





The Failure of Rural Transport Planning and Policy to Support Women's Entrepreneurship/

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with

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Launched in June 2008 and managed by Crown Agents, the five year-long, UK government (DFID) funded project, supports research and knowledge sharing between participating countries to enhance the uptake of low cost, proven solutions for rural access that maximise the use of local resources.

The programme is currently active in Ethiopia, Kenya, Ghana, Malawi, Mozambique, Tanzania, Zambia, South Africa, Democratic Republic of Congo and South Sudan and is developing relationships with a number of other countries and regional organisations across Africa.

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Report summary

This report explores the failure of rural transport planning and policy to support women entrepreneurs in rural Nigeria. It was undertaken by Plymouth University in conjunction with Pan-Atlantic University and Integrated Transport Planning Ltd. The report comprises of a number of chapters. Chapter 2 begins with a literature review which is used to set the scene in terms of the context within Nigeria and specific issues relating to rural transport, gender and women entrepreneurs. Chapter 3 provides a brief overview of the methodology that was used for this work, before chapter 4 summarises the survey of Nigerian women entrepreneurs that formed the first part of the original research and reports the findings from some more in-depth interviews with a sub-sample of the survey respondents. Next chapter 5 provides a discussion of the results before chapter 6 presents the conclusions to the research, and chapter 7 makes some recommendations. Overall the research identified that transport planning and policy is failing to support Nigerian women entrepreneurs (and others) due to poor roads, a lack of transport availability, high costs, unreliable and infrequent services, long journey times and security issues. Further, women are more keenly affected by some of these issues because of a range of additional gender, cultural and religious reasons. Action is needed to improve the transport system and ensure it takes account of the unique needs of women, and supports them in their business endeavours.

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List of Abbreviations	
AFCAP: Africa Community Access Programme	
CDF: Comprehensive Development Framework	
CIA: Central Intelligence Association	
DFID: Department for International Development	
FMWASD: Federal Ministry of Women's Affairs and Social Development	
GTTG: Gender and Transport Thematic Group	
IFRTD: International Forum for Rural Transport Development	
IMT: Intermediate Means of Transport	
MDG: Millennium Development Goals	
PRSP Poverty Reduction Strategy Paper	
RAMP: Rural Access and Mobility Project	
SSA: Sub-Saharan Africa	
TEA: Total Entrepreneurial Activity	
UNECA: United Nations Economic Commission for Africa	
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Abstract/

This research explores the failure of rural transport planning and policy to support women's entrepreneurship in rural Nigeria. It draws upon a literature review, and primary research with women entrepreneurs from the YouWiN! enterprise competition in the form of a survey and in-depth interviews to identify the transport and wider barriers they encounter. It also explores the extent to which these have an impact upon the women's businesses and looks at the ways in which they have overcome these barriers. The women encounter a range of barriers associated with transport, including a lack of available services, high and variable transport costs, unreliability, long journey times, a lack of capacity for people and freight, and security. Many of the transport barriers seem to be associated with the poor quality and lack of maintenance of the road network. These barriers are exacerbated by wider issues associated with gender, culture and religion which affect overall mobility. The women have tried to overcome some of these barriers through making changes to the way they run their businesses, for example through employing more staff or getting new business premises. However the favoured solution (or potential solution) is to buy a car and learn to drive. Overall it is clear that a lack of formal transport planning and policy, coupled with a poor quality road network is having an impact on the ability of women to operate their businesses successfully. It is necessary to take action to rectify this through continuing to improve the road network, developing transport policy that considers the needs of women, regulation of transport services, provision of funding to enable women to buy their own vehicles and measuring the situation and monitoring improvements using the AFCAP/IFRTD Rural Transport Indicators.

Executive summary

This research seeks to explore the failure of rural transport planning and policy in Nigeria to support women's entrepreneurship. As such, the overall objective of the research is to:

"identify the reasons behind the failures of rural transport planning and policy to improve women's access to facilities, services and entrepreneurship in Nigeria, and to identify women led entrepreneurial solutions to overcoming such barriers".

In order to do this it draws upon an extensive literature review, accompanied by primary research with women who have participated in the YouWiN! programme, a scheme which provides funding to help women entrepreneurs establish or expand their businesses.

Nigeria is situated in West Africa, with a sea coast and borders with 4 other countries. It is the most populous country in Africa, and average life expectancy is 52 years (below the average for the rest of sub-Saharan Africa). The literacy level is around 61%, however more men than women are able to read and write. Nigeria has significant natural resources, but poverty levels are high, and many Nigerians live in "absolute poverty". Farming is the main occupation in rural areas, and women constitute a significant portion of the workforce.

50% of Nigerians live in rural areas and 90% of these people are employed in agriculture. Two thirds of these people are classed as rural poor, and living on less than \$1 per day. There is a trend of rural to urban migration as people seek to leave rural areas to find employment in cities. Agriculture is the dominant activity, but more households are diversifying in order to survive. Rural areas closer to towns tend to be more successful in terms of economic output as businesses can get a better price for their produce. In many rural areas, especially the more remote ones, provision of services is very poor, and people have to travel long distances to access healthcare, education and other necessary services.

Transport infrastructure and services provide mobility and facilitate social and economic development. Therefore they are very important in a developing country. Nigeria has an extensive transport network comprising of road, rail, air and sea infrastructure. However much of it is in very poor condition due to a lack of maintenance. In Nigeria transport makes up a disproportionate portion of the cost of goods due to the poor quality road network. Formal national transport policy appears to be lacking, although a number of draft national transport policies have been produced historically. It is clear that the transport infrastructure in Nigeria requires significant investment, and the message coming from the draft national transport policies is that much of this should be sought from the private sector.

The rural transport network in Nigeria consists of a wide range of roads, many of which are low quality and a proportion of which become impassable in the rainy season. This has a negative impact on the productivity of rural households and can increase the level of poverty that they experience. However as well as improving the roads, the wider transport system (such as the provision of transport services) is lacking in rural areas where many households cannot afford their own vehicles. Transport services therefore need to cater for farmers transporting their produce to market, and be equipped to carry freight as well as people. Where transport services exist, they are often very expensive and overcrowded, although there is an increasing level of service provided by motorcycle taxis which make rural communities feel more "connected". Overall it is clear that the transport system is fundamental to economic and social development in rural areas, and significant investment is required to ensure it is of a suitable level.

The Nigerian Government has been attempting to mainstream gender issues for more than 10 years. While some positive progress has been made women are still subject to major inequalities. These include lower levels of education, lower earnings, difficulty accessing credit, poor healthcare, higher taxes and physical violence. It is clear that more work is necessary to minimise these inequalities and support women to reach their potential. Furthermore, women in rural areas in Africa are universally transport constrained. They have a lack of access to transport services (compared to men) and this has an impact on their ability to become entrepreneurs. The causes of this inequality are multi-faceted, and included the traditional subordinate role of women in the household, the additional household responsibilities (such as childcare) borne by women, religion, risk of crime and psychological stress. In additional, rural transport policy and projects have not necessarily accounted for the different needs of women, and therefore have generally

failed at reducing the transport inequality. Action is required in order to ensure women can be economically active, and can access other services such as healthcare and education.

Becoming an entrepreneur is one way that women can generate an income for their household. However while women make up a significant portion of the agricultural labour force, their contributions to economic development have been largely ignored. Women in Nigeria face an uphill struggle if they want to become entrepreneurs, and must contend with barriers such as a lack of access to finance and a lack of support from government, and from their families. This indicates that action needs to be taken at national policy level, and at lower levels to ensure that the barriers experienced by women entrepreneurs and potential women entrepreneurs are minimised as much as possible. A greater understanding of these barriers is also required as it is apparent they are not universal. In order to address these barriers directly, the Nigerian Government has supported a National Business Plan competition over the last 4 years (YouWin!). In 2012/13 this was open only to women, providing finance and support to 1,200 women from across the country. The mitigation of these key barriers to business development provides the opportunity to focus in on the impact of next-level constraints to developing businesses, such as transport.

The AFCAP/IFRTD rural transport indicators were developed to provide a better way of measuring rural transport development in Africa. A need for the indicators was identified because existing indicators did not take account of how "good" rural transport services are, and there is a tendency to measure outputs of projects rather than outcomes. The indicators comprise two headline indicators that have been tested and are ready to use, two indicators for rural small and medium freight services which could be used but are known to be less measurable and more variable, two further indicators that are not yet ready to use but could be developed and tested fairly quickly and four more complex sets of indicators relating to key stakeholders.

The research comprised an in-depth literature review accompanied by 2 stages of primary research – a telephone survey with 92 respondents and in-depth telephone interviews with 20 respondents. The sample was drawn from the YouWiN! database of 1200 women who have been awarded funding via the YouWiN competition during 2012/13. The survey explored the characteristics of the women and their businesses, their use of transport, and the impact of transport on their business activities. The interview explored the transport issues and barriers facing the women in more detail, and discussed potential solutions.

In general, the women in the study were found to have fewer children and be more educated than the "average" Nigerian woman. The majority used public transport for their business activities, although a large portion also used private vehicles, and some women used a combination of both. More than half the respondents identified transport barriers that they felt limited the growth of their business, while a similar amount suggested a number of wider barriers that have an impact on business performance. Transport barriers included the poor quality of the road network, high cost of transport, poor availability of transport, long journey length and low levels of reliability and convenience. These were exacerbated by wider barriers including poor treatment of women on transport services, safety concerns, and being unable to use certain forms of transport, or transport at certain times of the day as a result of religious beliefs. The consensus of opinion regarding the wider barriers was less clear cut than regarding transport barriers.

Overall the women were not very aware of local and state level transport policies. In order to overcome barriers some women made changes to their business arrangements, but the "best" solution for individuals was posited as being to buy a car and learn to drive. The women responded positively to some other policy improvements that were suggested, including improvements to the quality of the road network, better regulation of transport services, women drivers of transport services and finance to help women buy their own business vehicles.

It appears to be difficult for women to operate as entrepreneurs in Nigeria due to a range of gender, social and cultural barriers. A range of transport barriers were identified that are likely to affect everyone, including poor quality of highway infrastructure (including lack of investment in routine maintenance), availability and access to transport, a lack of passenger and freight capacity, the cost of transport (and its inherent variability) and safety / security issues. These broadly accord with the barriers identified in the literature. Some of these barriers are likely to have a disproportionate impact on women due to their additional responsibilities within the home, and religious, social and cultural barriers. While the women are

overcoming many of these transport barriers, the causes of the barriers (predominantly a lack of an adopted transport policy, at all three tiers of Nigerian government, and an inadequate road network) are not being addressed. The AFCAP/IFRTD Indicators offer a useful tool to learn more about these barriers and to monitor the effectiveness of solutions, and hopefully they will be applied in this way in the future. Overall, while women are expressing their entrepreneurial spirit through overcoming the barriers identified as far as possible, there is clearly scope for policy intervention and bespoke projects to minimise these barriers in the future.

As a result of the lack of a formal transport policy, and a lack of awareness of policy activities among the women who participated in this study, it is unclear exactly what action is being taken to minimise the transport barriers faced by women entrepreneurs. The findings of this research suggest that while the women themselves (or at least the ones within our research) are taking some action to overcome transport barriers, they are still having a negative effect on their businesses operationally, and furthermore affecting profitability. In addition while the women appear to be overcoming the barriers, the root cause of the barriers is not being addressed, so the impact on business, both in terms of restricting further commercial growth and ultimately maximising profits will remain. It is also likely that women are prevented from becoming entrepreneurs because of the barriers, and these people would not have been included in the study.

In order to rectify this situation and enable the transport system across the three tiers of Nigerian government to become more supportive of women entrepreneurs, the transport system needs some significant investment and improvements from an engineering, institutional and regulatory context. Clearly the rural infrastructure is lacking, and projects such as RAMP are working to address this. However it is important that these projects are followed up and supported by an active and enforced transport policy that recognises the needs of women and works to minimise the barriers that they articulate.

Recommendations

There is a continuing need for improvements to rural transport infrastructure, beyond the scope of the current RAMP projects. Work in this area is ongoing, and so the general focus on improvements that can be made to minimise the barriers in the meantime is complemented by measures that can ensure their benefits can be maximised for women after their completion.

General recommendations

- Continued improvement to road infrastructure, (including periodic and routine maintenance, before
 and after the traditional monsoon season) in rural areas should be a priority as better roads will have a
 direct impact on the range of transport barriers experienced by women, and lead to improving the
 commercial viability of their individual businesses.
- The needs of women should be explicitly considered in all transport planning and policy in order to
 ensure that policies and projects meet the particular needs of women, specifically how the lack of formal
 transport policy is a contributory factor in constricting commercial growth should be voiced.
- The AFCAP/IFRTD Indicators should be used to provide a baseline for policies and projects, and should
 also be used to evaluate their impact from a gender perspective. This will ensure that the impacts of
 policies and projects from a women's perspective are recognised and recorded.
- Regulation of existing transport services should be implemented at the national level and managed through organisations at local government level. This will help to ensure a higher degree of safety and minimise excessive charges levied by some operators. Regulatory organisations will need to have the resources to monitor and make random checks on transport services for quality, safety, and fare levels and to undertake surveys with transport users to scrutinise the level of service being provided. Regulation of existing transport services should also extend to including improved quality of vehicles, which have the ability to transport goods as well as people, and a structured (as far as possible) timetable of services.
- The formal regulation of public transport services should be encapsulated within institutional reform within the rural sector, thus providing sound governance within this sector. Any institutional reform

must have a sound legal basis to ensure it effectiveness, and this can only be delivered through legislative reform granted through the Federal House of Assembly. A relevant example in this regard can be drawn from the LAMATA Law (2003). The LAMATA Law provided the mandate for the planning, regulation, and ultimately, the provision of effective public transport by a single authority within Lagos state. This legal framework demonstrates how, through the imposition of institutional reform, an authority has sufficient legal power to effectively run and operate public transport, and can be used as a template for other states to adopt.

- Regulation and institutional reform should also include the provision of operational subsidies to transit routes which would not normally operate to destinations that would be commercially unviable

 thus the "reach" and accessibility to public transport is improved for all users.
- The YouWin! Competition should be used as a vessel to support change for women entrepreneurs in enhancing access to goods and services through improved transport solutions.
- Wherever practicable, core data collation within interventions such as YouWin! should seek to capture transport data, preferably using tools such as the User Perspective indicators from within the AFACP Indicators.

Recommendations prior to road improvements

- Schemes that provide finance to enable women to learn to drive and purchase their own vehicles should be explored. Finance should be provided at a reasonable cost and administered at either local or state level of government. Access to a vehicle will enable women to overcome barriers associated with availability, cost, reliability and safety.
- Schemes to enable women to establish their own transport services should be provided by
 government departments or charities. This could include both support to buy vehicles, and training in
 their operation, and in the skills needed to effectively run a transport service. Transport services
 designed and operated by women are more likely to meet their needs and be acceptable from a religious
 and cultural perspective.
- Current legislation regarding the prohibition of paratransit in rural locations should be reviewed in terms of how it restricts local mobility. Rural people will benefit from as many potential transport services as practicable.

Recommendations post road improvements

- Participatory approaches should be used to develop a plan for public transport services on roads. These approaches should include women, and ensure that their views are considered in the design of new transport services. This should be extended to ensure that women are represented as a key stakeholder during the consultation stage of any scheme to improve rural transport. The formulation of "Women's Transport Associations" should have a legislative position within local and state government
- The impact of road improvements should be monitored via the AFCAP/IFRTD Indicators. This monitoring should specifically consider the impact of the road and transport service improvements on women.

1. Introduction

One of the aims of the African Community Access Programme (AFCAP) is to promote transport services in rural areas, and to this end they have commissioned a number of research pieces that will explore significant knowledge gaps in rural transport, in particular transport services in sub-Saharan Africa. This report presents the findings from one such piece of research entitled: "The failure of rural transport planning and policy to support women's entrepreneurship".

This research was suggested because it was clear from existing literature that current transport infrastructure and services in Nigeria are failing to support women entrepreneurs and this (along with many other factors) is having a fundamentally negative effect on their ability to set up, and grow successful businesses. As such, the overall objective of the research is to:

"identify the reasons behind the failures of rural transport planning and policy to improve women's access to facilities, services and entrepreneurship in Nigeria, and to identify women led entrepreneurial solutions to overcoming such barriers".

The report comprises of a number of chapters. Chapter 2 begins with a literature review which is used to set the scene in terms of the context within Nigeria and specific issues relating to rural transport, gender and entrepreneurs. Chapter 3 provides a brief overview of the methodology that was used for this work, before chapter 4 summarises the survey of Nigerian women entrepreneurs that formed the first part of the original research and reports the findings from some more in-depth interviews with a sub-sample of the survey respondents. Next chapter 5 provides a discussion of the results before chapter 6 presents the conclusions to the research, and chapter 7 makes some recommendations.

2. Literature review

This chapter reviews the academic and grey literature concerning the issues of relevance to this study. As such, it will first provide some context to the subsequent sections by summarising the geography, demography and history of Nigeria, before focussing on the particular issues affecting rural areas. Following this it will describe the gender context within Nigeria, before discussing the transport policy and infrastructure that exists. These first four sub-sections provide the foundations for the last four sections which focus more tightly of the issues of relevance to this study: the rural transport context, gender and transport issues, women entrepreneurs and the AFCAP/IFRTD rural transport indicators.

