potentially affecting women's benefits from gender mainstreaming in transport programmes, an assessment of transformative change among women living in rural communities suggests a largely negative conclusion. Despite strong attention to gender in the RTTP and LGTV programmes, and a very positive response from women involved, much prejudice continues to prevail at local level around women's potential to make inputs into the design of programmes and in construction activities themselves: this is commonly reflected in interviews with males and, on occasions, it is evident that women have accepted these assessments, to their personal detriment. Once roads are constructed there is more opportunity for women to access benefits in terms of health, incomes and improved travel safety (and for future women to benefit as girls have improved access to education). Moreover, with improved infrastructure and hence the speed of travel, women have more disposable time to devote to family and pursue multiple projects. However, it would seem that only a few women are able to build the substantial businesses or access to other activities that could be indicative of transformative change in their lives.

2) Are women facing intersecting inequalities benefiting from the gender mainstreaming programmes?

There is even less evidence for women facing intersecting inequalities than for 'ordinary' women of any potential to benefit from the gender mainstreaming programmes that involve women's direct employment in roadwork, unless they are specifically targeted (as some have been under TASAF, in which case women reported that the income gained had been crucial simply for buying food for the household).

Some groups – notably people living with HIV and AIDS or with a severe disability – face particular prejudice. This is likely to be especially the case now that so many road contracts are tendered out to contractors by the district administrations. The contractors have profit not social goals as a priority. An interview with one district contractor showed the degree of potential discrimination against people with disabilities and older people: he does not want to employ anyone who might slow down his work because of the potential impact on profits and in such a case he would prefer to pay them to go away than employ them! Another district contractor similarly observed that he opts only to employ men to avoid being delayed.

Once the road is built or improved, women with multidimensional inequalities may benefit as much as many other women in their neighbourhood, through the improved access and reduced time they and other family members experience when they need to reach health and education services, to access markets or passing trade along the road, and to reach their farms. However, as with 'ordinary' women, benefits depend on the extent to which male family members allow them to travel, and also on other specific personal and family circumstances, including access to family-owned vehicles.

Those who are seriously physically disabled and unable to travel may gain specific advantages from improved access to the village in that health services (including HIV and AIDS testing and treatment) in the villages have improved and they receive more visitors than before, while wheelchair users may benefit from smoother roads which improve their mobility (as in the case of the woman at Ilula in Kilolo district who can now get to market, do some petty trading and collect her own water instead of having to pay someone to do this for her). Orphaned girls also benefitted from completed

roads just like other 'ordinary' girls in the community. The benefits include reduced exposure to motorcycle accidents and the ease of evacuation during medical emergencies. Children with severe disabilities possibly benefit least from the improved roads, as we were informed in Kibaha district, because they remain hidden from view by their families.

3) What are the transformative changes women with multidimensional inequalities specifically older women, women with disabilities and widows would like to see through gender mainstreaming programmes?

Women with multidimensional inequalities were modest in their suggestions regarding gender mainstreaming programmes towards potentially transformative change: the main point was that more involvement in the preparatory (consultation) stages of road programmes is needed (one Kibaha woman said that apart from TASAF projects, they currently only tend to learn about new road projects at the opening ceremony!) They would like to see more of the TASAF projects as in these they were specifically involved.

Generally, however, they focused on broader issues that affect the community as a whole, such as the poor quality of roads in the wet season and need for more tarmacking, the accidents associated with motorcycle taxis, high costs of travel in remoter locations and the need for improved transport services.

Men with disabilities and older men who were interviewed tended to be more forthcoming in offering suggestions. In Kibaha, this included transport to the site for the physically disabled, their being offered lighter work closer to home, and a rescheduling of women's contributions so they can leave site early to cook family meals. In Kilolo, community men suggested that the 'higher authorities' should make it 'mandatory' for women and other vulnerable groups to be brought into road work.

4) What are some of the constraints and factors facilitating transformative changes for women facing multiple levels of exclusion in rural transport programmes such as the Village Travel and Transport Programme (VTTP) and the Local Government Transport Programme (LGTP)?

Constraints:

- Male constraints on women's mobility associated with suspicions around their potential promiscuity.
- Male prejudices around the abilities of women, especially those multiplydisadvantaged, to contribute effectively and efficiently to road work, or even the consultations that precede it.
- Cost lack of budgets that adequately covers mainstreaming requirements.
- Lack of women professionals in the roads sector, especially (but not only) trained engineers.
- Regulations to support women facing multiple levels of exclusion are not enough without adequate monitoring these regulations will not be implemented effectively.

Facilitating factors: [i.e. factors mostly absent currently, but which could be encouraged in the future]

- Champions in positions of power are crucial more women trained as engineers; more women promoted to senior positions in the road/transport sector would help.
- Ensuring the voices of women facing multiple levels of exclusion are captured at the very

- beginning of road project planning and that regular consultations with this group continue through the project.
- Education and sensitisation of contractors, community leaders, ward leaders and district level staff across the road sector to the issues faced by women facing multiple levels of exclusion and strategies which can help address their needs.
- Adequate ring-fenced budgeting to facilitate all aspects of work to support women facing multiple levels of exclusion.
- Careful monitoring to ensure that regulations concerning attention to the needs and rights of women facing multiple levels of exclusion are implemented and they are not harassed.
- Women's information offices on project sites where they can provide grievances/ feedback.
- Attention to development of a facilitating work environment: crèche facilities, genderfriendly latrines.
- Ensure appropriate scheduling and organisation of activities for women facing multiple levels of exclusion e.g. shorter working hours, delegation of tasks closer to home.
- Specially-designed contracts, training and skills development for women facing multiple levels of exclusion [i.e. so they get equal pay and are not left with the most unskilled, low paid work]
- Gender-equitable recruitment requirements, with particular attention to women facing multiple levels of exclusion.
- Collect and report sex-disaggregated project performance data, including specific data on women facing multiple levels of exclusion.
- 5) What disparities (if any) do women with intersecting inequalities have in access, use and benefit from the mobile phone/information communications technology (ICT) that is bridging the rural transport and communication gap?