2.1 The Nigerian context

Summary: Nigeria is situated in West Africa, with a sea coast and borders with four other countries. It is the most populous country in Africa, and average life expectancy is 52 years (below the average for the rest of sub-Saharan Africa). The literacy level is around 61%, however more men than women are able to read and write. Nigeria has significant natural resources, but poverty levels are high, and many Nigerians live in "absolute poverty". Farming is the main occupation in rural areas, and women constitute a significant portion of the workforce.

The Federal Republic of Nigeria is situated in West Africa, bordering Benin, Niger, Chad and Cameroon. It has a total area of 923,768km² and a population of 174,507,539 of whom 49.6% live in urban areas (CIA, 2013). It is the most populous country in Africa, and the 8th most populous country in the world (Federal Republic of Nigeria, 2013). Nigeria is divided into 36 states and one territory with a number of urban areas. The largest urban areas in Nigeria are (by population) Lagos, Kano, Ibadan, Abuja and Kaduna. Average life expectancy in Nigeria has been rising, with the current average life expectancy being 52, however the average life expectancy in Nigeria is below that of the rest of sub-Saharan Africa (World Development Indicators, 2011). In terms of education, 61.3% of the population over the age of 15 can read and write, although this male/female split is uneven with 72.1% of men able to write, but only 50.4% of women (CIA, 2013). The average number of children per woman is 5.7, although families tend to have more children in rural areas than in urban ones (6.3 in rural areas and 4.7 in urban ones). Women with a higher than secondary level of education also tend to have fewer children, with an average of 2.9. The median age of the mother at first birth is 20.4, however this is lower in rural areas (19.5) than it is urban areas (22.3) (National Population Commission, 2008).

Nigeria is blessed with abundant natural resources, land and crude oil, however poverty and unemployment is widespread in part due to failure of past government policies to effectively manage human and natural resources (UNECA 2005). Over the past decade, Nigeria's economic growth has averaged about 7.4% annually, driven primarily by the non-oil sector. Nevertheless, the African Economic Outlook (AEO 2012) suggests that economic growth has not cut poverty nor created necessary jobs and unemployment is very high (about two thirds of the population live on less than one US dollar per day and the proportion of Nigerians living in absolute poverty rose to 60.9% in 2010, compared with 54.7% in 2004). The AEO showed that unemployment in the 15-44 years age groups was 60.1% and more than half of these, mainly women, have given up on finding work.

2.2 The rural context

Summary: 50% of Nigerians live in rural areas and 90% of these people are employed in agriculture. Two thirds of these people are classed as rural poor, and living on less than \$1 per day. There is a trend of rural to urban migration as people seek to leave rural areas to find employment in cities. Agriculture is the dominant activity, but more households are diversifying in order to survive. Rural areas closer to towns tend to be more successful in terms of economic output as businesses can get a better price for their produce. In many rural areas, especially the more remote ones, provision of services is very poor, and people have to travel long distances to access healthcare, education and other necessary services.

This research is concerned predominantly with rural transport issues, and as such it is necessary to consider the rural context within Nigeria. As noted previously, around 50% of the Nigerian population live in rural areas, and agriculture provides the livelihood for around 90% of these people (IFAD, 2010). Furthermore,

two thirds of rural people are classified as "rural poor" and living on less than \$1 (US) per day. Associated with this is a trend of rural-urban migration, as Addenipekum puts it "Average rural dweller irrespective of age or sex desires opportunity to vacate the rural environment for city life" (p.257).

The global economic liberalisation during the 1990s and advent of democracy (since 1999) has opened up the rural sector in Nigeria as never before. Farming is the main source of livelihood in the rural areas; however, more and more households are diversifying into non-farm enterprises, initially complementing farming and later supplementing it with activities that yield higher returns. This diversification trend is both a survival and a distress-push or demand-pull strategy. As a survival strategy, diversification takes place because of increasing rural population growth, land fragmentation, increasing input cost, adverse environmental conditions, diminishing access to agricultural markets, declining farm income and lack of access to public services (Ellis 2001, Davis and Bezemer 2003).

Nevertheless, farming remains the main occupation for households in rural villages; however as stated above, agriculture alone rarely provides sufficient household income. As a result of this, most rural households engage in a diverse range of activities and employment. In the villages, migratory opportunities are often pursued by male household members, leaving women behind to manage farm and non-farm enterprises. This leads to feminisation of economic activities, as women combine household tasks with income generation in order to maintain the food and welfare requirement of their household. Women contribute greatly to the agricultural labour force in Nigeria, making up 60-80 % (Odeboe, 2012).

Women dominate agro-processing and trading of commodity and farm produce in Nigerian villages, whereas men dominate ownership of assets, leadership and participation in livelihood activities and formal employment. In many sub-Saharan African communities, rural household's economic activities takes the form of informal and mostly self-employed or family owned farm and non-farm activities, operated by one owner and assisted by few family members. Kusters (2010) maintains that most African rural communities have been becoming less agrarian and participating in a wide range of non-farm activities, such as wage employment, self-employment, manufacturing and services. Olusola and Adenegan (2011) found this to be the case in Nigeria where "income from non-farm activities has become an integral part of the rural economy" (p.344).

In terms of agriculture, Dorosh *et al.* (2010) showed that agricultural output was far higher in areas with a shorter travel time to city markets, suggesting that infrastructure improvements which reduced travel time really made a difference to overall output. The authors found that agricultural production is highly correlated with proximity (as measured by travel time) to urban markets. The authors conclude that low population densities and long travel times to urban centres sharply constrain production and that reducing transport costs and travel times to rural areas would expand the feasible market size for the sub-Saharan African region.

Provision of public services in rural areas is often very poor and many services are difficult to access for rural dwellers. A policy of decentralization has been adopted, which in theory should have improved access to services, but Moti (2011) found that decentralization has not been used to create rural service centres, and instead ruling parties at state and federal level have used it to renew or consolidate their power. This is compounded by a lack of funding, corruption, a lack of accountability and the inability of rural people to hold their representatives to account.

2.3 Gender issues in Nigeria

Summary: The Nigerian government has been attempting to mainstream gender issues for more than 10 years. While some positive progress has been made, women are still subject to major inequalities. These include lower levels of education, lower earnings, difficulty accessing credit, poor healthcare, higher taxes and physical violence. It is clear that more work is necessary to minimise these inequalities and support women to reach their potential.

Before discussing gender issues in Nigeria, it is necessary to avoid confusion by clarifying the meaning of gender. Rather than referring to simply the biological characteristics of being male or female, gender is "the state of being male or female as expressed by social or cultural distinctions and differences, rather than

biological ones; the collective attributes or traits associated with a particular sex, or determined as a result of one's sex" (Oxford English Dictionary, 2014).

In Nigeria, the Federal Ministry of Women Affairs and Social Development (FMWASD) is the Ministry with responsibility for dealing with gender issues, and gender mainstreaming. The main aim of the Ministry is "to help build a Nigerian Society that guarantees equal access to social, economic and wealth creation opportunities to all, irrespective of gender, places premium on protection of the child, the aged and persons with disabilities; focuses attention of key operators in both private and public sectors on mainstreaming the concerns of these groups of people in national development process" (FMWASD, Undated).

The Nigerian government has been working on institutionalising gender mainstreaming through a number of policies and programmes since 2000 (UNECA, 2012). This began with the National Policy on Women in 2000, followed by the Child Rights Act in 2003, the National Gender Policy in 2006 and the National Strategic Implementation Framework in 2008 (UNECA, 2012). This final implementation framework expired in 2013, but a new version is currently being drafted (FMWASD, Undated). One of the key actions from the framework that has been implemented is the establishment of "Gender Units" within Federal Ministries to drive forward the inclusion of gender issues across government; however there is some concern that progress of gender mainstreaming in Nigeria is limited by a lack of expertise within these units (UNECA, 2012).

Nevertheless, some positive progress has been made in ensuring that policies across a number of departments do not discriminate against women, and women now have more rights (in some states) to property, and easier access to credit. Furthermore a large number of reforms including the National Policy on Rural Travel and Transport 2006¹ were judged by the UNECA not to discriminate against women. However there is still some way to go to reach an adequate level of equality (UNECA, 2012). In particular progress is stymied by poor perception and trivialisation of gender issues by national policy makers and the general public, a lack of awareness of the content of the National Gender Policy and a lack of funding, alongside increasing numbers of disadvantaged women requiring assistance (UNECA, 2012).

A research report produced by the British Council (2012) highlights some of the issues facing adolescent girls and women in Nigeria. A summary of the key issues is presented below:

- Nigeria ranks 118 of 134 countries in the Gender Equality Index;
- At every educational level women earn less than their male counterparts and in some situations men with less education earn more than better educated female peers;
- Nigeria has one of the lowest rates of women entrepreneurship in sub-Saharan Africa. The majority of women are concentrated in casual, low-skilled, low paid informal sector employment;
- Only 7.2% of women own the land they farm, which limits their access to credit and constrains entrepreneurship and business activity;
- Only 15% of women have a bank account;
- A gender bias in allocation of tax allowances means that women taxpayers are taxed disproportionately;
- In eight Northern States, over 80% of women are unable to read (compared with 54% for men). In Jigawa State, 94% of women (42% of men) are illiterate;
- Nigerian girls who enrol in school leave school earlier than their male counterparts;
- More than two thirds of 15–19 year old girls in Northern Nigeria are unable to read a sentence compared to less than 10% in the South;
- Only 4% of females complete secondary school in the northern zones;

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¹ Unfortunately a copy of this policy could not be obtained.

- Over half of all women in the north are married by the age of 16 and are expected to bear a child within the first year of marriage;
- Girls from poorer families are more likely to marry young and have worse health outcomes;
- A third of 15-19 year olds in Northern Nigeria have delivered a child without the help of a health professional, traditional birth attendant or even a friend or relative;
- Women are politically under represented. Their upper and lower house representation fell from 7% in 2007 to 6% in the 2011 election (the African average is 19%). Only 7 of 109 Senators and 25 of 360 Representatives are women;
- Most 15-24 year old women in Nigeria think it is reasonable for a husband to beat his wife if she burns the food, refuses sex or goes out without his permission; and
- Nearly half of unmarried women in parts of Southern Nigeria have experienced physical violence. (p.1-2).

Further evidence of inequality is evident in a variety of other research reports, for example Ogunlela and Mukhtar (2009) found that women are grossly underappreciated and have very little control within the agricultural sector considering the contribution they make to it. They suggested that that "the survival and sustenance of agriculture and rural development in Nigeria, as well as in many sub-Saharan Africa countries, rest squarely on the rural women. They therefore deserve to be given due recognition as far as decision-making process in agriculture is concerned" (p.28). This is reinforced by Odebode (2012) who suggested that while women have been noticed to play a significant role in agriculture, their roles and contributions were largely unacknowledged, leading to a lack of power and ultimately to a decrease in agricultural productivity.

Overall it is clear that women are disadvantaged compared to men in terms of the opportunities available to them. In particular, the subordinate perception of women compared to men, the lower levels of education and poor access to credit facilities are all likely to affect their ability to become successful entrepreneurs. In addition to their economic and income-generating activities, women assume multi-faceted roles in society, i.e. as breadwinner of the family, unpaid family workers, service providers in the communities and mother/care-taker of the family (UNIDO 2003). To respond to the needs of women to materialise their economic potential and thereby to improve their standard of living, it is necessary to design programmes that account for this and can meet their unique needs.

2.4 Transport and transport policy in Nigeria

Summary: Transport infrastructure and services provide mobility and facilitate social and economic development. Therefore they are very important in a developing country. Nigeria has an extensive transport network comprising of road, rail, air and sea infrastructure. However much of it is in very poor condition due to a lack of maintenance. In Nigeria, transport makes up a disproportionate portion of the cost of goods due to the poor quality road network. Formal national transport policy appears to be lacking, although a number of draft national transport policies have been produced historically. It is clear that the transport infrastructure in Nigeria requires significant investment, and the message coming from the draft national transport policies is that much of this should be sought from the private sector.

Transport is important: transport systems provide mobility and access and play a key role in the economic, human and social development of any nation. Mwase (2003) observed that until recently most sub-Saharan African (SSA) countries did not have a comprehensive transport policy. The author states that currently, transport (sub-sector) policies, strategies and action plans are being developed through medium-term transport (sub-sector) development plans, consistent with holistic comprehensive development frameworks (CDFs) and poverty reduction strategy papers (PRSPs). The advent of the Millennium Development Goals (MDGs) and PRSPs has underlined the need to establish the relationship between economic growth and poverty.

In terms of transport, Nigeria has 54 airports (40 with paved runways), and 3505km of railways. It also has 193,200km of road, although only 28,980km is paved (CIA, 2013). Nigeria operates a three tier government system — the federal level, state level and local government level (there are 774 local governments). The Federal Ministry of Transport is responsible for transport policy and regulatory issues for road, rail, maritime and inland transport. It also coordinates federal transport programmes, while state and local transport

programmes are coordinated at the state level (Federal Government of Nigeria, 2007). In terms of operational transport governance, the intra-state roads are the responsibility of state governments, intra-urban and rural feeder roads (which account for 60% of the existing network) are the responsibility of local government. The federal government is responsible for national highways (which account for 17% of the existing network), inland waterways, river ports, sea ports, railways, airports and pipelines (Federal Government of Nigeria, 2010).

Nigerian public transport services are largely in the hands of the private sector and consist of a range of service types including bus (for example the Danfo, a small bus with around 14-18 seats), bus rapid transit, motorcycle taxis (Okada or Achaba) and Keke Napap (auto-tricycle). The number of vehicles (including motorcycles) registered, increased more than three-fold between 2000 and 2010 and many are used as a form of public transport, predominantly in the cities and urban centres. The majority of the imported vehicles are second-hand, despite the introduction of a 10-year age limit for vehicle imports.

The transport market is almost entirely deregulated. The vehicle licensing organisations main mission is to regulate the use of transport vehicles by issuing licenses after carrying out technical inspection of the vehicles. In practice, vehicle-licensing organisations do not have the necessary resources (equipment and staff) to appropriately accomplish their missions. Technical control is limited to visual inspection of vehicles and furthermore the number of vehicles and their allocation to public transport routes is decided without reference to transport plan studies.

Transport associations — the main providers of passenger transport services — collect significant amounts of revenue from drivers for the use of terminals and have total control of public transport parking. This process has led to monopolistic tendencies preventing non-members from accessing the transport market. Transport operators face many bureaucratic requirements to conform to vehicle regulations and they are frustrated by the many control and security barriers along main routes. The law enforcement agencies that operate these barriers do not strictly enforce regulations, but take regular payments (bribes), thereby increasing vehicle operating costs. There is little evidence that national transport policies affect transport service provision directly.

In terms of formal transport policy, the situation is unclear. There is not a formally adopted written transport policy, however according to the "Institute of Transport Administration – Nigeria" (an autonomous professional body affiliated to the Institute of Transport Administration in the United Kingdom) (Institute of Transport Administration – Nigeria, 2013) this does not mean that the country does not have a national transport policy. Instead it is suggested that the national transport policy is embedded in various national development plans. The President of the Institute suggests that "There are two way of discerning a nation's transport policy; it could be documented, it could also not be documented but acted, as long as there are activities in the transport sector, these activities represent the nation's transport policy" (National Mirror, 2013).

Nevertheless it is possible to find a "Draft National Transport Policy" for Nigeria easily online. While this document has never been adopted, and therefore the policy goals within it don't necessarily reflect the aims and beliefs of the government, it does provide some useful context. In fact, there is something of a pattern of draft national transport policies in Nigeria. The last adopted national transport policy (which was also the first national transport policy) was adopted in 1993 and was entitled "Moving out of crisis". Subsequently a draft national transport policy was produced in 2003, and another in 2008 making the 2010 draft transport policy the latest in a series (Femi, 2013). Although media reports indicated that the draft policy was ready for final government ratification in 2011, this never took place (Daily Independent, 2011, Daily Independent, 2010).

In terms of rail, the draft policy identifies that the rail network has been neglected and is not able to provide an efficient and cost effective means of transport. The primary goal in terms of rail in the draft policy was therefore to "transform the system from its present condition to an efficient, flexible and competitive mode" (Draft National Transport Policy, 2010, p.23). A similar situation is true for the road network, with the draft policy noting that Nigeria is increasingly dependent on the road system for nearly all inland transport needs (by 2001 50% of national roads were classified as being in a "bad state"). However once again this has suffered from a lack of maintenance and investment at all government levels. The draft policy goal is

therefore to "achieve adequate and efficient maintenance of the existing road network" and encourage "promotion of private sector investment in the upgrade and maintenance of roads" (Ibid, p.25).

The draft policy also talks about "road transport" which appears to relate predominantly to public and freight transport. It suggests that the system is characterised by large numbers of small-scale operators with limited professional and business capacity, uncoordinated activities and services leading to inefficiency and non-compliance with traffic regulations (accompanied by poor enforcement). It is suggested that the main objectives are to enhance road productivity through effective utilisation and enhance private sector operation. The intention is to do this through: grouping small vehicle owners into cooperatives that can operate bigger capacity vehicles; promote training of operators and dissemination of information; and promote compliance with road traffic regulations (Draft National Transport Policy, 2010).

The issue of rural accessibility is considered within the draft policy which indicates that rural roads are considered to be of vital importance in terms of regional development. They are viewed as providing the means to move raw materials, facilitate service delivery of education, health, social development and agriculture; and allow rural-rural and rural-urban exchange of goods and services. The draft policy identifies that coordination of rural roads development is a "formidable task" due to the wide diversity of responsibilities, interests and capacity, and one that will not be possible without significant funding. It suggests that Rural Roads Development Boards will be set up at the state level to provide funding, set criteria for use of funding, set up training and provide technical assistance; however no evidence that this has taken place has been found (Draft National Transport Policy, 2010).