The role that phones are now playing for a majority of women with intersecting inequalities is particularly notable, both in terms of organising transport and in substituting phone communication for journeys. While this group mostly has less access to finance to purchase phones, airtime and pay for battery charging, the massive improvement the phone offers for organising their lives encourages many women with intersecting inequalities to allocate a portion of their sparse resources to obtaining and maintaining their phone access. Even if they do not own a phone, they will try to keep funds to buy airtime so they can then borrow a phone of a family member or neighbour. The evidence we report suggests that many women in this group appear to use and benefit more from mobile phones than the general population. The only exception is likely to be where the husbands of such women do not allow them access to a mobile phone.

7. Recommendations

In addition to the **facilitating factors** under No. 4 above, the study makes the following recommendations:

1. The interviews with women working within the road sector and associated local government offer evidence that transformative change is possible for professional women working in this arena. But even here, the interviews were with just a few confident, successful women, ranging from PO-RALG's Director of infrastructure, through to the Ward social development office who spoke out so firmly about the constraints limiting women's opportunities to benefit from the road programmes. Moreover, a section of both men and women respondents observed the need for a much greater emphasis on training women (engineers, in particular) who can act as role models for their peers. It would appear that greater effort

- was focused on building women's capacity to work in the sector in the past for instance, some women contractors were once trained but this programme seems to have finished. Similarly, there are no longer any gender experts at PO-RALG they have been mainstreamed elsewhere. Some revitalisation of those programmes is clearly needed.
- 2. From reviewing these benefits, it seems unlikely that gender mainstreaming in road works has had any significant beneficial impact on women facing intersecting inequalities, with the exception of those involved in the TASAF programme. Once the roads are constructed, as noted above, the advantages that women with intersecting inequalities gain depend on personal and family circumstances. Some of the policy documents developed to mainstream gender in the transport sector have made good commitments but with limited enforceability. It is therefore recommended that enforcement of these policies and guidelines be done. Practical ways of enforcing the policies are proposed in some of the recommendations below.
- 3. The Director of PO-RALG indicated that there is no breakdown of data regarding impact of their programmes by age (and probably not, she thought, regarding disability) and no capacity building such as training initiatives for women facing intersecting inequalities
- 4. At district level, suggestions focused on the need for contractors to be educated on the importance of including women and other disadvantaged groups, supported by formal guidelines and a budget to enable its application. Once this is done, it should be made mandatory for contractors to implement at least certain minimum standards that mainstream gender is road construction work, with special attention given to women facing multiple forms of exclusion. The Contractors' Registration Board ought to be made aware about this so it becomes a champion advocating for gender mainstreaming in road construction.
- 5. At national level the Director of Gender in the Ministry of Health, Community Development, Gender, Children and Elderly pointed to the importance of ensuring that gender mainstreaming is fully incorporated at the very start of projects, with adequate resources allocated to that work, and emphasised the need to capture the voices of those most disadvantaged in communities at the design stage. He also called for attention to ensuring these groups are adequately considered in policy and associated guidelines
- 6. Community research participants and their leaders requested for more involvement in road construction activities in their districts, from the preparatory to execution. One way to achieve this is to facilitate the establishment of labour-based groups in the rural areas. There is also need for better coordination and more involvement by the District Community Development Office in road construction initiatives. The Rural Road Agency (currently under formulation at the PO-RALG) should consider these recommendations in its plans. The Agency should also ensure that gender mainstreaming in road construction is enforced and the Agency should be in the forefront in advocating for gender mainstreaming.
- 7. The study has demonstrated that the transformations associated with women's involvement in the road construction process are not inspiring. Evidence also shows that women continue to face prejudice, negative gender stereotypes and are least likely to participate and therefore benefit from road construction activities. To mitigate this, it is important that more awareness is created through multiple channels such as electronic and print media, local meetings and so forth.
- 8. The gender issues raised in this research need to be addressed through a multi-sectoral approach. There is a need for more inter-agency dialogue to continuously enforce gender mainstreaming in government programmes including in the transport sector. The Gender Policy of 2000 that is currently under review should factor in this recommendation.

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Annex 1: Photo-story – Kibaha District

Focus on transformative change that women have experienced as a result of road projects

Our survey focused on road infrastructure projects in rural Tanzania, Kibaha District specifically Mlandizi Area (Mlandizi-Madimla, Mlandizi-Makazi Mapya -Ngeta and Kongowe- Soga roads). All are completed earth roads that are passable, especially during dry seasons, despite the fact that dust remains the greatest challenge for users. Other challenges include: steep hills and valleys and poor drainage facilities-culverts and bridges that were improperly fixed and would occasionally be swept away during heavy rains. The roads are predominantly used by motorcycle transport operators and pedestrians accessing markets, social centres, meeting places and hospitals (located in Mlandizi and Ngeta areas).

Here, we focus on gender mainstreaming in rural transport programmes and whether they have resulted in transformative changes for women (including women facing intersecting inequalities), identification of some of the constraints and factors facilitating transformation for women facing multiple levels of exclusion in rural transport programmes (e.g. VTTP and LGTP) and disparities (if any) that women with intersecting inequalities have in the access and use of mobile phone / ICT technology that could bridge the rural transport and communication gap. Below is a demonstration of the above aspects based on field visits and interviews with selected women living and working along the identified roads.



Case 1: Salome Nzike (widow, 53); a resident of Makazi Mapya area along the Mlandizi-Ngeta Road

Case 1: Mainstreaming Women in Road Construction Projects

Salome (pictured in **Case 1**) was among the first inhabitants of the Makazi-Mapya area in 1999. The construction of a road was among the first community activities to enhance accessibility to their homes as well as markets.

During the construction, she was actively involved, alongside other women and men, in the creation of the access road to their new homes. Her specific roles included forest clearance, digging and occasionally cooking food for the rest of the community involved in the road construction. She however argues that the road construction works that followed thereafter largely involved very few members of the community and use of the machines owned by the local government – wholly operated by men (thus denying them employment). But, she appreciates the fact that the passable state of the road facilitates quicker movement of people and transportation of goods to the market (predominantly using motorcycles), as well as enhanced security of pedestrians. She argues that "even women now can freely walk along the wider roads –compared to footpaths in the past- without fear of

being attacked by robbers or even rapists". The challenges faced by women in the usage of motorcycles is the bumpy roads and the fact that motorcycles sometimes travel too fast, to the extent that older women find it uncomfortable to withstand. With respect to use of mobile phones, Salome says her phone helps her quickly alert the motorcyclists (boda boda) whenever she would need service-to which they respond quickly. The same motorcyclists help them deliver their phones to Mlandizi market for charging since their village has not been supplied with electricity. The main challenge with phone usage is the fact it requires an allocation of money from the household expenditures. She states "when my husband was alive, he would generate more income for the family and finance all expenditures including those related to phone usage.".

Case 2: Mama Mlowe



Mama Mlowe (pictured left) is also a widow who sells food items and a few household goods under a makeshift shed along the Mlandizi-Madimla road, about 2 km from Mlandizi market.

She argues that her business has grown due to increased usage of the road by the residents of Madimla village, as well as business men travelling to Madimla for fresh agricultural produce. She is able to provide for her family using the proceeds from her business. She obtains her wares from the markets easily using the road transport infrastructure. She however, says:

"My business is hampered by the dusty conditions of the road during dry seasons and muddy conditions when it rains. Motorcyclists sometimes ride dangerously along the road and there is a greater risk of an accident. Due to my close proximity to Mlandizi market, I can call my suppliers and motorcyclist transport operators to facilitate the replenishment of my stocks and also pay for the goods through the phone prior to the delivery".

Some of her customers even make orders and payments for food deliveries through mobile phones. However, Mama Mlowe feels extremely excluded in the road construction projects. "I don't get any information prior to the start of the road construction project- I only see men clearing bushes and digging trenches. Yet I would suggest that the drainage systems could better be done

Assessment of Transformative Changes: Business Engagement to Enhance Earnings

to avoid difficulties that road users (including myself) encounter during rainy seasons."

The only existing 2 shops at Makazi Mapya centre along the Mlandizi-Ngeta road are operated by women; one



Case 3: Adelyan Quoro's general retail shop at Makazi Mapya centre

selling general retail wares (mostly households goods) in an enclosed permanent building/shop as well as vegetables and the other baking food for sale in a semi-open air structure. Adelyan is a woman aged 43. She is the sole owner and operator of a general retail shop in Makazi-Mapya centre since 2011. She sells both food and non-food household items. She contends that the shop enables her and her family to make a living from the sales which are between TSH 10,000 (USD 4.47) and TSH 15,000 (6.71) daily. The road enables her to obtain supplies from Mlandizi market easily and facilitates customers in accessing her shop. Adelyan has found the mobile phone useful to her business since she can send money to wholesalers. Her main challenge is the impassable state of the road during rainy season.

Case 4 shows 'Mama' Sofia engaging in the business of baking and selling small cakes (Mandazis and Vitumbua) to road users at Makazi Mapya centre, situated along the Mlandizi-Ngeta road. She started her business in early 2016 upon construction of the building she is using as a shelter. She makes a profit of about TSH 2,500-5,000 (USD 1.12 to 2.24) a day from sales, which helps her provide for family needs as well as offset daily rental fees of TSH 1,000 for use of the shelter. Her main customers include the road users and the surrounding community. Besides, she sells fish (on the stand outside the sheltered cooking area) to augment her business earnings, which generates additional estimated earnings of between TSH 2000-3000 (USD 0.89-1.34) per day.

While she points out that her main challenge is the dusty condition of the road during dry seasons -that works against her business, there are still profits that enable her to provide for her family. Just like Adelyan Quoro, the road helps her easily access her inputs from Mlandizi market, water supply project that was developed along the road as well as conveniently lead customers to her business establishment.