The final issue of relevance within the Draft National Transport Policy relates to discussion of integrated and intermodal coordination. This notes that excessive freight is putting pressure on the road network and leading to a requirement for excessive maintenance. It suggests that integration and intermodality can be improved by better coordination and policy making accompanied by effective regulation and legislation

The overwhelming message of the draft policy is that implementation of the measures within it will require significant private sector funding. Both public-private partnerships and private sector investment are mentioned on numerous occasions, perhaps indicating that the government feel that private sector investment is essential before improvements can take place.

The Draft National Transport Policies of 1993, 2002 and 2010 sought to address some of the transport issues facing the country and to achieve sustainability in the transport system. Furthermore in the last two decades the Government's investment in the country's transport network has been substantial (in the first, second, third and fourth National Development Plans, 19%, 23%, 22% and 15% respectively of the total capital outlay went to the transport sector (Adeyemi, 2001)). However, these actions have not helped the country to meet its primary targets in the transport sector

As noted by Ugboaja (2013), despite the policies, Nigeria's transport infrastructural facilities are deteriorating at a rate of 800 billion Naira or 5.41 percent per annum, and quality of service is falling. The author further states it is apparent that, in spite of the Federal Government of Nigeria's huge expenditure in the transport sub-sector of the economy and the introduction of an elaborate National Transport Policy, coupled with the formulation of strategies for implementing the policy in 1993 and 2002, the system appears sluggish and unsustainable. Globally, Nigeria's transport infrastructure ranks low in terms of the quality of its infrastructure which impacts upon the ease of undertaking business (Igwe *et al*, 2013) and this is having a negative impact on the country's economy. This is illustrated by Oni and Okanlawon who give the example that transport costs make up a disproportionately large portion of the final costs of delivered goods due to the inadequacy and inefficiency of the transport infrastructure (2006) and this is having a negative effect on both the country's competitiveness and levels of poverty.

Njenga and Davis (2003) assert that the failure of transport policies to respond to the needs of the majority arise from the fact that the theoretical notions that inform policy are largely derived from observations and experiences in countries where structural transformation has already replaced traditional production with market institutions. Indeed, it is the process of industrialisation that has formed a common basis for theoretical models in transport. They state that in spite of this, these models have in the past been applied to developing countries, in total disregard to existing conditions. They conclude that in this context,

transport policies can be seen as having created a polarised disharmony in which modern methods of transport are available only to limited areas and are accessible to a minority of people.

This section has shown that while positive actions have taken place in terms of the provision of funding and new infrastructure, the condition of the transport network is still holding the country back, and contributing to reduced competitiveness and poverty.

2.5 Rural transport issues

Summary: The rural transport network in Nigeria consists of a wide range of roads, many of which are low quality and a proportion of which become impassable in the rainy season. This has a negative impact on the productivity of rural households and can increase the level of poverty that they experience. However, as well as improving the roads, the wider transport system (such as the provision of transport services) is lacking in rural areas where many households cannot afford their own vehicles. Transport services therefore need to cater for farmers transporting their produce to market, and be equipped to carry freight as well as people. Where transport services exist, they are often very expensive and overcrowded, although there is an increasing level of service provided by motorcycle taxis which make rural communities feel more "connected". Overall it is clear that the transport system is fundamental to economic and social development in rural areas, and significant investment is required to ensure it is of a suitable level.

In rural areas, it is evident that the most effective means to increase income and reduce poverty is to increase the productivity of local activities which households depend on for their livelihoods (Igwe 2013). While rural areas in Nigeria experience widespread poverty and other issues associated directly with a lack of basic services, lack of assets and lack of income, and indirectly with inequality and discrimination (Adenipekun, 2013), this research is centred on the role of transport. The rural transport system in Nigeria consists of the network of roads and tracks on which the population travels by non-motorised and motorised modes. The network links the rural communities to other rural and urban towns. Starkey *et al.* (2013) note that for Africans to be able to gain from the great social and economic benefits of roads, people need to be within a reasonable distance of a motorable road. Starkey (2007) noted that rural transport services are often inadequate and that passenger and goods transport needs improving to stimulate rural economies and reduce poverty.

Providing an adequate and sustainable transport system is crucial for promoting rural enterprises, which are vital for economic growth and poverty reduction. International development agencies such as the World Bank and the Department for International Development (DFID) are primarily concerned with sustainable economic growth and pro-poor growth of developing countries. DFID's aims recognise that transport consumes a significant proportion of the income of the urban poor and lack of transport severely constrains development in rural areas (Jacobs and Greaves 2003). Remoteness caused by an inefficient transport system discourages rural people from participating in employment opportunities in the urban centres, raises transport costs for agricultural produce, reduces farm-gate prices and earnings and weakens incentives to engage in economic activities. Transport can also contribute to poverty reduction, for example Aderamo and Magaji (2010) (drawing on a case study from Edu Local Government Area of Kwara State) concluded that the rural road network has a significant effect on the provision of facilities in rural areas and thus has the potential to reduce poverty.

Bryceson *et al.* (2003) believe that the provision of transport as physical capital can be a direct source of livelihood (employment) and can support the conduct of livelihood activities. Transport services cater for a wide range of tasks which are required for subsistence agricultural production, economic and social activities. Agricultural travel is associated with crop cultivation, movement of farm inputs, crop harvesting and crop marketing according to Njenga and Davis (2003). The authors maintain that the cost of moving produce to market can be prohibitive both in terms of the transport service fare and the time cost, a factor that is exacerbated by the poor road conditions and inflated transport costs that are inherent in low-density farming regions. For this reason, they suggest farmers often trade at the farm-gate to avoid the need to transfer harvests to market, which can be a high-risk exercise, particularly with perishable goods. As Starkey *et al* (2002) suggest the reduction of isolation and inaccessibility are fundamental to poverty reduction.

Therefore rural transportation is a major component of rural development and improvements in transport infrastructure contribute to economic growth and human development by:

- facilitating trade and market flows between rural communities and rural-urban centres as well as enhancing social contact and interaction;
- enabling entrepreneurs to respond to new types of opportunities in different locations;
- lowering the cost of production and transaction of goods and services;
- increasing agricultural production and improving competitiveness, creating new entrepreneurs and making business more financially rewarding;
- enabling access to transport which may double the volume of produce local people can take to market;
- providing opportunities for women to combine domestic work, agricultural and non-agricultural employment; and
- enhancing the quality of lives for all by reducing the travel time and energy spend on trips for domestic needs, food processing, marketing, access to schools and health clinics.

More than 50% of Nigerians live in rural areas, therefore the problems of poor rural transport infrastructure is affecting the country's economy. Ume and Nwachukwu (2011) identified that many rural areas where goods are produced are not effectively linked to urban areas by good motorable roads, because the role played by road transport has not been adequately considered and addressed. Many rural roads are in poor condition, only a few are paved and this has an impact on public transport services. Furthermore, some areas are only accessible during the dry season (Approx. November to February) as heavy rain makes them impassable and increases erosion during the wet season (Igwe *et al*, 2013). In terms of ownership of transport, 27.2% of rural households own a bicycle, 31.3% own a motorcycle and 5.7% own a car (National Bureau of Statistics, 2013), however household ownership does not necessarily mean that the women of the household have access to the transport.

A speech by the national coordinator of the Ramp project, Ubandoma Ularamu, at the opening of the 2011 RAMP project retreat and review meeting described the state of the roads:

"Out of over 160,000 kilometres of secondary and tertiary roads in Nigeria, with an average registered network of 4,000 kilometres per state, only about 10 – 15 per cent is paved, while a large proportion of this network remains in poor or very poor condition with only 15 per cent of federal roads in good condition. It is sad to note that rural roads, which are statutorily referred to as local government roads which constitute about 132,000 kilometres (67.7 per cent) of the entire road network in Nigeria are the worst hit by this state of disrepair." The deplorable state of rural roads across the nation, the RAMP chief stated, have continued to impact negatively on the national economy. As a result of these problems, he added that farmers continued to face the challenges of "high transport cost, long travel time, huge post-harvest losses and high rate of auto-accidents". Explaining the negative effect on agriculture, Ularamu recalled that studies carried out in 2006 revealed that about 20 per cent of total farm produce never reached the market.' (The Nation, 2011).

Some work is being undertaken to improve rural roads. For example, the RAMP project was established to improve road connections for rural communities in Kaduna state (Northern Nigeria). The project (funded by the World Bank) aims to improve 427km of rural roads (142km to bituminous surface dressed standards and the rest to gravel wearing course standards). It will also create 132 river crossings. In addition, work will be undertaken to strengthen the institutional capacity in the state in order to manage the roads at a total cost of \$72 million (World Bank, 2013b). RAMP is due to be completed by 31st December 2014. RAMP 2 is already underway, which has similar aims in four further states. This second project will run until December 31st 2018 and cost \$244.36 million, \$170.00 million of which is being provided by the World Bank (World Bank, 2013c).

Previous studies have concluded that this type of work should have a positive impact. For example Ibok and Daniel (2013) investigated the role that investment in rural roads and bridges had in the Akwa Ibom state and concluded that investment in rural roads and bridges since 1999 has had a positive effect on rural areas

through providing a reduction in transport costs, increasing socio-economic activities in the state and reducing rural – urban migration. However such projects must have adequate funding in order that they can provide adequate coverage (Ibok, 2010).

Writing on the topic 'living off-road', Porter (2002a) asserts that getting to market to sell produce, getting to school, obtaining medical attention, finding employment, buying spare parts, sourcing farm inputs and consumer items and trying to arrange a loan at the bank can be difficult tasks for the rural poor because they are not available locally. The author states that across Africa, banks, clinics, hospitals, secondary schools, extension agents, produce markets and the like all tend to be located in larger rural services, usually situated on paved roads.

However Starkey and Njenga (2010) make the important point that "roads are not enough" (p.1) and that in addition people need rural transport services to access services and livelihoods. They discuss the fact that for the "overall benefits of improved rural transport infrastructure to be realised there is need to encourage the development of a range of complementary and competing transport services, small and large, short distance and long distance, passengers and freight as appropriate for different rural contexts" (p.1). This is reiterated by Porter (2007a) who notes that transport planning in sub-Saharan Africa has in the past concentrated on rather narrow engineering issues, and needs to further consider wider economic, social and political environment in order to create real benefits.

In terms of public transport, the motorised transport fleets in rural areas are small and old vehicles comprising of rural taxis (buses and pickups, always overloaded and overcrowded) and large trucks carrying mixed loads with people on top. Most villages do not have public transport services as buses and taxis only operate along a small number of main routes to major destinations. Passenger fares are high, with higher fares on shorter journeys on poor or unpaved roads, matched by higher prices higher for goods carried short distances or transported by rural taxi or bus. Sometimes these fares can be extortionately high (Mijinyawa and Adetunji, 2005). Further, Porter (2002) identified transport costs via minibus were over 25% higher on unpaved roads than on paved roads during one study in Nigeria. This means that bicycles and motorcycles are extremely important.

Many people travel 10–30 km by foot to reach periodic markets, often along 'invisible' tracks that are not part of the road network. Mijinyawa and Adetunji (2005) found that in Osu and Oyo states 56.3% of farmers travelled between 4 and 16 km to market, while 26.1% travelled over 16km. Most medium distance journeys (10–40 km) are made by intermediate means of transport, in particular using motorcycle transport services which have increased in recent years as cheap second-hand motorcycles have been imported from abroad. Motorcycle taxis (known as Okada in southern Nigeria and Achaba in the north (Porter *et al*, 2007)) and tri-cycles (keke) provide important, profitable transport services for short- medium distances (1–50 km) in rural areas.

Porter (2013) showed that one of the most recent - and arguably the most dramatic - change in rural transport services in many countries has been the expansion of motorcycle-taxi services, which gathered pace in the 1990s. The author notes that these are still penetrating remoter rural areas today, fuelled particularly by the availability of cheap imported Chinese motorcycles. The impact of this has been greater because it has occurred at roughly the same time as the expansion of mobile phone networks and the acquisition of handsets even in poor rural households. In a 2002 paper Porter posited that achaba services "appear to have contributed substantially to the altered perceptions evident among both men and women in off-road villages regarding their position in relation to major service centres, which now seem fairly accessible" (Porter, 2002b, p.13).

For the first time in African rural transport history many – even very poor - rural dwellers may have the potential to summon transport when they need it (ibid: 7-9). For people living in remote areas the consequential new levels of connectivity amount to a transport revolution, because even if they cannot afford transport on a regular basis, many can now obtain it in emergency contexts and perceive this to be of crucial importance to their well-being (Porter, 2013).

Motorcycle drivers have experience and knowledge of the area and can avoid routes that are dangerously bad, while allowing people to travel long distances. Hence they are becoming an increasingly popular livelihood (Yakabu, 2012). However one consequence of this is that some of these motorcycle drivers do not

perceive there to be a need to improve rural roads. They are concerned that road improvements will lead to better bus services and this will have a negative impact on their livelihood (Ume and Nwachkwu, 2011).

Much of the transport of agricultural produce in Nigeria is undertaken by animal traction, car, truck, train and other intermediate means of transport (IMT) which, according to Porter (2002) include motorcycle, bicycle, tricycle, wheelbarrow, animal drawn cart, boat and canoe. However these IMTs, while providing vital rural transport can be invisible to policy makers and thus may be poorly managed and relatively unregulated (Starkey and Njenga, 2010).

As such, rural transport services commonly need to cater for passengers accompanying their freight and there has been continued widespread dependence on vehicles with substantial carrying capacity, whether (in earlier days) traditional mammy-wagons, or (more recently) imported second-hand minibuses. Many people (mainly women and children) attend periodic markets, arriving by foot, bicycle, rural taxi and pickups. Bicycles and motorcycles are the main means of transport in areas with flat land, but bicycles and spares are expensive and most bicycles lack brakes. Bicycle ownership has offered a complementary transport mode for personal travel and smaller loads, but mostly for men (Porter 2013). Finally, small boats provide essential rural transport in villages located around lakes, islands, rivers and swamps.

However, while there have been some improvements to roads and transport services, there are further barriers beyond the existence of roads and transport services for rural dwellers. These include the availability and cost of fuel which has a direct impact on mobility, transport fares and other services in rural areas. Chronic shortages of fuel in Nigeria resulting from inadequate pricing and marketing policies have affected rural areas most severely in the past 30 years. Deficiencies in transport services are often the outcome of inadequate policies concerning pricing and marketing of fuel, tariffs, and other government regulations.

In addition, travellers in rural areas run the risk of robbery (often experienced by traders) and the potential for illegal taxation by corrupt officials. If traders are robbed they often lose all the produce they are carrying which can have a substantial financial impact (Porter *et al*, 2005).

Overall, the availability of transport can be viewed as fundamental to the local economy in rural areas. Describing the limitation posed by lack of transport on access to traders and markets, Porter (2002) explains that produce traders are often unwilling to move into rural areas with poor access in order to purchase goods, unless supplies from accessible areas are insufficient. The author states that when urban-based traders visit areas where access is difficult, the competition from other traders is likely to be limited and prices achieved by local farmers will remain poor, especially for perishable produce. Njenga and Davis (2003) consider market relations and access to market information equally important, since information on market price helps farmers maximise their income and negates the need for travel to the market. They note that in reality, physical access to markets or lack thereof, has a critical impact on producer prices, causing farmers to revert to growing subsistence crops or to diversify altogether and pursue non-agricultural income generating activities.

Rabirou et al, 2012 add further complexity to this by describing how high pressure on land has resulted in declining soil fertility. One of the means of dealing with this has been through moving farm locations further from the settlements requiring longer distances to be travelled to the farm by workers, and extending the distance that the products of agriculture have to be transported to market. This requires an adequate transport system which the authors note does not currently exist in Nigeria. Nevertheless this may be countered by use of IMT, although take-up may be limited by the availability of roads.

While the transport system is important for economic development, it is also important from the perspective of wider sustainability. Ugboaja (2013) reviewed the Draft National Transport Policy from this perspective and identified that "the policy had little or no influence in reducing the negative social impact emanating from Nigeria's Transport system" (p. 1208). This is reinforced by other authors such as Ume and Nwachukwu (2011) who posit that "the roles played by road transport in rural setting are not squarely pursued, hence many rural areas where goods and services are produced are not effectively linked to urban areas with good motorable roads" (p. 14)..

This section has illustrated the common barriers experienced by Nigeria's rural populations. As shown, good transport infrastructure and services are important because they allow access to vital services such as healthcare and education. However they are also fundamental in terms of economic development. At the moment however, their capability to facilitate this is inhibited by poor road conditions and transport services that don't always meet the needs of the population.

2.6 Gender and transport

Summary: Women in rural areas in Africa are universally transport constrained. They have a lack of access to transport services (compared to men) and this has an impact on their ability to become entrepreneurs. The causes of this inequality are multi-faceted, and include the traditional subordinate role of women in the household, the additional household responsibilities (such as childcare) borne by women, religion, risk of crime and psychological stress. In additional, rural transport policy and projects have not necessarily accounted for the different needs of women, and therefore have generally failed at reducing the transport inequality. Action is required in order to ensure women can be economically active and can access other services such as healthcare and education.

There is growing evidence of the enormity of the women's transport dilemma in sub-Saharan Africa in literature (Bryceson and Howe 2003, Porter 2002, Bryceson *et al.* 2003, Njenga and Davis 2003, Howe 2003). Njenga and Davis (2003) pointed out that discontent with existing transport policies and patterns of investment has led to the evolution of a body of investigative work whose focal point is around issues of social, economic and environmental sustainability and is related to gender. However Porter (2014) notes her disappointment that "knowledge that has been gathered over more than two decades concerning rural women's transport problems in Africa has not, as yet, induced adequate remedial action" (p.39). This is reinforced by Odufuwa *et al* (2012) who posit that "women's issues in Nigerian public transport have received little or no attention from transport planners and policy makers, empirical evidence with respect to travel burdens facing women during spatial interactions is needed" (p.24).

African rural women are universally transport constrained and lack of access to transport services impacts upon women's ability to engage in entrepreneurial activities. Overall men make on average more trips using transport services than women, as illustrated by Fadare and Morenikeji (2001) and others. This is associated with their gender-related roles (greater responsibility for children), their gender related financial and economic situation (less access to money) and their gender-related poor access to transport technologies (Starkey 2007). In summary it is clear that the transport system and services need to be designed to take account of women's requirements which "vary according to gender relations, mobility needs, roles and access to resources and decision-making process" (Odufuwa et al, 2012, p.24).

Transport planning and policies have been unfavourable to rural areas and especially to women in many African countries. The World Bank (1999) stresses that women did not benefit from past initiatives because these ignored gender relations of households at community level, and also men tended to monopolise IMTs intended to benefit women.

Njenga and Davis (2003) stress that walking and use of non-motorised transport remains for the vast majority of poor people in sub-Saharan Africa the key means for travel. Across rural Sub-Saharan Africa (SSA), head loading – mostly by women – has continued to dominate the mode of transporting goods from and to rural households (Porter 2002). Moreover, agricultural production in SSA is generated along a vast network of footpaths, tracks and community roads, where the most common mode of transport is the leg, heads and back of women (Mwase 2003). Therefore, women suffer the physical and health burdens of head loading and long distance walking that takes most of their household's time and energy.

The World Bank Gender and Transport Thematic Group (GTTG 1999) enumerated the effect of lack of transport on African women's ability to participate in economic activities as:

- Women have limited access to and control of financial resources and also limited incentives to participate in many kinds of agricultural production;
- Division of labour in the rural areas assigns heavy physical activities to men, while allocating time-consuming activities to women;

- Women tend to make more trips overall than men, combining agricultural activities with domestic responsibilities (preparing meals, collection of water, child-care, etc.);
- Women suffer the physical and health burdens of head loading most of the fuel, water and produce of the household;
- Seasonal variations in labour demand affect the time allocation of household members;
- Women's limited access to motorised transport for marketing leads to added burdens due to longer trips that results in post-harvest losses;
- Path and track problems make travel and transport by walking and head loading arduous, timeconsuming and dangerous, and limits the load being carried;
- Women combine farm and household activities; hence limited access to transport limits the degree to which they can engage in agriculture; and
- Timing of different transport requirements means conflicting responsibilities such as immediate need for water or longer term need for food production.

Porter discussed the issue of gender and roads extensively in a 2012 paper, which concluded: "Evidence from Ghana and Nigeria suggests that, throughout the last century, the rural poor - particularly poor women resident away from the gradually expanding paved road networks - have faced enormous transport/access hurdles. Access to markets, to services like health and education, to agricultural extension services, banking facilities and credit and, indeed, to centres of power, influence and information, have all been constrained by poor roads and poor transport services". (p.11). This article highlighted in-particular the issue that it is easier to accrue benefits from a road when one has financial means which can be used to take advantage of the infrastructure. Without this, the benefits of the road are often not realised by those without means, particularly women.

Although Nigeria does have a National Gender Policy (as discussed in section 2.3) that aims to create gender equality, there is only one mention of transport within the policy itself. This states the aim to "provide equal opportunities for women and men to enjoy and attain an acceptable minimum threshold of universal access to potable water, sanitation, electricity, transportation, road networks, and general security of life and property by 2015" (Federal Republic of Nigeria, 2006). Furthermore, the associated implementation plan makes no mention whatsoever of transport (Federal Republic of Nigeria, 2008).

While women may have some privileges while travelling (such as access to safer seats) they are disproportionately affected by issues such as unreliability of services and due to their additional responsibilities at home may choose not to travel rather than risk being stranded (Starkey and Njenga, 2010). A study undertaken in Ibadan city (an urban area) also found women in Nigeria are more likely to experience psychological stress than men when using the transport system (Asinyanbola, 2007). This is echoed by Odufuwa (2008) and is probably linked to some extent to women's additional responsibilities at home.

Detailed research was undertaken by the World Bank Gender and Rural Transport Initiative (GRTI), including a country report discussing the issues within Nigeria. The GRTI produced an online resource guide aimed at providing easy access to useful materials on gender and transport. This is available both online² and on CD-Rom.

The GRTI report contains a sub section specific to women and transport in Nigeria that makes some useful points about gender, transport and rural areas in Nigeria. These are outlined below (World Bank, 2006):

• Educational status in rural areas tends to be lower than in urban areas, and lower among women than men;

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² http://www4.worldbank.org/afr/ssatp/resources/html/gender-rg/index.html

- Rural dwellers engage in a complex mix of activities to support themselves. The complexity of these livelihood strategies must be understood so that necessary interventions can be provided;
- Any attempt to improve the transport situation for members of the household must involve the knowledge and approval of the male head, even if the intervention is solely for the benefit of women;
- Social restriction can affect females' access to certain types of transport, but this varies by socio-cultural and religious groups;
- Both males and females generally use more than one type of transport, and in some areas women use more types than men; and
- Officials of formal organisations need to be sensitised to the gender issues in rural communities, and be made aware of the importance of participatory planning in project planning and implementation.

Access to market affects women's ability to engage in economic activities. In areas with poor or expensive transport services, women commonly face particular constraints in accessing markets (Porter 2011). The author maintains that often this is not only a factor of limited availability of local markets but also of restrictions on women's mobility which affects their ability to travel.

The World Bank (1999) emphasises that cultural traditions and male control of household resources mean that women have less access to non-motorised and motorised transport than men. For example, Odufuwa (2007) found that in Lagos, the decision to acquire an automobile was made by men in 57% of all cases. Therefore, multi-tasking, poor service access, and poor vehicle access severely limits the time available to women for other activities and the timeliness for carrying out activities. For women, the financial and time constraints — and, in some cases, the cultural constraints — on mobility (and thus on access to these facilities), can be particularly restrictive (Porter 2002, Porter 2007).

This situation is further complicated by other factors, for example religion (World Bank, 2006). In Northern Nigeria, most people are practicing Muslims and sharia law prohibits women taking transport vehicles operated by men and being in the same modes of transport with men at the same time. As a result, most rural women take to walking and head-carrying to, and returning from farms and markets. For those who wish to take public transport, they often wait for several hours for the few vehicles that are operated by females. This is echoed by Porter *et al* (2007b) who describes varying degrees of constraint for Muslim women ranging from limited movement beyond their village to total house seclusion. However, it is important not to draw blanket conclusions about the impact of religion on access to transport, as it varies across the country with women in certain areas having significant restrictions and those in others having very few (Porter, 2003).

Women are also unlikely to cycle (which would present an ideal low cost mode), either due to cultural inhibitions, or because they had not learnt to ride a bicycle in their youth. During fieldwork in Nigeria, Porter et al (2007) found that 76% of women interviewed at rural markets had walked there compared to only 41% of men. There is evidence that more women are using Okada in the cities, although they are also more likely to be involved in accidents than men (Oyesiku and Odufuwa, 2002), and the drivers tend to be male. According to the World Bank (2006) bus is the favoured mode of transport in rural Nigeria for women. Further, a study in Lagos metropolitan area found that women were far more likely to experience crime while using public transport than men, and most crimes occurred while waiting for public transport (Odufuwa, 2012). While this study took place in an urban area it raises important issues that may also have an impact on the willingness of women to use transport services in rural areas.

While IMTs appear to have made a significant difference to accessibility in Nigeria for rural settlements, ownership and use of them by women was found to be much lower by Porter (2002). It was suggested that this was primarily because they couldn't afford them and due to a variety of cultural constraints. Therefore the author suggested that in areas where a critical mass of IMTs is already present, credit arrangements to help women to purchase them coupled with training programmes could have a "massive impact" (p.17).

Porter (2011) noted that even in regions where the majority of the people are not Muslim, there is often a strong male association of female mobility with promiscuity. The author maintains that patriarchal constraints impact on the mobility of females from an early age. This relates not only to male concerns around the vulnerability of girls to sexual and other attacks and to their potential promiscuity, but also to

gender division of labour, which typically places great emphasis on female labour contributions to household reproduction and, in locations where the transport gap is substantial, assigns pedestrian transport of goods to females (ibid: 66). The author observed a widespread association of mobility with female sexual misdemeanour in many African villages, where the majority population is Christian. Males attitudes to mobility and a discourse that specifically associates mobility both with promiscuity and being a 'bad uncaring wife' clearly brings tension within the household, which escalate into violence if women rebel (ibid: 68).

In addition, it is necessary to consider the wider potential consequences of transport improvements aimed at women on other aspects of their lives. Porter (2003) posits that many women make a living out of porterage, and improvements to transport may reduce the opportunity for this. The impact of such issues must be factored into the consideration of improvement actions.

This section has highlighted that women have different needs to men because they are often constrained by other responsibilities in the home. It has also shown that women are limited by cultural and religious aspects that affect the modes of transport that are available to them. Therefore there is a clear need to take into account these gender differences when designing and implementing policies in order that they are able to meet the needs of everyone.

2.7 Women entrepreneurs

Summary: Becoming an entrepreneur is one way that women can generate an income for their household. However, while women make up a significant portion of the agricultural labour force their contributions to economic development have been largely ignored. Women in Nigeria face an uphill struggle if they want to become entrepreneurs, and must contend with barriers such as a lack of access to finance and a lack of support from government, and from their families. This indicates that action needs to be taken at a national policy level, and at lower levels to ensure that the barriers experienced by women entrepreneurs and potential women entrepreneurs are minimised. A greater understanding of these barriers is also required as it is apparent they are not universal.

"Women entrepreneurs are simply women that participate in total entrepreneurial activities, who take the risks involved in combining resources together in a unique way so as to take advantage of the opportunity identified in their immediate environment through production of goods and services. Most of them are involved in micro, small and medium scale enterprises (MSMEs)" (Okafor and Mordi, 2010, p.44)

The World Bank (2013a) maintains that after decades of progress towards the equality of women, almost 90% of countries continue to have laws or regulations that prevent women from fully participating in economic life as entrepreneurs or employees. Conversely, it has been suggested by Pines *et al.* (2010) that from the perspective of diversity, equality and inclusion, entrepreneurship can be viewed as a means of inclusion for women and other marginalised groups in low-income countries, in which they suffer from lack of equal opportunities and social exclusion. As Jamali (2009) put it, for many women entrepreneurs, the choice of self-employment may reflect the restricted structure of opportunities in the labour market, labour market discrimination or glass ceiling career problems, with self-employment often perceived as a survival strategy, or as a means of providing flexibility in work scheduling and reconciling multiple roles.

The recently released Global Entrepreneurship Monitor (2013) showed that not only do women entrepreneurs lag behind their male counterparts in terms of percent of the population in every economy, but there are wide differences of female participation across different nations. The gap ranges from only a 1% Total Entrepreneurial Activity (TEA) rate in Pakistan to nearly 40% in Zambia. The most fertile region for woman entrepreneurs is sub-Saharan Africa, which boasts a 27% TEA. There is evidence suggesting that although the rate at which women are creating businesses has increased, the rates of female entrepreneurial activities are significantly and systematically lower than those for males (Jamali 2009).

In spite of their important contributions to socio-economic development (they make up 60-80% of the agricultural labour force in Nigeria according to Ogunlela and Mukhtar (2009)), women suffer from various constraints, which inhibit them from fully realising their potential for development (UNIDO 2003). Nnamdi (2009) posits that women entrepreneurs in Nigeria "face additional impediments or road blocks due to deeply rooted discriminatory sociocultural values and traditions that are embedded in the policy and legal environment and in institutional support mechanisms" (p.58). Cultural values and social exclusion also hinder

the equal participation of women in economic activities. One of the major constraints women face as entrepreneurs is the unequal access to productive resources and services, including education, land, finance and other opportunities.

In Nigeria specifically, women run only 20% of enterprises in the formal sector (World Bank, 2009). In general women are better represented in the retail sector, and less well represented in wood, metals, chemicals, construction and transport industries. Further, more women are in the formal sector in the more industrialised south of Nigeria than in the north, indicating that many opportunities for entrepreneurship may be in manufacturing (British Council, 2012).

The title of Nwoye's 2007 paper "Gender Responsive Entrepreneurial Economy of Nigeria: Enabling Women in a Disabling Environment" is telling regarding the uphill struggle experienced by women entrepreneurs and potential entrepreneurs in Nigeria. Nwoye states that "African women are by nature innovators. They can easily create something from nothing in attempt to assist in family needs. And so by extension, Nigerian women are natural entrepreneurs and presently they dominate the informal sector business in the country" (p. 171). She suggests that gender issues need to be addressed at the policy level, the institutional level and the project level in order to minimise the barriers (such as a lack of political influence, a lack of finance and socio-cultural issues) experienced by women entrepreneurs and enable them to fulfil their potential.

Many of these issues are compounded by the "traditional" roles that are expected to be fulfilled by women in Nigeria. Woldie and Adersua (2004) assert that "in Nigerian culture, the traditional female role is still highly regarded, and such qualities as subservience, supportive, and submissiveness meet with approval. Career women therefore often face a conflict, since the qualities that make them "acceptable" in traditional terms can undermine their self-confidence and their ability to assert themselves, to assume responsibility and to succeed in a career. Gender divide exists in Nigeria, hence aspiring Nigerian women entrepreneurs feel obstructed by the gender divide" (p.80-81). This means that, according to the authors one of the greatest barriers for women entrepreneurs is being taken seriously by their male counterparts. These factors place a major barrier on women who have entrepreneurial aspirations.

The same authors go on to suggest that it is difficult for women in Nigeria to become entrepreneurs because "Women entrepreneurs in Nigeria are often prevented from running competitive businesses by their relatively low education and skill levels, which generally limit their access to the various support services. Despite many shortcomings and constraints, women have been able to create their own enterprises, even in countries where economic decisions would normally be taken by the male head of the households" (p.79-80).

In terms of income generation, Porter (2011) observed that rural women's marketing mobility may be restricted because in many cases women (together with their children) have heavy labour obligations including head porterage for male family members, and additionally because male family members are suspicious of their women-folk travelling long distances from home. In addition, the costs of transport, especially for poor women traders are often too high to allow access to more lucrative food markets (Porter et al, 2007).

Okafor and Mordi (2010) examined the role of environmental factors on women entrepreneurship in Nigeria. They found that environmental factors (such as financing accessibility, family and community, business support services, and legal and regulatory factors) can have both a triggering/push role if they conspire to force women into business, and a supportive/pull role if they help women to establish business.

Lack of rural microfinance services impacts on women's mobility and ability to start entrepreneurial activity. Financial constraints are more pervasive in agriculture and related activities than in many other sectors, reflecting both the nature of agricultural sector and the average size of firms (World Bank 2008). Besides fighting poverty, microfinance also targets social and gender inequality and microfinance institutions actively try to involve women and disadvantaged groups as their main clients. It has proven to be difficult to provide accessible microfinance services to remote rural locations. Most of the financial services in African countries centre on the urban areas and cities and they are unable to reach the rural households.

It is important to recognise that barriers experienced by women entrepreneurs are varied (Mordi *et al,* 2004), and preconceptions must be avoided. For example, Zakaria (2001) found that Muslim Hasau women in northern Nigeria who are generally relatively secluded were no more inhibited in terms of economic

activity than non-Muslim women in the same area. In fact they were often found to be participating in economic activity and income generation in the hidden informal economic sector.

Much of the literature asserts that in order to allow more women to become entrepreneurs, access to finance, and support needs to be improved (Mordi *et al*, 2008, Halkias *et al*, 2011, Singh *et al*, 2011) alongside cultural changes (Ehigie and Umoren, 2003). Support should come both from the government and other authorities, and from family in order to reduce the "double burden of work" (Ehigie and Umoren, 2003, p.92) that women suffer from and that decrease women's ability to commit to a business.

This section has reviewed the current role of women as entrepreneurs in Nigeria, and highlighted some of the barriers that they face. It has identified that being a female entrepreneur in Nigeria is no easy task, and has also highlighted something of a knowledge gap in terms of the barriers that a lack of transport may pose. The final section of this literature review introduces the AFCAP/IFRTD rural transport indicators.

2.8 The AFCAP/IFRTD rural transport indicators

Summary: The AFCAP/IFRTD rural transport indicators were developed to provide a better way of measuring rural transport development in Africa. A need for the indicators was identified because existing indicators did not take account of how "good" rural transport services are, and there is a tendency to measure outputs of projects rather than outcomes. The indicators comprise two headline indicators that have been tested and are ready to use, two indicators for rural small and medium freight services which could be used but are known to be less measurable and more variable, two further indicators that are not yet ready to use but could be developed and tested fairly quickly and four more complex sets of indicators relating to key stakeholders.