Case 4: Mama Sofia, 49, a single mother of three bakes Mandazi & Vitumbua (varied types of small cakes) for sale at Makazi Mapya , along centre, along Mlandizi-Ngeta Road



Case 5: Women engaging in sale of fish (background) while others clean up cashew nuts (front) for sale, along the Kongowe-Soga Road

Quicker and Safer access to markets for their wares /goods





Case 6: Women use motorcycle transport predominantly used along Mlandizi-Madimla Road to travel to Mlandizi market centre. On the left is a woman with a small baby onboard a motorcycle

Prior to the construction of the roads, many women were forced to walk for over 12 km in search of household goods and services such as healthcare for themselves and their children from Mlandizi market. This exposed them to various dangers including risk of rape and security of their wares. The road has facilitated their movement from one point to another (**Case 6**). This has helped them save time while seeking services from the market and the health centre located at Mlandizi market besides improving their safety while travelling. Motorcycle transport service is readily available; just a 'phone-call away'.



Case 7: Neema (inset, 13) and Ramadhan(9) of Madimla Primary School walk back home along the Mlandizi-Kilangalanga –Madimla Road.

Case 7 also shows children walking back home from Madimla Primary school using the road. Despite the dust (during dry seasons) or mud (during rainy spells). Neema (inset and in the picture) contends that walking along the road gives them a sense of safety.

Case 8 shows school girls walking freely back home from Makazi Mapya primary school. Prior to the road improvement, girls would have to be accompanied by older men (relatives) to and from school due the risk of being raped and robbed of their belongings. Peter Samuel; the Secretary of the village local government of Makazi-Mapya, Kibaha District contends that after the road was constructed, parents do not have to worry about the safety of their children on their way to and from school.



Case 8: School girls walk back home from Makazi Mapya

Enhanced access to agricultural / food producing zones of Madimla for Mlandizi residents

Madimla village is rich in agricultural soil that supports farming of almost all types of vegetables, but commonly: bamia (okra), tomatoes, and hoho (capsicums), as well as green maize. Most of these produce are perishable goods that require quick access to markets. Women are engaged in the planting, weeding and harvesting of the produce from these farms-but mostly as hired labourers. This gives them income all year round since the agricultural activities are supported by irrigation facilities that have been put in place by farm owners. Men pack the produce in sacks and deliver to Mlandizi market predominantly using motorcycles. Part of the produce is consumed locally by the villagers, thus provides nutritional/health benefits to all.

Case 9 shows the irrigated farms (farthest end in the picture) located off the

Mlandizi-Madimla road that women are employed on a daily basis. The road offers easy access to markets for farm inputs as well as produce upon harvest.

Case 9: Selected agricultural farms for fresh produce vegetables located next to Madimla Market Centre. Fresh produce are delivered to the market using the road shown; the road under study.



Pictures below show women engaging in different agricultural activities. While some are harvesting okra (bamia) (Case 10), others are tending to tomato (Case 11) and capsicum farms (Case 12), men packing the bamia produce (Case 13) and ferrying them to the market using a motorcycle (Case 14). The passable state of the road enables transporters deliver all produce to the market in good time. The income generated from sales is partly used to pay the harvesters (predominantly women) as well as the men packers and transporters. Thus the engagement provides a source of livelihood to many families living in the villages served by the road.



Case 10: Two women work as hired labourers harvesting Bamia (Okra) along the Mlandizi-Madimla Road.

Case 11: A woman works as a hired labourer weeding and harvesting tomatoes, from a farm along the Mlandizi-Madimla Road.



Case 12: A woman works as a hired labourer irrigating a capsicum farm situated along the Mlandizi-Madimla Road.

The woman fetches water from a nearby spring located about 300 metres away



Case 13: Men pack the okra (bamia) produce (Left picture) and green maize produce (Right Picture) ready for transportation to the market.



Case 14: Men ferrying bamia to the market

Enhanced Accessibility to Ngeta Health facility

Ngeta Health Dispensary, located at Ngeta Centre adjacent to Ngeta Primary School and along the Mlandizi-Makazi Mapya-Ngeta Road, Kibaha District serves between 200 and 500 people every day from the surrounding communities (Case 15). The Doctor-in-Charge of the facility says that the most common ailments treated at the health facility include viral infections for children and maternal healthcare (prenatal care). He further argues that the location of the health facility adjacent to the road enables people living with disabilities —especially those that cannot walk with ease, have quick access to the facility. Drug supplies are delivered by road to the heath facility, and emergency cases (health) are referred to Mlandizi Hospital; sometimes ambulance services are made possible by the existence of the road, especially currently in its passable state. Prior to the construction of the road, residents (predominantly women carrying children on their backs) were forced to walk in search of healthcare services from Mlandizi Hospital, located about 8 km away. This would only happen as measures of last resort, otherwise self medication was common (using herbs and stored-up painkillers).



Case 15: An elderlywWoman rests under a tree after being served at Ngeta Health Dispensary, located in Ngeta Market, along the Makazi Mapya Ngeta Road. The health facility was built adjacent to the road (right picture)

Other important projects have emerged as a result of the road infrastructure project

There is a water supply project developed in the Ngeta area that supplies tap water to over 7 villages, namely: Ngeta, Makazi-Mapya, Kikongo, Lupunga, Mwanambwito, Kidai, Kisabi, and Madimla (Case 16). Accessibility to the project sites and delivery of construction materials (and maintenance materials too) for the project were facilitated by the road in focus. Prior to the water project, women would be forced to walk over 3 km in search of water from neighbouring rivers. Now, the water tank developed by the project accommodates 100,000 litres of clean water is adequate to serve all families in the 7 villages. Each village contributes a monthly minimal fee of TSH 20,000 (USD 8.95) to finance bills for water treatment and pumping costs using electricity or generator. The rest of the water infrastructure- piping and water collection points- are located besides the roads to enhance accessibility for repairs (Case 16 and Case 17, respectively).