This section of the literature review is not directly related to its preceding sections. The preceding sections have addressed a range of issues that set out the context within which women entrepreneurs in rural Nigeria are working. This section introduces the AFCAP/IFRTD rural transport indicators, which at this stage may not appear to be of direct relevance to women entrepreneurs. However one of the objectives of the study is to test these indicators against the "real world" experiences of women entrepreneurs.

Recently the International Forum for Rural Transport Development in conjunction with Paul Starkey on behalf of the African Community Access Programme developed a set of rural transport indicators. These indicators are referred to as the "AFCAP/IFRTD indicators" within the remainder of this report. As stated above, one of the objectives of this research was to test these indicators against the real world experiences of women entrepreneurs in Nigeria.

Before considering which of the indicators are "gender related" the next few paragraphs describe the background to the development of the indicators. They do not consider wider issues relating to the development and definition of transport indicators generally as this is considered to be outside of the scope of this research.

The AFCAP/IFRTD indicators were developed to assess how good rural transport services are at providing access for rural people. They were developed because general opinion was that current transport indicators were not able to properly assess this issue. As this report has already described, rural roads are a vital factor in economic development and poverty reduction. However in the context of most people in rural locations not having access to a motorised vehicle, road transport services that use these roads are an essential component (Starkey and Njenga, 2012).

Existing indicators for assessing rural transport tend to have a number of characteristics. Firstly they often relate to a different context, for example that of the developed world, while those that could be applied to the developing world generally relate to urban areas. Secondly they are often structured from the perspective of the regulatory authorities (Starkey, 2012). This leads to a situation where policies and projects cannot be properly evaluated in terms of their impact. Starkey (2012) offers the example of a road project in Ethiopia:

"In a recent road programme in Ethiopia, the importance of improving rural transport services was mentioned repeatedly in the planning documents required to justify the infrastructure investment. Yet when it came to the evaluation, there was no assessment as to whether or not transport services had actually improved: the evaluation was of the physical development. We do not know, and perhaps we never will know, whether this particular investment had the intended consequences for transport services on those roads in Ethiopia". (p.2).

Furthermore, the World Bank's rural access index indicator (Roberts *et al*, 2006) equates rural access to proximity (2km) to a motorable road, and takes no account of the existence (or otherwise) of transport services. Further, it does not differentiate between high quality paved roads, and tracks that are just passable in a motor vehicle. Therefore upgrading a track to a road has no effect on the indicator, although it is likely to have considerable effect on access to various destinations and activities.

As such, a set of indicators were required that better measured rural accessibility, and as a result the AFCAP/IFRTD indicators were developed. The indicators comprise two headline indicators that have been tested and are ready to use, two indicators for rural small and medium freight services which could be used but are known to be less measurable and more variable, two further indicators that are not yet ready to use but could be developed and tested fairly quickly and four more complex sets of indicators relating to key stakeholders. The full list of indicators is set out below (for the full report see Starkey *et al*, 2013).

<u>Headline indicators</u>: Fare price per passenger km

Transport frequency on normal days

Freight indicators: The costs per tonne km of accompanied small freight (50 kg loads)

The costs per tonne km of consigned medium freight (200 kg loads)

<u>Future indicators</u>: Reliability and predictability index for return trips to the market/services hub

Disruption index

User satisfaction indicators:

Each aspect is scored between 1 (very dissatisfied) and 5 (very satisfied) indicating how satisfied the respondent is. The following items are given a score for each relevant mode of transport and the results displayed disaggregated by gender.

Passenger fares Medium freight charges

Courier services Medium freight handling

Journey times Road safety

Service frequency Security

Service predictability Comfort: space

Passenger capacity Comfort: seat type/conditions

Small freight availability Comfort: surrounding baggage

Small freight charges Comfort: environment

Small freight handling Access for vulnerable people

Medium freight availability

The following indicators are scored for the transport system as a whole:

Facilities at roadside stops

Linking intermodal connectivity

Feeding intermodal connectivity

Regulator perspective indicators

Each aspect is scored between 1 (very dissatisfied) and 5 (very satisfied) indicating how satisfied the respondent is. The following items are given a score by the respondent for each relevant mode of transport.

Vehicle technical compliance Safety compliance

Vehicle fiscal compliance Environmental compliance

Insurance compliance Regulatory planning framework

Operational compliance Safety of the road

Operator perspective indicators

Each aspect is scored between 1 (very dissatisfied) and 5 (very satisfied) indicating how satisfied the respondent is. The following items are given a score by the respondent for each relevant mode of transport.

Road condition for operations Regulatory disincentives

Adequacy of working capital Regulatory incentives

Facilities for formal credit Active associations

Facilities for informal credit Security risks

Adequacy of technical facilities

Development perspective indicators

Each aspect is scored between 1 (very poor) and 5 (very good) indicating how satisfied the respondent is. The following items are given a score by the respondent for each relevant mode of transport.

Agricultural facilitation Education-related transport

Enterprise/trade facilitation Mobile phone and ICT integration

Women's empowerment Cultural impact

Minority group empowerment Environment impact

People with disability empowerment HIV/AIDS impact

Young people's empowerment Integration with feeder transport

Maternal health needs Integration with external transport

Medical service transport Road maintenance adequacy

It is clear from these indicators that most of them will apply to either gender, and improvements made to any aspect of the transport system should be beneficial to both genders. However there is one indicator "women's empowerment" that relates specifically to women and so may lead to transport improvements specific to the female gender.

This section has provided a brief introduction to the AFCAP/IFRTD indicators and these will be revisited during the analysis of the findings from this study.

2.9 Summary

This chapter has attempted to provide an introduction to the context for this study. It began by providing some facts and figures about Nigeria in terms of geography, economy, demography and social aspects. Next it described some of the rural issues that exist in Nigeria, detailing how isolated rural areas are often dependent on agriculture, although recognising that increasingly income sources are diversifying. It also described how rural areas tend to have poor public service provision. Subsequently gender issues were discussed, and it was concluded that while steps have been taken to include consideration of gender issues in policy, and create gender mainstreaming, there is still some way to go before equality exists.

The subsequent section of the literature review gave an overview of transport policy and transport infrastructure and services in Nigeria, and found that poor road maintenance has had a negative effect on transport provision. This may have been compounded by the lack of an adopted national transport policy. The following section identified that the problems caused by poor maintenance are worse in rural areas, where the majority of the roads are unpaved and the rainy season often makes travel impossible. Furthermore public transport services are infrequent, expensive and often unreliable. Next, issues relating to gender and transport were explored, and it was clear that women have different transport needs and face very different transport barriers to men for a variety of social, cultural and religious reasons.

The penultimate section discussed the role and experiences of women entrepreneurs in Nigeria, and described some of the barriers that they face, such as a lack of support from policy and from their families, and a lack of finance. It also highlighted that there is something of a gap in the knowledge regarding the barriers that may be associated with transport. Finally the AFCAP/IFRTD transport indicators were introduced so that they can be used in the analysis at a later stage of this project.

The failure of transport policies and planning to effectively integrate women into the mainstream of economic activities in sub-Saharan Africa has long been cause for policy concern, and in this regard there seems to be a gap in knowledge in terms of the barriers faced by women entrepreneurs in rural areas, or into the role of transport and mobility in helping women entrepreneurs to become a success. Transport planning and policies require a structured approach to understanding women's transport needs and identifying instruments to address these needs, analysing cost and benefits of those instruments in order to establish an appropriate policy framework.

Such planning requires knowledge of the effect of the transport burden on women's abilities to engage in entrepreneurial activities, employment, access to markets and social services leading to reduction in economic loss. Policies should be able to distinguish cultural, economic and social barriers constraining women's access to economic opportunities and identify intervention strategies more likely to benefit women and other vulnerable groups in society. This requires devising measures to integrate women as decision-makers, participants and beneficiaries in all relevant development activities, irrespective of the sector or type of activity. It is also necessary to address the totality of problems women face as entrepreneurs, due to the wide spectrum of elements affecting the equitable participation of women in development in poorer countries (UNIDO 2003).

This study aims to address some of these knowledge gaps by identifying specific transport barriers that affect rural women in Nigeria and the impact that has on entrepreneurial activities.

3. Research methodology

Summary: The research comprised of an in-depth literature review accompanied by two stages of primary research – a telephone survey with 92 respondents and in-depth telephone interviews with 20 respondents. The sample was drawn from the YouWiN! database of 1200 women who have been awarded funding via the YouWiN competition during 2012/13. The survey explored the characteristics of the women and their businesses, their use of transport, and the impact of transport on their business activities. The interview explored the transport issues and barriers facing the women in more detail, and discussed potential solutions.

This chapter provides details of the methodology for the primary research that was undertaken as part of this project. Firstly it introduces the YouWiN! project, which provided the database of women entrepreneurs used as the sample. Next it describes the telephone survey approach, before explaining the method used for the telephone interviews.

3.1 YouWiN! Women

The phenomenon of 'poor rural economy' has been accentuated by the inability of the private and public sectors to accommodate rapid growth in the population and labour force and has been worsened by labour market discrimination and segregation between men and women, social groups and different occupations. As identified in the literature review, women in particular often have difficultly accessing funding to start up or grow their businesses. This led the Federal Government of Nigeria to introduce entrepreneurial funds in order to stimulate the creation of new business enterprises among youths and women. The Nigerian National Business Plan Competition (YouWiN!) which is one of these funds has been heavily promoted and funded by the Federal Government across the 36 states of the country for the past four years.

The 'YouWiN!' competition is supported by Plymouth University through the DFID. In 2012/13 'YouWiN!' received 60,000 applications from women entrepreneurs, with the best 1,200 applicants supported with financial and mentoring awards. The programme has generated data on more than 100,000 business concepts and 12,000 detailed business plans within the scope of entrepreneurship and SMEs, which Plymouth Business School in partnership with Pan-Atlantic University Lagos - Nigeria has access to for research purposes.³

This research study draws upon YouWiN! to generate a sample of women entrepreneurs for the survey and interviews. Barriers of finance and support have been directly addressed by winning the competition, hence they offer the unique opportunity to understand next-step barriers to business growth. The findings are based on a data set of 1200 women entrepreneurs from the 2012/13 competition.

3.2 Stage 1: Telephone survey

The first stage of the primary research involved the conduct of a short telephone survey with 92 women entrepreneurs who were randomly selected from the YouWIN! sample. Pre-screening questions at the start of the survey were used to exclude women who lived in a city. Interviewees were selected from the least populated 3 states in each of the 6 geo-political regions of Nigeria – North Central, North Eastern, North Western, South Eastern, South South and South Western regions (Table 1).

Table 1: Coverage of the telephone survey

Zones/regions	States	Frequency	Percent
	Kwara	4	4.3%
North Central	Nasarawa	7	7.6%
	Plateau	5	5.4%
North Fastern	Borno	1	1.1%

³ with permission from the Nigerian Ministry of Finance

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Total	16	92	100.0%
	Oyo	9	9.8%
South Western	Ondo	1	1.1%
	Ogun	10	10.9%
South South	Edo	5	5.4%
Couth Couth	Yobe 2 Kaduna 12 Zamfara 1 ern Ebonyi 10 Enugu 7 Enugu 7 Edo 5 Ogun 10 Ondo 1 Oyo 9	2.2%	
	Enugu	7	7.6%
South Eastern	Ebonyi	10	10.9%
	Abia	7	7.6%
North Western	Zamfara	1	1.1%
North Western	Kaduna	12	13.0%
	Yobe	2	2.2%
	Taraba	9	9.8%

Telephone surveys were selected because the YouWiN! data set contained the mobile phone number of all the 1200 women winners and so could be contacted easily and more quickly using the telephone than using other methods. In addition, the national spread of the entrepreneurs and the lack of efficient postal services in Nigeria means that the telephone survey was the most suitable and cost effective method.

The survey schedules were designed by the project team and piloted before being finalised. The survey schedule comprised of four main sections (see Appendix A for the full schedule) using a combination of open and closed questions:

- The first section was populated prior to the survey using data from the YouWiN! database. This data included: location, date of birth, education level, marital status, family situation, role of family care, business ownership, business sector, full time staff, internet, electric generator and years of business experience.
- The second section concerned gathering information about the business, including data on the type of location of the business, the type of location of the applicants residence, the number of employees when the applicant applied for funding and the current number of employees and how long the business had been operational for.
- The third section concerned transport usage and explored whether the respondent used public transport or private transport during their business activities. For both possible responses the respondent was asked about how often they used the transport, what type of vehicles they used, how long they used it for in terms of distance and time and what activities they used it for. Respondents who did not use public transport were asked why not, and respondents with their own vehicles were asked what they were and how many they owned.
- The fourth section concerned business operations and transport usage. It included questions on whether and how the transport system limited business growth, whether and how the transport system impacted upon recruitment, whether and how the transport system limited women from participating in business activity, whether any wider gender and cultural issues prevented women participating in business activity, and whether any government policies were being implemented to improve rural transport in the local area and what these were.

The surveys were undertaken during November and December 2013 by female interviewers from the Pan-Atlantic University in Nigeria. Female interviewers were used in order to eliminate the cultural/religious/social barriers of having a male interviewer contacting a female on the phone.

3.3 Stage 2: In-depth interviews

Stage 2 comprised in-depth qualitative interviews with a sub-sample of 20 women who participated in the telephone survey. The aim of these interviews was to yield a richer data set to enable the exploration of the problems and worries highlighted in stage 1, and investigate potential solutions. Initially the plan was to

conduct this stage using focus groups, however due to the geographic spread of the respondents this was not feasible. The interview schedule was designed by the project team, based on the findings and the key issues highlighted by the stage 1 survey. The interviews were undertaken using female interviewers from a Nigerian Market Research Agency supervised by the Pan-Atlantic University.

Each interview was recorded and transcribed to aid analysis. A brief summary of the interviewee's responses to the stage 1 telephone survey was prepared prior to each interview so that these could be used to guide the telephone interview. 20 women were interviewed during February 2014 and the interviews lasted for no more than 25 minutes each.

The interview schedule comprised six main sections (see Appendix B for the full interview schedule):

- Section 1 was a general introduction from the interviewer outlining the objectives of the interview and providing assurances that their comments would not be attributed to them personally in the research outputs without their express permission.
- Section 2 was used to review the interviewees' responses regarding their personal situation during the stage 1 telephone survey and to make a note of any incorrect information or changes in their personal circumstances that had occurred since the conduct of that survey.
- Section 3 included questions on the participants' use of methods of transportation for business purposes, vehicle ownership, whether the local road network limits public transport options available meet their business needs and whether improved road maintenance could help to solve this issue.
- Section 4 explored the costs and journey time issues that might be associated with using public transport for business activities and identified whether either of these factors had a significant impact on their business activities.
- Section 5 explored the transport issues and barriers specific to women entrepreneurs and sought to
 ascertain any problems that the women had experienced when using public transport, whether and how
 they had addressed these problems in the past and whether they had any suggestions for addressing
 these problems in the future. The participants were also prompted for their reactions to a series of
 suggested solutions and their awareness of any specific state or local government policies aimed at
 addressing these issues.
- Section 6 was used to briefly summarise the main points made during the interview and to thank the respondents and draw the interview to a close.

3.4 Summary

This chapter has introduced the YouWiN! project and described the methods used during the primary data collection. The next chapter describes the results from this primary research.

4. Data analysis and results

Summary: This chapter summarises the findings from the telephone survey and the in-depth interviews. In general, the women in the study were found to have fewer children and be more educated than the "average" Nigerian woman. The majority used public transport for their business activities, although a large portion also used private vehicles, and some women used a combination of both. More than half the respondents identified transport barriers that they felt limited the growth of their business, while a similar amount suggested a number of wider barriers that have an impact on business performance. Transport barriers included the poor quality of the road network, high cost of transport, poor availability of transport, long journey length and low levels of reliability and convenience. These were exacerbated by wider barriers including poor treatment of women on transport services, safety concerns, and being unable to use certain transport, or transport at certain times of the day as a result of religion. The consensus of opinion regarding the wider barriers was less clear cut than regarding transport barriers.

In general the women were not very aware of local and state level transport policies. In order to overcome barriers some women made changes to their business arrangements, but the "best" solution for individuals was posited as being to buy a car and learn to drive. The women responded positively to some other policy improvements that were suggested, including improvements to the quality of the road network, better regulation of transport services, women drivers of transport services and finance to help women buy their own business vehicles.

This chapter provides the analysis and reporting of the results from the primary research. It will firstly review the findings from the telephone survey before discussing the findings from the telephone interview. These findings will then be discussed in the context of the literature review in Chapter 5.

4.1 Findings from stage 1: telephone survey

As described in chapter 3, the telephone survey comprised a number of sections that explored aspects of transport and business affecting women entrepreneurs in rural Nigeria. This section begins by providing some context to the findings by describing the characteristics of the women and their businesses. Next it looks at their use of transport, and the barriers that they encounter in terms of transport and business. Finally it looks at other barriers that affect the women entrepreneurs and impact upon their ability to be successful.

4.1.1 General characteristics

This section reviews the general characteristics of the women that were surveyed looking at their personal and business characteristics. To this end it covers age, language, marital status, family situation (including the importance the women place upon family care and independence), education level, business sector, age of business, location of business, business ownership and number of employees.

The women who participated in the study were aged between 20 and 46 as shown in Table 2. The largest group is the 36-40 age group, while the lowest is the youngest age group, 20-25. Interestingly there were no respondents under 20 or over 46. The main language of 32% of the women was English, while for 29% it was Igbo, 22% Yoruba, 11% Hasau and 7% other.