Case 16: Water Supply Infrastructure (Tank) built besides the Makazi-Mapya Ngeta Road. The water tank accommodates 100,000 litres of water and serves 7 villages.



Case 17: Water piping infrastructure strategically positioned besides the road to ease accessibility during repairs.



Case 18: Water collection points for the community have been strategically positioned besides the road to ease accessibility by locals.

Water collection points also offer women an opportunity to gather and socialise – exchanging ideas (right picture).

Formation of women investment and social groups:

Upendo Widows Group that was started in 2015 (by 10 members) currently has a membership of 51 drawn from the surrounding villages (radius of 3 km from Soga Market). The good road network facilitates their meetings which occur every Thursday. They meet at Soga market centre next to Government offices because of security-since they usually collect TSH 700 (USD 0.31) from each member in every meeting. Road transport-especially boda-boda – is the main mode of transport to the meetings since most of them are over 60 years old- and would have a challenge walking. From its pool of resources, the group extends small loans to its members at affordable interest rates. The loans are largely for engaging in agricultural activity as well as making household purchases of essential durable goods-such as seats, utensils, beddings, etc. The Chairlady of the group (second right holding book in Case 19) says the passable state of the road enables them to conveniently gather at the Soga market centre. Members can make purchases of household items after the meeting and can easily obtain transport services back home since most of the motorcycle operators are stationed at the centre.



Case 19: 'Upendo Women Group' meeting on session (Left Picture) outside a building adjacent to Government offices in Soga Market, Kibaha District. The Chairlady (holding book) leads the rest of the members.

On the right is a picture of the Group making their monthly contributions

Annex 2: Photo-story – Kilolo District





After ages of waiting for the government to build a road and a bridge for them, the impoverished villagers of Kiwalamo village decided to take a stupendous task of building these themselves. Kiwalamo is one of the villages in Kilolo district located north-east of Iringa region. Major economic activities practiced by its inhabitants include timber sawing and agriculture - they grow maize, beans and wheat. The 6 km Kiwalamo-Kisiwa road connects the village to Kidabaga, the main trading centre in the area where most of the services including markets for their products and health services are located. They use it to transport timber and other farm produce to markets. They also use it to transport patients to Kidabaga or Iringa town for medical attention. Students from different parts of the country depend on this road as they travel to the famous Lutangiro secondary school.

Community initiative

For many years, there was no road connecting Kiwalamo to Kidabaga, making it difficult for the villagers to access a number of important social services.

"Many patients in need of health care lost their lives while being transported by bicycles to the hospital in Kidabaga or Iringa town located 6 km and 50 km away respectively", said Elijus Luhanga, Kiwalamo village executive officer.

Transportation of timber and farm products was a big challenge as well. Consequently, tonnes of timber and excess farm produce ended up rotting as it was not easy to transport them to the markets. Efforts by community leaders to convince the district council to construct the road did not succeed.

"They kept giving us promises which were never fulfilled", said Luhanga.

Tired of these unfulfilled promises by the district council, the villagers decided to take it upon themselves to construct the 6 km stretch. Men and women of all age groups and abilities participated in this community project. Since the road had to cross Lukosi river, they had to

construct a bridge. When this was done, in the subsequent years the villagers carried out routine maintenance of the road as well as the bridge. According to the village chairman, Godfrey Kikula, the bridge had the capacity of up to 8 tonnes and it made their village easily accessible.



"But in 2011 the bridge was removed by the district council who said they wanted to construct a better one within a period of three months", said Kikula. "But now about 6 years down the line the work has stalled".

Meanwhile, people from the village are forced to use an alternative road which is 17 km to Kidabaga. The headmaster of Lutangiro Secondary School, Sebastian Chaula, complained of increased cost of transporting food stuffs to his school.

"Transport for students is also a challenge. They now have to travel a longer distance and pay more unnecessarily. People from 9 surrounding villages have greatly been affected by the removal of the bridge", said Chaula.

He said it was surprising that the district council removed the bridge without constructing an alternative, temporary one, as is the normal practice in construction works. One of the villagers Yujeni M-Pesa also wondered why the district council did not bother to involve the beneficiaries of the project.

"It is our project and not theirs. We really don't understand why we were left out in the planning and implementation stages of the project", he said. They don't share our suffering that's why they have abandoned it", he said.

One of the main reasons for unsuccessful development projects is a lack of active, effective and lasting participation of the targeted beneficiaries. This explains the need for projects to promote the participation of people, particularly, marginalised women and men in rural areas.

We will build it again

Having painfully waited for six years for the district council to construct the bridge, Kiwalamo villagers said they are fed up and can wait no longer.



"We have mobilised ourselves to construct the bridge again. We have already brought together wooden poles, timber, stones and nails. Lutangiro school and villagers are willing to contribute their hard earned money so we can buy cement", said Chaula.



Both men and women of different abilities are taking part in this project. Once this project is completed, it will reduce the travel distance to the trading centre by 11 km.

Story 2: Participation of special groups of people in rural transport projects



In male dominated communities, where the identity and value of a woman is determined through her husband, widowhood is challenging. The woman often becomes subject of all forms of abuse, humiliation, harassment, property grabbing and loneliness. In many cases she is excluded from

participating in family and community development activities.