Table 2: Age of survey respondents

Age	Frequency	Percent
20-25	7	7.6%
26-30	22	23.9%
31-35	17	18.5%
36-40	29	31.5%
41+	17	18.5%
Total	92	100.0%

Source: YouWiN Data, 2012.

The original YouWiN! survey asked the respondents about their marital status. 71% were married or cohabiting, 28% had never married and never lived together, and 1% were widowed. It also recorded the number of children each respondent had and this is shown in Table 3. This indicates that over a third of the women did not have any children which is unusual since statistics indicate that on average Nigerian women in rural areas have 6.3 children (although the average is only 2.9 across all areas for more educated women), and their age at the birth of the first child is 19.5 (National Population Committee, 2009).

Table 3: Number of children

Number of children	Frequency	Percent
0	33	35.9%
1	13	14.1%
2	13	14.1%
3	11	12.0%
4	15	16.3%
5	6	6.5%
6	1	1.1%
Total	92	100.0%

Overwhelmingly, the women rated "care for their family" very highly, with 75% judging it to be very important and 14% rating it somewhat important. Only 11% rated it as unimportant. In addition, 90% of women rated independence as important with only 4% rating it as somewhat important and 5% rating it as unimportant. This perhaps goes some way towards explaining why the women were entrepreneurs.

As shown in Table 4 the majority of the respondents (58.7%) were educated up to university/postgraduate level while 30.4% obtained Polytechnics/College of Education qualifications indicating that the women tended to have a higher than average (for Nigeria women) level of education. Only a very low percentage of the sample had completed their education at secondary or primary level (8.7%). One possible explanation for this is the motivation for the YouWiN! competition which is aimed at reducing youth unemployment among university graduates in the country.

Table 4: Education attainment

Highest qualifications	Frequency	Percent
Master's Degree	13	14.1%
University	41	44.6%
Polytechnic/College of Education	28	30.4%
Secondary School	8	8.7%
Primary School	1	1.1%
Missing	1	1.1%
Total	92	100.0%

Source: YouWiN! Data 2012

The women had businesses that were spread across 19 business sectors. However the majority of the women engaged in four major enterprises - animal farming (20.7%), crop farming (14.1%), food and drinks (13.0%) and education (8.7%) as shown in Table 5.This reflects the domination of agriculture as a source of income generation in rural Nigeria. About two-third (67.4%) of these activities are informal (unregistered) businesses.

Table 5: Business sectors

Business activities	Frequency	Percent
Animal farming	19	20.7%
Crop farming	13	14.1%
Food and drinks	12	13.0%
Education	8	8.7%
Food & restaurant	5	5.4%
Manufacturing - others	5	5.4%
Building and construction materials	5	5.4%
Other	4	4.3%
Chemicals, industrial materials	3	3.3%
Cleaning	3	3.3%
Media and entertainment	3	3.3%
Medical	3	3.3%
IT and telecommunication	2	2.2%
Retail	2	2.2%
Accounting, finance and management	1	1.1%
Clothing, shoes and other personal items	1	1.1%
Engineering, building and construction	1	1.1%
Furniture, wood products	1	1.1%
Personal / beauty	1	1.1%
Total	92	100.0%

Source: YouWiN! Data 2012

The results showed that 64.1% of the businesses were new activities created through the YouWiN! 2012 funds, while 35.9% represents existing enterprises. In terms of business experience, 17.4% of the women have between 0-1 year business experiences, 19.6% had 2-5 years' experiences, 19.6% have between 6-10 years of experiences and 19.6% of the women had between 11-27 years of business experiences amongst them. About 24% of the entrepreneurs did not provide information as to their years of experience. This indicates that the majority of the women who provided information about their level of experience were relatively inexperienced in business. 53% of the women owned the businesses they were applying for funding for, while 47% did not.

Data generated showed that a majority of the businesses (65.2%) had been in operation for 1-12 months or less at the time of the survey. About 17.4% of the businesses had been in operation for between 2 and 4 years, while only 16.3% of the businesses had been in operation for 5 or more years.

When the women applied for the 'YouWiN!' grant they had a total of 109 full time employees (mean 1.18 employees), and 66 part time employees. Currently, the women employ more than twice the initial number of employees; with 254 full-time employees (mean 2.76) and 161 part-time employees (mean 2.24) (see Table 6). However, the number of employees currently employed in the various enterprises falls short of the number of full-time and casual staff the women entrepreneurs estimated they would employ during the YouWiN! grant. The estimates were 885 (full-time employees) and 481 (casual staff) with mean values of 9.62 and 5.23 employees respectively. Table 6 shows the distribution of employees amongst the 92 YouWiN! women entrepreneurs.

Table 6: Size of enterprise by number of employees

	No. of	employees YouWil	when appl N! grant	ied for	No.	of employe	ees current	ly
Staff	Full	l-time	Part-time		Full-time		Part-time	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
0	53	57.6%	60	65.2%	21	22.8%	29	31.5%
1	5	5.4%	4	4.3%	12	13.0%	11	12.0%
2	8	8.7%	5	5.4%	18	19.6%	13	14.1%
3	7	7.6%	-	-	14	15.2%	7	7.6%
4	1	1.1%	1	1.1%	9	9.8%	3	3.3%
5	2	2.2%	-	-	3	3.3%	3	3.3%
6	1	1.1%	-	-	2	2.2%	1	1.1%
7	1	1.1%	1	1.1%	4	4.3%	-	-
8	1	1.1%	2	2.2%	1	1.1%	1	1.1%
9	-	-	-	-	1	1.1%	-	-
10	-	-	1	1.1%	1	1.1%	1	1.1%
12	-	-	-		-	-	1	1.1%
15	-	-	1	1.1%	-	-	1	1.1%
16	2	2.2%	-	-	-	-	-	
22	-	-	-	-	1	1.1%	-	-
24	-	-	-	-	1	1.1%	-	-
25	-				-		1	1.1%
Unknown	11	12.0%	17	18.5%	4	4.3%	20	21.7%
Total	81	100.0%		100.0%	92	100.0%	92	100.0%

Source: Telephone survey, November 2013.

This study set out to select entrepreneurs who have both their business and homes located in rural towns⁴, inter-urban areas⁵ or villages⁶ for the telephone survey. It also included women who have their business in the cities⁷ but their homes are located in rural town or villages and vice versa. Those who have both their home and business located in the major cities of the states or state capital cities were excluded (Table 7).

⁴ Rural towns are places located in rural locations far away from cities

⁵ Inter-urban denotes rural towns close to a major city and non-state capitals

⁶ Villages are remote places surrounded mainly by farms or rivers dominated by agriculture

⁷ City in this research context refers to major cities or capitals dominated by commerce

Table 7: Entrepreneurs' home and business location

Location	Но	me	F	Business
Location	Freq.	Percent	Freq.	Percent
City ⁷	9	9.8%	2	2.2%
Rural Town ⁴	22	23.9%	35	38.0%
Inter-urban ⁵	42	45.7%	46	50.0%
Village ⁶	3	3.3%	6	6.5%
Unknown	16	17.4%	3	3.3%
Total	92	100.0%	92	100.0%

It is clear from the data about the women provided in this section that they are not representative of Nigerian women as a whole in terms of the language they use, the number of children they have and their level of education. However they are an interesting sub-set of women, and as such the barriers they face are still very relevant and important.

4.1.2 Use of transport

The telephone survey set out to generate data regarding the availability and extent of use of both public transport and private vehicle(s) for business among the women entrepreneurs. 80% of the women stated that they use public transport for their business operations, while 17% did not. In terms of frequency of public transport use, the majority of the women entrepreneurs (about 51%) reported that they used public transport every day and only 1.4% said that they did not use public transport often (Table 8).

The findings from the initial YouWiN! survey of the sample of women surveyed for this research indicate that 23% of respondents owned a bicycle, 23% owned a motorcycle and 75% owned a car or other vehicle, and of this 75%, 33% owned more than one vehicle (although they do not necessarily use these vehicles for their business activities). From the telephone survey it was calculated that about 45% of the respondents use their own vehicles for their business operations, while the remainder do not. Of those with their own vehicles, 16 stated that they used them for personal business. In terms of frequency of use of own vehicle, about 37% of women surveyed used their private vehicle every day for their business operation, while 61% did not (Table 8).

Interestingly, car and other vehicle ownership levels appeared to be relatively high compared to the averages in rural areas, while bicycle and motorbike levels are lower. The literature suggested that in terms of ownership of transport, 27.2% of rural households own a bicycle, 31.3% own a motorcycle and 5.7% own a car (National Bureau of Statistics, 2013).

Table 8: Frequency of use of public transport and own vehicle

Engage or of ugo	Public ti	ransport	Own vehicle		
Frequency of use	Freq.	Percent	Freq.	Percent	
Every day	38	51.4%	15	36.6%	
Few days weekly	20	27.0%	18	43.9%	
Few days monthly	12	16.2%	5	12.2%	
Not often	1	1.4%	2	4.9%	
Missing values	3	4.1%	1	2.4%	
Total	74	100.0%	41	100.0%	

Source: Telephone survey data November, 2013

The survey investigated the types of public transport and private vehicles that the respondents use or own for their business or private activities. In terms of public transport, car taxi (25.7%) was the most commonly used mode, followed by van/truck/pickup (20.3%) and Keke (Tricycle) (18.9%) (Table 9).

Looking at the vehicles owned by the entrepreneurs and used for their business operation, of the 41 respondents who used their own vehicles, 51.2% used a car, while 22% used a bus and a further 22% used a van/truck/pickups (as shown in Table 9). 25 of the respondents use both private vehicle and public transport for their business activities. The main reasons that the private vehicle users did not use public transport were: cost, convenience and availability (either lack of availability of public transport, or having a private vehicle available).

Table 9: Types of public and own transport means

T	Public tı	ransport	Own transport		
Types of transport used	Freq.	Percent	Freq.	Percent	
Buses	15	20.3%	9	22.0%	
Car (taxis)	19	25.7%	21	51.2%	
Danfo	2	2.7%	-	-	
Keke (tricycle)	14	18.9%	1	2.4%	
Motorcycle	8	10.8%	-	-	
Van, trucks, pickups	15	20.3%	9	22.0%	
Missing values	1	1.4%	1	2.4%	
Total	74	100.0%	41	100.0%	

Source: Telephone Survey, November 2013.

The mean travel time for the most frequently undertaken journey for private vehicle users is 39 minutes, within a range of 10 to 90 minutes. Analysis of travel times by means of public transport vehicles showed mean travel times of 55 minute for bus, 52 minutes for car taxi⁸, 50 minutes for Danfo⁹, 37 minutes for Keke, 23 minutes for motorcycle¹⁰ and 109 minutes van/truck/pickups.

The purpose of the most frequently travelled journey by public transport differ from one entrepreneur to another and from type of transport means to another. As expected they comprise a wide range of business activities, from collecting stock, to travelling to the business location, to travelling to market. About 24% of public transport users travelled to market to sell; 35% travelled to market to buy, 35% to supply customers; 12% to receive deliveries; 37% to move goods; and 15% for business/employees travel. The comparable values for women travelling using their own vehicles were: 20% of the respondents use own vehicles to travel to market to sell; 17% to travel to market to buy; 29% to travel to market to supply customers; 17% to receive deliveries; 24% to move items or goods and 32% for employees and business travels.

4.1.3 Impact of transport

One of the main objectives of this study was to investigate the impact of existing transport system and polices on business growth. About 62% of the entrepreneurs reported that the existing transport system in the country limited their business growth, 23% do not think the system has an impact on their business and about 10% do not know if the system have impact on their business growth or not (the remaining 5% did not give an answer).

The entrepreneurs were asked about the main transport related barriers that they faced during the survey. The responses they provided are presented in Table 10.

¹⁰ with the removal of 1 outlier

⁸ with the removal of 1 outlier

⁹ although only 2 people stated a time

Table 10: Transport barriers in rural communities that affect women

Transport barriers	Example responses
Availability	Lack of scheduled rural routes means women have to wait a long time to for transport to desired destinations. It is difficult to move from one place to another without a personal car or motorcycle. Lack of an adequate transport system also reduces marketing and business opportunities and increases costs.
Time	Transport takes too long and this has an impact on business. This applied more to public transport that to private vehicles, but was present for users of both types of transport;
Missed opportunities	Many women felt that they could not take advantage of business opportunities because they could not reach their clients, or their clients were unable to reach them at the required time, or with the required speed;
Convenience	Public transport was perceived to be inconvenient and not conducive to running a successful business;
Access	Some women felt that their businesses were inaccessible for clients due to their locations away from accessible transport routes.
Capacity	Some transport modes are unable to transport the amount of goods necessary for the business.
Poor road conditions	Travelling by road can be dangerous and uncomfortable for women (especially pregnant women), and transport providers avoid some routes where road conditions are too bad. Poor road conditions also increase vehicle maintenance costs.
Safety	People have to struggle to board buses/taxis and vehicles are over capacity. Also, they are overloaded with goods and safety is not considered.
Transportation stress	Stress discourages women from engaging in businesses by public transport.
Conformability	It is easier for men to join Okada and take taxi than women. Tiredness and delays on the road put women off using transport. Clients may negatively perceive business women who use public transport.
Tribal clashes/conflicts	Women are scared to take long distance transport journeys because of conflicts and community clashes in some places.

Source: Telephone survey, November 2013

The majority of the women stated that transport issues do not impact on their recruitment of suitable employees, while about 23% believe they do. The main impacts that respondents stated that the transport issues created were: expense (higher salaries had to be paid in 6 cases to cover the transport costs incurred by employees); housing (in 2 cases housing had to be provided to staff due to a lack of transport and long distances); expertise (in 2 cases respondents had difficultly recruiting adequately trained staff); transport (in 1 case a respondent had to provide transport for employees). Overall it appears that while recruitment wasn't too much of an issue, increased costs were incurred by the business due to the location and lack of affordable, useful transport services.

The women were also asked whether they were aware of any transport policies that were being implemented to improve rural transport in their locality. 22% were aware of policies, 51% were not and 27% did not answer. If the women were aware of any policies, they were asked to provide more details. Unfortunately the results were not very detailed or clear, but the responses seemed to relate predominantly to motorcycle taxis (uniformed drivers, and operational limitations); taxis (more widely distributed); trains (long-term plans for long distance trains, and existing train routes that make transport easier); roads (road maintenance and the construction of new roads); buses (luxurious buses and state buses being made available); and financial loans for transport for some people.

This shows that women experience a range of barriers relating to cultural issues, maintenance, safety and availability. Broadly these reflect some of the transport barriers identified in the literature review. These links are explored in more detail in the discussion.

4.1.4 Wider issues

The majority of the respondents (66%) said that there were wider issues preventing women from fully participating in business. 14% didn't think there were, and 8% did not know with the remainder not giving an answer. Those that said there were issues gave a number of examples which broadly fitted into four categories (business issues, cultural, gender and social factors). These are shown in Table 11.

Table 11: Wider issues affecting women from participating in business

(i) Business issues	Example responses
Location outside homes	If the home location is far away from the business location, women could get home late and this brings about family dispute among suspecting husbands.
Challenges	Women feel they cannot deal with the stress and challenges involved in setting up and managing businesses
Competition	There are a lot of competitors in the business communities and some women may not cope with the competition demands especially with businessmen.
Finance	Financial difficulties facing households make it difficult for women to have enough money to take care of their homes and at the same time invest in businesses.
Poor infrastructure	Public infrastructure (e.g. electricity, roads, transport, schools and health care) is unavailable, inadequate or malfunctioning and do not support women who want to go into business.
(ii) Cultural issues	Example responses
(ii) Cultural issues Religion and traditions	Example responses Some cultures (e.g. Hausa) and religions (e.g. Islam) require women to stay at home, while the men engage in work or business outside the home. Therefore the chances of women from those backgrounds participating in business that takes place outside the home (and thus requires transport by/of the women) are low. However the women may still need access to goods.
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Religion and traditions	Some cultures (e.g. Hausa) and religions (e.g. Islam) require women to stay at home, while the men engage in work or business outside the home. Therefore the chances of women from those backgrounds participating in business that takes place outside the home (and thus requires transport by/of the women) are low. However the women may still need access to goods.
Religion and traditions (iii) Gender issues	Some cultures (e.g. Hausa) and religions (e.g. Islam) require women to stay at home, while the men engage in work or business outside the home. Therefore the chances of women from those backgrounds participating in business that takes place outside the home (and thus requires transport by/of the women) are low. However the women may still need access to goods. Example responses There are some tasks that women physically cannot do (e.g. cleaning the pig

	engage in business or undertake a task with her.
Discrimination	Most men will always want to dominate and takeover the business when a woman is involved. Also, some men want to be in total control of the business run by their partners.
Sexual harassment	Some men harass and demand for sex in return for business favours/assistance.
(iv) Social issues	Example responses
Marriage	Women with plenty of money are looked at differently by men. Sometimes men are not forthcoming to marry such women, as they are looked upon as sophisticated ladies. Also, some men feel uncomfortable and lack the trust to engage in business with single/unmarried women.
Societal beliefs	People underrate women and believe that women cannot be as good as the men in business management and organisation. Society believes that certain occupations are for men and not women e.g. Farming and transport driving, etc.
Awareness	Women are not knowledgeable about most opportunities available to them within society.
Bribery	Women have to bribe and pay a lot to get what they want, even for things that are supposed to be public goods and services or free to the society.
Stress	Playing different roles at the same time; taking care of the husband and children and combining with managing a business can be stressful to women. Some occupations have more stress for women e.g. animal and crop farming.
Risk/crime	The roads are risky to take every day and there is too much crime on the road and in the society that scares women away from engaging in businesses.