Things are changing

However, the situation is different for 54-year-old Era Myenda, a widow from Magome village in Kilolo district, north – east of Iringa region.

"My husband died 16 years ago (in 2000) but I thank God, none of his relatives or any other person from the community has ever attempted to grab our land and other property. I live cordially with all of them and I'm involved in different family and community activities", she said.

"I also know many other widows in this area who are not facing any form of discrimination. In the past incidents of property grabbing and harassment were common. But all this is now history in our area".

Era said before her husband died they owned a 4-acre (1.6 hectares) piece of land where they planted trees for timber and construction poles. They also owned a 3-acre-farm (1.2 hectares) where they have been growing maize, beans and peas.

"We have maintained these properties and we now sell timber and construction poles from the tree plantation. We also sell part of the agriculture produce and use the money to meet our daily needs which include health expenses and school fees for my four children", she said.

Transport projects are transforming lives of rural communities



Era said unlike many patriarchal communities in the region, she is grateful that her community leaders ensure that all groups of people participate actively in different community development projects, including road construction as well as periodic road maintenance, to ensure the road is kept in good condition.

"These projects benefits all of us equally, regardless of sex, political affiliation or abilities. We are very happy that our leaders encourage everyone in the community to take part right from planning to implementation", she said.

Era explained how all groups of people in her community participated in the construction of Msonza–Kimara earth road, which is under the jurisdiction of Kilolo District council. The road has opened up Magome and surrounding villages to the rest of the region.

"Before the construction of this road, it was very difficult to transport goods, particularly tree plantation and agricultural products, which are a major source of income for most of households here. Very few buyers would manage to come. As such the prices for our products were normally very low while products in shops were very expensive", said Era.



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here. Very few buyers would manage to come. As such the prices for our products were normally very low while products in shops were very expensive", said Era.

"The inaccessibility of this place affected everyone in this area equally. That is why when this road project came, all of us joined hands and participated in the construction works to ensure it came to fruition as soon as possible".

Era said since the road became operational many buyers are now able to come to buy their products. "There is now a big competition which helps them to sell their products at higher prices and earn more income than before.



Era said the road has also helped members of her community to access cheaper public transport. "We now have buses which commute between Iringa town and Ndengisiwiri. In the past traders relied on bicycles while some carried goods on their heads from Iringa town, a distance of over 40km. As a result, highly demanded products such as kerosene, soap and sugar were sold at exorbitant prices", she said.



However, Era said the earth road is impassable during the rainy season. During this period people in the area are forced to walk long distances to Kidabago, the main trading centre in the area, where most of the services including a health centre and reliable markets are located.

"No wonder our income drops significantly during this period", she said.
Era said it is necessary to upgrade the earth road to gravel so it provides all-season access to both sides of the village as well as to services and markets in the region.



Era said although it takes 10 and 12 years to start benefiting from tree plantations, she gets up to 2 million TSH (USD894.86) per year from the sales of timber and construction poles alone.

Connectivity and mobility is the key to reaching out and opening opportunities for rural communities. With the construction of rural roads in Kilolo district, lives of the disadvantages groups of people are improving.

Story 3: Participation of PWDs in rural development projects



Tomasi Magubika, 30, is one of the people termed as 'disabled' who have always had the will to accomplish what others thought impossible, but now people around them are seeing the possibilities more and more. It is pretty evident that Tomasi is not the one to sit and wait for something to happen. He refuses to be limited.

Background

Tomasi is married and has two children - a girl and a boy. He went to Itunda primary school -around Ilula main trading centre - where he studied up to standard 7.

"When my father died, I stayed with my aunt. But later I disagreed with her and she kicked me out of her house", he said. "At first I thought it was going to be the end of the road for my life. But no, it didn't turn out that way". Tomasi decided to come back to the village and embark on farming activities.

"Because I am disabled, many people at the time doubted if I was going to succeed. But I have always worked hard and succeeded to prove them wrong", he said.



Benefits of Ilula - Ilambilole road

"I have been growing tomatoes, onions, maize and sun flower. I own 5 acres of land. I do it myself with the assistance of my wife. But sometimes we engage boys and girls who do piece works. We do both rain fed and irrigation farming. My income per annum ranges from 2 -3 million TSH (USD894.86-1,342.29). But in the past, before Ilula – Ilambilole road, which connects us to Ilula trading centre, was constructed, there were not many customers coming to this area. I used to get between 250,000 and 300,000 TSH (USD 111.86-134.23) only per year."



Apart from farming, Tomasi also keeps chicken, ducks and pigs.

I remember a few years ago, our local leaders called for a meeting which I attended, to discuss the transportation problems of our area. The meeting resolved to ask the district council to help in constructing the road. That is the only level of the project I participated.

Later the district council identified the contractor and awarded him the contract. Unfortunately, the contractor did not involve us in any way. He employed people from outside this community to construct this road.

"However we are benefiting. Now more customers come to buy farm produce right here at the farm. We no longer have to worry about transport. Also public transport is now easily accessible and cheaper".



During the rainy season the road it is impassable. There is need to upgrade it to gravel status so it is passable throughout the year.

"I am happy that special groups of people are now beginning to be recognised and are at least given a chance to participate in different community projects", said Tomasi.