Source: Telephone survey, November 2013.

As with the transport barriers, these broadly accord with the barriers that were identified in terms of women entrepreneurs in the literature review, and will be reviewed in more detail in the discussion.

4.2 Findings from stage 2: in-depth interviews

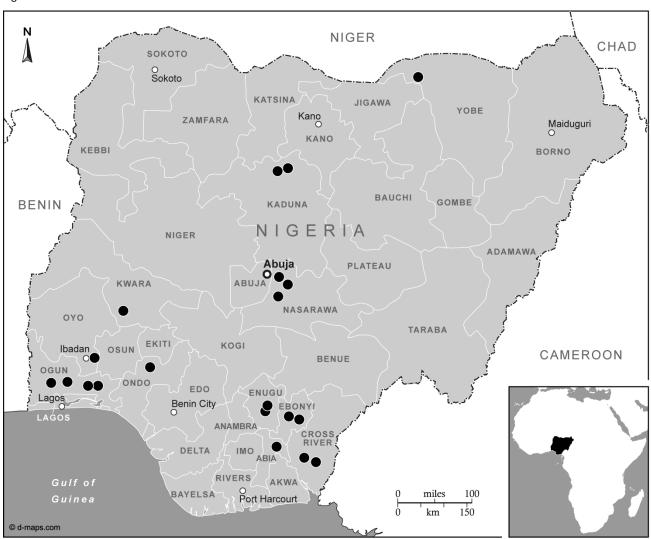
In-depth qualitative interviews were conducted with 20 rural women to enable the examination of the problems and issues highlighted in Stage 1, and to investigate possible solutions. The participants state, age and business sector are summarised in Table 12 while Figure 1 shows their distribution around the country.

Table 12: Stage 2 participant characteristics

State	Age	Business sector
Abia	30	Food and drinks
Cross River	29	Crop farming
Cross River	43	IT and telecommunication
Ebonyi	29	Crop farming
Ebonyi	39	Food and drinks
Enugu	31	Animal farming
Enugu	40	Chemicals, industrial materials
Kaduna	36	Education

Kaduna	38	Media and entertainment
Kwara	25	Animal farming
Nasarawa	31	Animal farming
Nasarawa	37	Cleaning
Nasarawa	42	Other
Ogun	30	Animal farming
Ogun	31	Crop farming
Ogun	37	Animal farming
Ogun	38	Animal farming
Ondo	39	Food & restaurant
Oyo	27	Animal farming
Yobe	23	Retail

Figure 1: Home locations of interviewees



This chapter begins by discussing the transport barriers that women face. Next it looks at gender, cultural and social issues that they encounter in terms of transport and business, before describing their level of policy awareness. Finally, ways in which women have overcome these barriers and possible solutions to the issues raised are discussed.

4.2.1 Rural transport barriers

A number of transport barriers were suggested; these included poor road conditions, expensive public transport services, limited availability of transport services and limited access to transportation, lengthy journey times and unreliable and inconvenient public transport services.

Poor road conditions

"The cost of transport is high...time is wasted and...all of this due to bad roads" (A participant from Yobe).

As this statement identifies there is a perception amongst numerous participants that the underlying reason for many of the transport issues, including limited availability of services, rising transport costs, increased vehicle maintenance, journey delays, safety issues and access difficulties, is poor road conditions.

Poor roads were identified by many participants as a cause for limited availability of transport services. Many of the women commented that they are often only able to take an Okada along the worst roads, as other modes cannot traverse the poor road conditions:

"The road to my farm is not tarred, we have a lot of potholes and the road is not straight. We don't have public transport plying the road. The road is not motorable" (A participant working in animal farming, from Nasarawa).

"There is no public transport that comes out, it is only Okada, no commercial vehicle comes out because the roads are not too good" (A participant working in the food and restaurant industry, from Ondo).

Participants claimed that poor road conditions often increase the cost of transport, as a price would be agreed with a driver but when arriving at a poor road the driver would often ask for more money. This may be due in part to high vehicle maintenance costs as one participant highlighted:

"The roughness of the road makes transport difficult, both the vehicle and the person driving it suffers" (A participant from Nasarawa).

Travelling can also become both time consuming and dangerous when traversing poor road conditions.

"If you have bad roads vehicles can't get to the place on time, you have traffic building up...and secondly it can cause accidents" (A participant from Nasarawa).

Moreover some participants noted that they have been restricted in selecting the location of their business, as poor roads make areas inaccessible and can deter customers.

"Because of the way the roads are, people don't come down to buy the bread, except people at the neighbourhood" (A participant from Ondo, working in the food and restaurant industry).

Cost of transportation

The high cost of transportation was described by many participants as having a negative impact upon business, often because high transport costs increase production costs. In particular a participant in the chemicals and industrial materials industry asserted that using public transport increases the running costs of her business by 20 - 30 %. Another participant stated that as a result of high transport costs she is forced to raise the price of the goods she sells, meaning that she cannot price her goods as competitively as others. Moreover a further participant described feeling discouraged from participating in business due to high transport costs, which have directly resulted in reduced profits for her business.

The issue of a large cost differential between the cost of using public transport and that of using private transport modes was mentioned. In some cases participants claimed that it would be cheaper overall if they were able to afford to purchase and use their own vehicle:

"We use public transport so the cost is much higher than if I have my own vehicle and just maintain the vehicle and pay the driver" (A participant from Enugu, in the animal farming sector).

Only one participant felt that public transport was cheap, however she also noted that at times when there were not many people making a journey the driver would inflate the price, increasing the cost.

Interviewees were asked why they thought public transport was so expensive. There were a range of answers, yet the majority of participants (as previously highlighted) felt that the cost of public transport was high because of poor road conditions. Furthermore it was suggested that this was because drivers have to spend a lot of money on repairing their vehicles:

"Almost every day they go to the mechanic and those mechanics are another problem. They charge so high the drivers have no choice but to increase their fares" (A participant from Yobe).

Some participants felt that the cost of maintenance and fuel was therefore transferred to the customers through higher fares. One participant added that this situation was exacerbated during the rainy season, when road conditions worsened, and therefore vehicle damage increased.

Several participants shared the opinion that transport costs were high because public transport services are unregulated commercial enterprises and thus operators are effectively able to charge whatever they like. A participant stated that the lack of regulation and monitoring was worsened by a group known as the "Area Boys" who extort money from commercial buses. This not only increases costs, but also creates a safety issue.

Conversely a handful of participants claimed that transport operators were regulated through an association, but still felt that drivers charged whatever they wanted. Some participants believed this was because drivers were aware that passengers didn't have an alternative mode of transport and therefore had to pay whatever was charged.

One participant commented that high transport costs were due to the 'opportunist nature of Nigerians'. She felt that a shortage in the supply of public transport services compared to the high level of demand led to higher fares being charged. Another participant emphasised this point, noting that while there tends to be an abundance of the more expensive taxis, there is a general lack of pick up vans available to move materials, and because there are not that many available the van operators can set a higher fare.

Availability of transportation

Many participants acknowledged the lack of an adequate transport system within their local area has contributed to heightened demand, increased journey times (and costs) and restricted mobility.

The majority of participants felt that the demand for locally licensed transport operators exceeded supply in their locality. Some interviewees commented that this led to increased journey times as passengers were often left waiting at bus stops.

"Demand is more than supply, we need reliable public transportation" (A participant working in media and entertainment, from Kaduna).

Furthermore a participant from Nasarawa asserted that there was currently a ban on green mini buses in Abuja, which has led to a shortage of vehicles in the area as a whole and therefore an increase in demand. Conversely a small number of participants felt that there was an excess of transport providers in some areas.

Participants also cited poor road conditions as a contributor to limited availability. Participants noted that it is difficult to move from one place to another without a motorcycle or personal car as other forms of transport are unable to navigate the poor road conditions. Consequently there is a lack of public transport options available to people trying to travel in these areas:

"There is no form of transport in village, most of the time they trek and even sometimes on the road we see children that ask for lift, so we have to carry them in our truck" (A participant working in the chemicals and industrial materials industry, from Enugu).

Such limited availability of transport was recorded by participants to have a negative impact upon their business practices and has restricted their ability to grow their businesses:

"Unavailability of mobility makes it difficult for people to come to us" (A participant from Ebonyi, working in the food and drinks industry).

"The limitation of transport has increased my cost of production" (A participant working in animal farming, from Ogun).

Many of the participants reported that as their businesses were not located on a major road or were located away from transport routes, access to transport services was very limited for customers, employees and suppliers:

"The farm is not on the major road, so getting to the farm is almost impossible. Staff who work there have to take a bus to a particular place and then walk a distance" (A participant from Nasarawa).

Limited access was also reported as affecting recruitment and increasing transport costs. Some participants stated that they are often forced to look for staff in their local area that they have to train, rather than recruiting a highly qualified person who lives further away who would often be unable to reach the business because of access issues. Furthermore this lack of access increases the personal transportation costs of potential employees and therefore they often don't want to accept a job because the salary would not be high enough cover their transport costs.

Journey length

Most interviewees stated that the available public transport services take too long and this has a negative impact on business. Many participants stated that they had to travel long distances to conduct business activities and any delays in their journeys often led them to miss appointments and in turn could lead to missed opportunities:

"Using public transport will not allow you to do your business because you will stand more than two hours before you move" (A participant working in the food and drinks industry, from Ebonyi).

"Where I live, to the city centre is about 15minutes, but I end up spending 2 hours because of the traffic...it is annoying, it has an impact" (A participant from Nasarawa).

One participant in particular noted that she often loses valuable production time due to time spent on the road. Another participant, working in crop farming, noted that long journey times can sometimes spoil her harvest. Taking journey delays into account it can actually take her up to 4 or 5 days to get to market, which can directly impact on the saleability of her produce.

Long journey times and delays were mostly associated with public transport. The participants offered a number of reasons for these long journey times which included poor road conditions, a lack of availability of transport services and a high volume of traffic, accidents and vehicle breakdowns. All of these factors increase the amount of time spent transporting both people and goods.

Several participants felt that public transport took longer than private modes of transport. Some participants remarked that if they had their own vehicle they would save time.

However other participants remarked that journey times didn't have an impact upon their businesses as they ensured that there were enough other staff on site to run the business if they were unable to be there due to journey time delays.

Only one participant thought public transport was faster than travelling using a private vehicle. She claimed this was because public transport drivers had greater knowledge of the roads and would drive faster. However she also noted that this often resulted in unsafe driving practices.

Reliability and convenience

Several participants reported that the public transport service that is provided is often unreliable and infrequent:

"They go in the morning and they come back in the evening so you have to stay where you are" (A participant in the food and drinks industry, from Ebonyi).

Consequently some participants stated that they would rather use private methods of transport as they are more convenient:

"I can take it out at anywhere and I can go anywhere without stress" (A participant working in the animal farming sector, from Ogun).

One participant in particular commented that having her own vehicle allowed her to move goods at her own convenience instead of having to rely on public transport:

"You can control everything, you determine when to leave and come back" (A participant from Ebonyi, working in crop farming).

4.2.2 Wider issues

As well as transport barriers that are likely to impact upon everyone, the participants highlighted additional gender, social and cultural issues which are specifically related to the way the women use transport and conduct their business.

Gender related transport issues

Most of the participants interviewed found that, as a woman doing business in the local area, they encountered problems using public transport that men didn't encounter. As one participant said:

"Women have transport challenges more than men" (A participant working in animal farming, from Oqun).

Some participants also felt that when using transport women are treated differently to men and are sometimes regarded in a derogatory way:

"They treat women the way they want, they treat women like they are not human being" (A participant working in crop farming, from Ebonyi).

"Men should stop intimidating us, they should give us equal rights and freedom" (A participant from Ebonyi, working in crop farming).

A few participants also commented on physiological barriers, stating that there were some things that women can't physically do, such as carrying goods:

"Women are weaker vessels" (A participant from Ebonyi, working in the food and drinks industry)

"It is true if you don't have men around to help you, it will be very difficult for me to carry feed on my head" (A participant from Oyo, working in animal farming).

One participant observed that in actual fact both men and women are often helped to carry goods but crucially the price negotiation for this service tends to be different for women than for men, resulting in a higher charge levied on women.

It was apparent that personal safety and security was a significant issue for those women using public transport. In particular robbery, kidnapping and rape were perceived to be real concerns for women travellers. One participant felt that more security on public transport services was needed as there is a high incidence of robbery on the road which scares commuters. She stated that she had been a victim of robbery twice and that more should be done by the government:

"The government should beef up security on the road, and put more police men on, arm them" (A participant from Nasarawa).

One participant commented that she feared for her personal safety when travelling as she often didn't know who she was getting into a vehicle with, sometimes being the only woman amongst many men. Another participant felt that women as more vulnerable members of society can be targeted by criminals. In addition, some participants noted that women are restricted as to what time they can travel; one participant stated that she had to leave the house when it was very bright and had to return before 6:30pm when it got dark. This was because she perceived that her personal safety was at greater risk after dark. Consequently travelling long distances was also noted by one participant to heighten security issues.

"Women are more at risk because they know they can barely defend themselves" (A participant from Yobe).

"For a man it is easier because he can defend himself but for a woman, anybody that sees her at late hour will want to take advantage of her because she is alone. Anything can happen" (A participant working in animal farming, from Kwara).

"You have to be careful, people can take advantage of you when they see that you are a woman" (A participant working in animal farming, from Oyo).

However it is important to be aware that some participants felt that transport issues are not gender related and affect everyone equally. Furthermore, three participants mentioned that they felt being a woman sometimes works to their advantage as (in their experience) drivers tend to be more sympathetic to women and therefore these women felt they have a greater bargaining power than men.

Social and cultural issues

Social and cultural issues such as family commitments, cultural and religious beliefs and personal safety and security concerns for women travellers, when travelling independently and at night, were identified by the interviewees as being barriers to women both in terms of using transport and also in business generally.

Many participants remarked that it was challenging to manage family and child care commitments alongside business commitments and the need to travel on long journeys for business purposes. There was a general consensus and societal belief that family should come first:

"You have to see to the needs of your children and husband before you can go out" (A participant in the food and drinks sector, from Abia).

Another participant agreed and also stated that:

"It's a very big problem, to me it doesn't make sense for a woman not to have time for her family because of business" (A participant working in Animal farming, from Ogun).

Most participants felt that a woman should have time for her family, they should be there to know what their children eat, where they are, what they are wearing. One participant went on to say that women with business commitments can encounter marriage problems as a result:

"Your children will not be happy when you are not around, your husband will not be happy" (A participant from Nasarawa).

However some participants, although noting that it is challenging, felt that as long as a woman is organised and plans well, such issues can be overcome. A few participants stated that to organise and plan they have to make adequate provision for childcare if they are travelling long distances for business.

It was also identified that religious and cultural rituals and beliefs can present a barrier to women travelling both for business and for other purposes. One participant commented that when the 'oro' ritual is taking place women are expected to stay indoors, restricting when and where women can travel. Another participant observed that in certain areas women's freedom of movement was restricted because in some regions women are not permitted to go out at night. A few participants faced other cultural and religious barriers including negative perceptions of women working when pregnant or after marriage. Conversely other participants felt that attitudes to women working were more positive and that the societal perceptions of a hard working woman was a good one as it was recognised that it can link to an improved quality of life.

Another participant remarked that respect was crucial in business transactions. She felt that she was able to run her business without harassment, as she is well respected in her region. Linked to this a handful of interviewees reported that male customers can try to cheat women as there is a general perception that women are more vulnerable both physically and culturally and as a result can be bullied in business transactions:

"The male counterpart can easily push you into the road and as a woman you need to be modest you can't fight" (A participant from Nasarawa).

4.2.3 Policy awareness and knowledge

There appeared to be a general lack of awareness and knowledge amongst participants regarding local and state government policies which aim to address transport issues. The majority of participants had not heard of any policies which could aid them. Those participants that had heard of policies knew very little about them. Due to this lack of awareness and knowledge there is an absence of a real breadth of detail in this section of our analysis.

Local government policy

The majority of participants felt that little was being done by their local governments to improve transport in their area. However some participants highlighted a few initiatives that they were aware of, these included:

- Introduction of keke transport in rural areas;
- Provision of loans for transport;
- Repairing the road in developing areas;
- Road infrastructure improvements through grading and drainage;
- Transport operators aiming to improve road safety; and
- o Regulation of bus and taxi fares.

State government policy

Participants appeared to have a slightly greater knowledge of state government policies than local policies addressing transport issues.

One participant highlighted that she was aware of a body called IFOTRAN, which she claimed was a state scheme to regulate passenger transport services although according to the participant this scheme was no longer running.

Furthermore three participants highlighted that the state government have empowered young people to purchase a taxi through an instalment plan, in collaboration with a financial institution.

A list of other policies that the participants were aware of, but provided limited detail about, included:

- Road works in towns;
- Providing mass transit buses;
- Highway improvements; and
- Provision of buses in the city.

4.2.4 Overcoming the barriers to women's participation in business

After identifying the issues faced by women in business, some participants described how they had attempted to overcome these barriers. The majority of participants concentrated on expressing how they had personally addressed the main transport issues they encounter on a day to day basis.