Annex 3: Key informant guide District - Gender and Community Devt Officers

INTRODUCTION

Good morning/afternoon/evening

We are conducting a study with HelpAge International

We are trying to find out if there have been any results, impacts and developments arising from gender considerations in road construction and other infrastructure projects in the district.

We will take our findings to the community and to other policy makers so they will know about these issues for learning purposes and also how to solve them.

Please could you give me a little time to participate in our study?

If you are unhappy about the questions, you can tell me at any time and we will stop.

We will not use your name in any way in this research.

- 1. Tell us/me about your position and role at this district council (probe for terms of reference, length/history on the current role, role in development projects in general)
- 2. Explain your role as far as road infrastructure, road construction and maintenance is concerned (probe for participation in design, in planning, in feasibility studies, procurement, recruitment activities of road construction projects)
- 3. Please explain your previous role/position (if applicable) prior to taking up the position of a gender specialist at this district (probe for background and also his/her general experiences within the district i.e. outside the transport sector)
- 4. Describe how your experiences in providing gender related services for other departments/development projects differs or is similar with the expertise you provide for road development projects
- 5. Describe how planning for infrastructure projects in this district is done?
- 6. How are men involved in planning for infrastructure? (probe for participation in feasibility studies, procurement, recruitment activities of the project)
- 7. How are women involved in planning for infrastructure? (probe for participation in feasibility studies, procurement, recruitment activities of the project)
- 8. Between men and women, who participate most at this planning phase? *Probe for who is likely to hold the decision-making power*)
- 9. Is gender analysis conducted (to identifying specific transport needs and constraints of women) prior to the design of the projects?
- 10. In your opinion, do you think gender dimensions of the project are adequately addressed in the design of the project including environmental assessments? Explain
- 11. Are you as a gender specialist/District Community development officer included on the project team/ or does the project team identify a specific staff to facilitate and ensure women participate in these projects? (probe whether gender experts are consulted in the design and implementation of the projects)
- 12. What mechanisms do you as local leaders put in place to ensure that groups such as a) orphaned girls, b) widows, c) older people and d) the disabled participate and benefit from road construction projects? What about after completion of these projects?
- 13. What do you think should be done more to ensure that older women, women with disabilities and widows are included and benefit more in transport programmes?
- 14. Is that feasible at the moment? What are the biggest constraints to making this happen?
- 15. To what extent would you say that the senior management/leadership in this district council is committed to gender equality (probe for percentage of women represented in the senior

- management/leadership, their role and how the leadership insures that women are given equal chances)
- 16. To what extent are district project documents and reports gender sensitive? (probe for uses gender neutral language; does not contain gender stereotypes; uses examples of men and women in case studies, data is sex and age disaggregated)
- 17. Do most older women, women with disabilities and widows have access to mobile phones in this district? If not, why not?
 - a. If so, how do they access them?
 - b. Does owning a mobile phone improve the lives of older women, women with disabilities and widows? Can you give a specific example?
 - c. Can you think of any barriers/difficulties of access these specific groups might experience (prompt for reasons of these difficulties)?

Annex 4: Key informant guide for District - level engineers and contractors

- 1. Tell us/me about your position and role at this district council (probe for length of time, role in infrastructure/road transport and construction)
- 2. Describe how planning for infrastructure projects in this district is done?
- 3. How are men involved in planning for infrastructure? (probe for participation in feasibility studies, procurement, recruitment activities of the project)
- 4. How are women involved in planning for infrastructure? (probe for participation in feasibility studies, procurement, recruitment activities of the project).
- 5. Between men and women, who participate most at this planning phase? Who makes the decisions?
- 6. To what extent do you conduct gender analysis (to identify specific transport needs and constraints of women) prior to the design of construction of transport/infrastructure projects? Explain
- 7. To what extent do you include in the contracts with road contractors a clause on integration and commitment to gender issues? How do you do to enforce this?
- 8. Are specific resources earmarked for ensuring gender is mainstreamed in the project (probe for human resources such as gender expert; financial resources for capacity building/training on gender for staff involved in the programme; resources facilitating involvement of women in the programme)
- 9. What mechanisms do you put in place to ensure that your transport/infrastructure projects involve women and men equally or equitably, in various phases of construction?
- 10. What mechanisms do you put in place to ensure the participation of marginalised women, e.g. widows, women with reduced mobility, women with disability, women with HIV etc.?
- 11. Do you have any mechanisms to ensure that trainings and capacity building initiatives and methodologies cater for both women and men?
- 12. What do you think should be done more to ensure older women, women with disabilities and widows are included and benefit more in transport programmes?

Annex 5: Key informant guide for Ward Executive Officers and Village Leaders

- 1. Tell us/me about your position and your administrative role (probe for length of time, role in infrastructure/road transport and construction)
- 2. Describe how the planning for the infrastructure projects implemented in your area of jurisdiction has been conducted?
- 3. How are men involved in planning for infrastructure? (probe for participation in feasibility studies, procurement, recruitment activities of the project)
- 4. How are women involved in planning for infrastructure? (probe for participation in feasibility studies, procurement, recruitment activities of the project).
- 5. Between men and women, who participate most at this planning phase? Who makes the decisions?
- 6. Citing examples, between men and women, who do you think benefits most from road construction projects when the road is being built? (NB: the focus here is only during construction)
- 7. Citing examples, between men and women, who do you think benefits most from completed road projects when the road construction has been finished? (NB: the focus here is the benefits after completion of the road project-s)
- 8. Do you as local leaders have any mechanisms in place to ensure that groups such as orphaned girls, widows, older people and the disabled participate and benefit from road construction projects? What about after completion of these projects? What are the mechanisms?
- 9. What do you think should be done more to ensure that:
 - a. older women are included and benefit more in transport programmes?
 - b. women with disabilities are included and benefit more in transport programmes?
 - c. Widows are included and benefit more in transport programmes?
 - d. Women with disabilities are included and benefit more in transport programmes?
 - e. Women with HIV are included and benefit more in transport programmes?
- 10. To what extent would you say that the senior management/leadership at the district level are committed to gender equality in road projects? (probe for percentage of women represented in the senior management/leadership, their role and how the leadership insures that women are given equal chances)
- 11. Do you think there should be more concern to improve gender equality in road projects?
- 12. Do most older women, women with disabilities and widows have access to mobile phones in this district? If not, why not, if so, how do they access them?
- 13. Does owning a mobile phone improve the lives of older women, women with disabilities and widows? Can you give a specific example?
- 14. Are there any barriers/difficulties of access to mobile phones/ICT that these specific groups might experience? (prompt for reasons of these difficulties).

Annex 6: Key informant guide for national level respondents

- 1. Kindly tell us/me about your position and role
- 2. Do you have any experience regarding our 2 study districts? [if so, what?]
- 3. Kindly describe how the planning process for infrastructure projects at the district level is done? Does planning in Kibaha and Kilolo follow the same pattern as elsewhere or are there likely to be differences across districts? If so, please explain?
- 4. To what extent does this planning ensure that both women and men in communities are involved especially at the project design and planning stage? (probe for participation in feasibility studies, procurement, recruitment activities of the project. Between men and women, who participate most at this planning phase?) Nationally? In our 2 districts? Other districts you know about?
- 5. Is gender analysis conducted (to identifying specific transport needs and constraints of women) prior to the design of the projects? Nationally? In Kibaha and Kilolo districts? Other districts you know about?
- 6. In your opinion, do you think gender dimensions of the project are adequately addressed in the design of various project? Explain probe more for VTTP and LGTP? Nationally? In Kibaha and Kilolo districts? Other districts you know about?
- 7. Who facilitates and ensures women participate in these projects? (*probe whether gender experts are consulted in the design and implementation of the projects*)? Nationally? In Kibaha and Kilolo districts? Other districts you know about?
- 8. Does the Ministry have any mechanisms to ensure that marginalised groups such as orphaned girls, widows, older people and the disabled participate and benefit from road construction projects? What about after completion of these projects?
- 9. Is there any mechanism to ensure that training and capacity building initiatives and methodologies are in place when road construction projects commence and that they cater for both men and women?
- 10. Are they any specific conditions and guidelines to ensure that Road Construction Contractors implement and adhere to gender issues?
- 11. Is there any mechanism to ensure effective follow up and enforcement on implementation of the above mentioned guidelines?
- 12. To what extent are project implementation reports from the district level gender sensitive? (probe for uses gender neutral language; does not contain gender stereotypes; uses examples of men and women in case studies, data is sex and age disaggregated)
- 13. What do you think should be done more to ensure that older women, women with disabilities and widows are included and benefit more in transport programmes?
- 14. To what extent would you say that the Ministry is committed to gender equality and how is this being translated to the district and lower levels?
- 15. Do you think results and lessons learnt from implementation of projects and interventions towards gender mainstreaming can be used in other projects? Please explain
- 16. What have been the challenges in implementing the Gender and Development Policy of 1999 in road construction projects? Give your recommendations of ways to improve the implementation of this policy.

Annex 7: Checklist for Focus Group Discussions

- 1. Thinking of your life before the transport project (e.g. before the roads were built) and comparing it with your life now, could you tell us what are some of the changes both positive and negative:
 - For you personally
 - For your family/household
 - For your community/society
 - Access to social services for your community/society increase? Probe for in HIV/AIDS awareness, access to health services, treatment and counselling
 - → Ask the participants to rank the changes in order from the most important to the least important for them compare results to see if any patterns emerge
- 2. What changes would you have loved to see (as an ideal case scenario) as a result of the transport programme / road construction, etc.
 - → Follow the same instructions as in the previous exercise but ask participants to imagine the changes they would have liked to see and not just those that took place (although they can overlap!)
- 3. Do you agree or disagree with the following statements? (count and record the number of people that agree/disagree with the statement and ask them to explain their answers)
 - 1. Both women and men were consulted equally during the project planning stage?
 - 2. Some cultural practices affect women's access to transport services
 - 3. Both women and men benefitted equally at the project construction stage
 - 4. The proportion of women and men selected to participate in road or path maintenance is equal
 - 5. The relevant authorities always ensure that road construction and maintenance activities involve
 - i. older people,
 - ii. people with disabilities,
 - iii. orphaned girls
 - iv. widows
 - v. women with HIV
 - 6. The short-term and long-term results of the project will benefit both women and men equitably
- 4. Are there barriers or constraints to women's equal participation in the planning of the road construction projects? Explain
- 5. Are there barriers or constraints to women's equal participation in the implementation of road construction project? Explain
- 6. What do you think should be done more to ensure that older women, women with disabilities and widows are included and benefit more in transport programmes?
- 7. Does owning a mobile phone help people in this area get better access to transport?
- 8. Does owning a mobile phone help people in this area get better access to services [e.g. health care]? Which people benefit least from the availability of mobile phones in the district? Why?