Several participants have successfully addressed and overcome specific transport barriers including some of the cost, availability, reliability and safety issues highlighted above. For some this involves making arrangements with familiar, reliable and trusted truck drivers to pick up and deliver materials and products, meaning less reliance on unreliable and expensive public transport services. For others it involves travelling at different times of the day for safety reasons and also to take advantage of cheaper fares. One participant stated that she was even planning on changing the location of her business by renting a farm shop in the middle of town to provide a more convenient place for her customers to travel to. Other participants had addressed the impact of lengthy journey times on their business by employing a supervisor or other responsible staff members to monitor and run the business in their absence.

The most common way to overcome many of the transport issues highlighted however was to buy a car and learn to drive. This means the women no longer have to rely on third parties to travel or to transport their goods:

"I have my personal car so I don't have to depend on public transport as they can disappoint" (A participant in the animal farming business, from Nasarawa).

"If they should have their own car they can go anywhere and nobody will assault them" (A participant working in animal farming, from Ogun).

4.3 Suggestions for improving transport

In addition, participants were prompted to respond to suggested measures for improving the transport options available for women to use, particularly when travelling for business purposes. A number of suggestions were raised in response which highlighted a need to improve infrastructure, improve finance for transport, improve women's transport specifically and increase regulation of transport services.

Infrastructure improvements

Improving the roads was identified as a crucial initiative to improve transport with some participants stating that this was the most important measure that was needed and that other initiatives would not be successful without first improving the road infrastructure.

"That is the most important aspect of any transport arrangement, if the roads are good then any transport provision will work better" (A participant from Ogun).

Moreover it was felt that road improvements will reduce the number of accidents on the road and allow people to reach their appointments on time, making life easier for everybody. One participant felt that it would have a positive impact for women:

"That will seriously impact the life of women, even maternal services you can access it without worrying about the road" (A participant working in animal farming, from Enugu).

Others note that improving the roads will reduce their costs and help them to recruit more workers.

"if the road is better it will enhance the growth of the business" (A participant from Cross River, working in the IT and telecommunication industry).

Availability of finance

The majority of participants felt that the provision of loans for private transport modes was a good suggestion to make these modes more accessible to women entrepreneurs. Participants asserted that this would help women to become more mobile. One participant highlighted her enthusiasm for this idea:

"That's a very good idea, it will go a long way in assisting these women and make life more meaningful. That means that most times they will not need to depend on public transport" (A participant from Ogun).

Others added that it would assist them in running their business and would reduce transportation costs as well as empowering women:

"It will help and you know when you empower women you have empowered the whole nation" (A participant from Ogun, working in animal farming).

However participants did note some reservations about the interest rate and repayment plans that may be attached to the loan arrangements. Clearly they were concerned about the long term affordability of these finance options and the availability of such deals.

Women only transport

The majority of participants asserted that a women's transport association providing, for example, a women only taxi service was an initiative that could really help women, empowering them and giving them more control over their transport needs, particularly if the women themselves player a greater role at the decision making level, in any such arrangement:

"That will be superb, that will remove a lot of trouble for us, everybody wants convenience" (A participant working in animal farming, from Kwara).

Some of the participants noted however that women drivers should be able to carry everybody and not be constrained in providing this service to women only from a commercial perspective. There was also a feeling that male conductors might be useful in providing assistance with loading goods.

Regulation of services

Most of the participants felt that implementing uniformed and licensed Okada drivers was a positive suggestion. They noted that this would help from a safety perspective by increasing trust between the operator and women passengers. Two participants in particular perceived that this measure would improve women's perceptions of personal safety when travelling by this method of transport:

"Ultimately it will increase the security of women" (A participant from Oyo, working in the animal farming industry).

Another participant agreed with this idea and added that driver training should also be offered as part of this approach.

However one participant felt that Okadas should be completely outlawed as she felt that the riders are careless and create numerous safety issues.

The response to a suggestion regarding training for women to ride Okada received a mixed response. Those that felt this was a bad idea stated so because of the perceived lack of safety that this mode of transport currently provides. Furthermore a participant stated that it would not work in her locality for cultural reasons:

"It is a Muslim land, and a Muslim man will not allow his wife to ride Okada" (A participant working in the education sector, from Kaduna).

However other participants claimed that this initiative would help women to sell their goods as it is a faster form of transport with low cost maintenance and therefore can be a cheaper option for users.

Participants were also relatively divided about the idea of providing earlier and later public transport services. Some participants felt that services already run early and finish late so did not see this as an issue. However other participants felt that it would aid women who have to leave the house very early when travelling long distances.

4.4 Summary

This section has provided analysis of the results from the in-depth telephone survey and interviews. It began with an overview of the characteristics of the women who participated in the survey and in the interviews. They were generally educated to above average levels, and had fewer children. They were engaged in three main business types — animal farming, crop farming and food and drink production, although some other business types existed. It showed that the women in the study had higher levels of car and other vehicle ownership than normal for rural residents, but that the bike and motorcycle ownership levels were lower.

The women identified a range of transport barriers, and other barriers that they felt had an impact on the performance of their businesses. In general the barriers that were identified reflect the findings from the literature review. The women in both the survey and the interviews felt that the transport barriers negatively impacted upon their business growth, although opinion was mixed regarding whether transport negatively affected recruitment.

The main transport barriers that were identified were high costs, low availability, long journey length and poor reliability and convenience. In general these were attributable to the main issue that the women mentioned – the poor quality of the road network. It was felt that this increased costs because it increased the need for vehicle maintenance, reduced availability because operators did not want to use poor rural roads, increased length as operators tried to use the "better" roads and decreased reliability and convenience due to frequent breakdowns.

These barriers are likely to apply to both men and women trying to travel in rural areas. Furthermore some barriers were identified that were more gender specific, however the consensus of opinion was less clear regarding the existence of these barriers. They included the negative treatment of women using public transport, the impact of long and unreliable journeys on the other responsibilities of women (childcare for example), personal safety, unfair charges for women travellers and restrictions on time of travel as a result of religious beliefs.

It was clear from both the survey and the interviews that in general the women had a very low awareness of local and state government policies that may help them overcome transport barriers. Some women gave personal examples regarding how they had overcome barriers on an individual level, but by far the most common solution (or potential solution in the case of some women) was to buy a car and learn to drive, thus taking ownership of the problem (although this would not deal with road quality barriers).

In terms of other potential policy solutions, ideas which appealed to the women included road improvements, better regulation of transport services to make them safer and cheaper, finance to help women buy their own vehicles and women transport operators (although many women felt that women transport drivers should be able to transport men too, and that they services shouldn't be limited to women passengers).

It is clear from this analysis that women experience a range of barriers to transport in Nigeria – some of which are encountered because of their gender, and other which will apply to everyone regardless of gender. Furthermore many of these barriers have an impact on the business activities of women entrepreneurs and are having a real impact on their success. The next chapter will explore these findings in the wider context of the literature review, before the final chapter draws some conclusions and makes recommendations.

5. Discussion

Summary: This chapter discusses the findings from the primary research in light of the literature and the aims of the research. In general it is difficult for women to operate as entrepreneurs in Nigeria due to a range of gender, social and cultural barriers. A range of transport barriers were identified that are likely to affect everyone, including poor quality of highway infrastructure (including lack of investment in routine maintenance), availability and access to transport, a lack of passenger and freight capacity, the cost of transport (and its inherent variability) and safety / security issues. These broadly accord with the barriers identified in the literature. Some of these barriers are likely to have a disproportionate impact on women due to their additional responsibilities within the home, and religious, social and cultural barriers. While the women are overcoming many of these transport barriers, the causes of the barriers (predominantly a lack of an adopted transport policy, at all three tiers of Nigerian government, and an inadequate road network) are not being addressed. The AFCAP/IFRTD Indicators offer a useful tool to learn more about these barriers and to monitor the effectiveness of solutions, and hopefully they will be applied in this way in the future. Overall, while women are expressing their entrepreneurial spirit through overcoming the barriers identified as far as possible, there is clearly scope for policy intervention and bespoke projects to minimise these barriers in the future.

This chapter provides a discussion of the issues raised in the primary research in the context of the literature, and considers them in light of the original objectives of the research. As such it will begin by looking at the main transport barriers facing people in rural locations across Nigeria, and consider the specific impacts that these have for women, and in particular for women entrepreneurs. Next it will consider the importance of rural transport planning and policy in the context of solutions to overcome these barriers and issues. Finally it will provide an overview of the role of the AFCAP/IFRTD Indicators in helping to facilitate and monitor transport planning and policy improvements in the future.

5.1 Setting the scene

The participants in this research were women entrepreneurs whose homes and businesses were situated in rural locations across Nigeria. As such the literature review provided some context on the general barriers to becoming and being a female entrepreneur within Nigeria. This is important because, while this research focusses on the transport barriers experienced by women entrepreneurs, these barriers need be discussed and understood within the wider context and experiences of the women.

Women in Nigeria appear to be subject to some major inequalities and Nigeria ranks 118 out of 134 countries in the Gender Equality Index (British Council 2012). While steps are being taken to create equality, for example through the creation of Gender Units in federal government departments, fundamental imbalances still exist. The literature review discusses these in detail, but briefly they comprise lower levels of education, limited access to finance, higher levels of taxation, lower levels of land ownership, greater responsibilities in the home and a lack of support in their business endeavours from family (British Council 2012, UNIDO, 2003, Woldie and Adersua, 2004). The impacts of these inequalities are compounded by a lack of support and understanding of gender issues from policy makers (Mordi *et al*, 2008, Halkias *et al*, 2011, Singh *et al*, 2011).

The women who participated in the survey suggested that many of these barriers are very real for them. For example, the women cited a high level of competition, financial difficulties, poor public infrastructure / maintenance, religious traditions, combined with the challenges and stresses associated with setting up a business, societal beliefs regarding women's roles, a lack of awareness of opportunities, and discrimination. The interviews further underlined that women can be perceived in a negative social and cultural perspective if engaging in employment while pregnant or after marriage. Traditionally, and in the first instance, these barriers have discouraged women from becoming entrepreneurs, consequently affecting their ability to contribute to the economy. However, it is likely that the women participating in this research have managed to overcome the barriers posed by lower levels of education, as the majority of them were very well educated compared to the wider female population of Nigeria.

These findings highlight just how difficult it is for women in Nigeria to operate as entrepreneurs when they are not operating on a "level playing field" with their male counterparts, in terms of the barriers that they

experience. It is clear from this that women need to be very committed to setting up and running their own business in order to become entrepreneurs, and the sooner these barriers are recognised, and effective action is taken by policy makers the better.

5.2 The role of transport

While it is clear from the preceding section that women entrepreneurs in Nigeria are faced with a myriad of barriers, the aim of this study is to focus on those created by poor transport planning and policy. The availability and utility of transport services and infrastructure is critical to the success of many businesses because it allows for, amongst other things, the efficient movement of employees, customers, and the transaction of goods, either being bought or sold. As indicated by the literature review, transport infrastructure and services provide mobility and facilitate social and economic development, vital in underpinning a developing economy. However the literature review also provided some important context by suggesting that Nigeria is lacking a formal transport policy, and that transport infrastructure in many rural areas is totally inadequate despite rural roads being considered as vitally important for the economy (Igwe *et al*, 2013, Federal Government of Nigeria, 2010). Rural roads clearly have a direct impact on the productivity of rural households, and low quality roads are likely to increase poverty levels.

One area where the findings from the literature did not reflect the results of the primary research was in terms of access to transport and the main modes of transport used. The literature review reports that for the vast majority of poor people in sub-Saharan Africa, walking and non-motorised transport remains the key mode of travel (Njenga and Davis, 2003). However in this study the participants interviewed had higher levels of car and other vehicle ownership than normal for rural residents (possible because they were entrepreneurs). Those who could not afford a vehicle used public transport rather than walking, even though the wider transport system was deficient in many areas.

Nigerian transport planning and policy clearly has a role to play in improving this situation, and from a positive perspective, this seems to have been realised on occasion, and led to the implementation of the RAMP projects, and investment in rural roads and bridges in other areas. However as Starkey and Njenga (2010) identify, roads alone do not make enough of a difference, rural transport services are also required in order to maximise their impact. While the literature identified that women are transport constrained (Porter 2014) our primary research identified a range of barriers that are likely to apply to both women and men on a fairly equal basis. As such, we will first discuss the transport barriers that were identified, before reviewing them to identify which ones in-particular will be felt more keenly by women.

5.2.1 Transport barriers

Within the literature it was clear that the roads in much of rural Nigeria are inadequate, and are often unpaved and have very uneven surfaces (RAMP, 2011). This was reinforced very strongly by the primary research undertaken for this study, where many of the women in the survey and the interviews highlighted the quality of the roads, the lack of on-going maintenance, and the impact that this has on them. Since roads form the backbone of the transport system, it is apparent that they create, or worsen many of the other transport barriers that were raised. As the primary data showed, limited availability of transport services, rising and variable transport costs, increased vehicle maintenance, journey delays, safety issues and access difficulties are all attributable to the poor road network.

The degree to which poor road quality can have an effect on entrepreneurial activity was discussed in the literature, with Starkey *et al*, 2013 suggesting that there are great economic gains to be made from being within a reasonable distance of a "*motorable*" road. Evidence in support of this was found throughout the surveys and interviews. Poor road access was perceived to deter customers, make visiting clients difficult and affect recruitment, although not all participants faced these issues (the recruitment issue seemed more common among the interviewees, while the survey respondents did not perceive it to be a problem). The main problems in terms of recruitment included: a struggle to finding qualified staff within the local area; needing to employ people from further afield and pay a higher salary to cover transport costs or provide accommodation; or having to train staff rather than being able to recruit people who were already qualified. Arguably, the issue of availability of trained staff and staff recruitment is a wider economic problem, but, and in this context, the lack of an efficient transport system still remains at the heart of this problem.

Seemingly (at least in part) as a result of poor quality roads, a number of other transport barriers were identified. This first of these – availability of transport services – is to be expected since clearly the poor quality of roads will have an impact on the transport services that can be provided on them. However it is unclear from the primary data whether the women who participated in this study lived in areas where roads had been improved, or whether availability was affected by the unimproved roads. It was reported that there was a very limited supply of transport services, and levels certainly were not high enough to meet demand. The interviewees suggested that the lack of availability led to increased journey times, which in turn led to missed opportunities and restricted mobility. When services were available they were reportedly as being unreliable, infrequent and being exposed to significant variability in transport costs. However the literature review notes that there is increasing levels of service provided by motorcycle taxi (Okada), which make rural communities feel more connected. This mode of paratransit is becoming increasingly popular, allowing those in remote locations with unpaved roads to access transport.

Linked to a lack of availability is a lack of capacity – in rural parts of Nigeria it is clear that transport services need to be equipped to carry freight as well as people. The surveys revealed that public transport is often overcrowded and over capacity. This means that even where a service exists, people may not be able to use it because there may not be room for them and/or their freight on board. Any delay in getting goods to market is likely to have an impact on the price that can be achieved for the goods, especially if these goods are perishable in nature. This means that a lack of passenger / freight capacity will have a negative impact on people trying to operate a business. However some of the women noted that even where public transport is available they prefer not to use it due to the negative perceptions that customers may have of a business women using public transport.

A further issue that was raised was the issue of cost. The literature identified that poverty is widespread in rural Nigeria (Igwe, 2013) and therefore being exposed to expensive transport services will exacerbate this. The literature identified that the cost of transport was often higher in rural areas because of short journeys on unpaved roads, or due to the longer distances involved (Mijinyawa and Adetunji, 2005, Porter, 2002). Our findings reflect this with many of the women describing transport services as expensive and variable. Explanations for this included: higher prices due to the increased maintenance costs incurred by operators due to the poor roads; the high cost of fuel (especially during periods of the frequent fuel scarcity that occur across Nigeria); and the fact that outside of urban areas, public transport is totally unregulated so the operators can charge whatever they like, when they like. The high cost of transport in rural areas has multiple knock on effects for businesses. The women stated that it increases production costs and reduces profits and means that the businesses have to either charge a higher price or reduce their (often already low) profit margins. This accords with Oni and Okanlawon (2006) who found that transport makes up a disproportionately high portion of the final cost of goods in Nigeria due to the low quality of the road network.

The final barrier that was particularly eminent is safety, however it appears that this barrier is less closely linked to the quality of the roads than those mentioned previously. Safety was only mentioned briefly in the literature in relation to robbery. However according to the women interviewed this means that people would rather use a private vehicle if they can afford one as it is safer, and it reduces cost, while increasing convenience and availability.

It is evident that these failures in transport provision are negatively impacting business and restricting business growth and consequently contributing to poverty. This seems to be primarily as a result of the poor road network which limits the availability of transport services, and increases costs. However it is important to recognise that these issues won't be fixed simply by addressing the road network. Additional action will be needed to implement regulated public transport services, which is encapsulated within wider institutional and regulatory reform, that meet the needs of the rural population and are not excessively costly. Although less frequently mentioned it also appears that there are safety barriers, and these will need addressing. The impact of these on women in-particular is considered more in the next section.

5.2.2 Impact of transport barriers from a gender perspective

It is clear from the preceding section, transport planning and policy is failing to provide an efficient transport system in rural areas that adequately supports and nurtures economic development. This creates barriers for everyone who is trying to live there and to run a business, not just women. Nevertheless, this is likely to present a greater barrier to women due to the additional constraints that they are subject to. There appear to be three particular constraining factors that (at least in part) cause this.

Firstly, it is apparent that the responsibilities of women in the home often require them to be at home to attend to the needs of their children and husband. This means that unreliable transport services with long journey times mean that sometimes women will be unable to make a journey because they will not be able to rely on being back in time to attend to their other responsibilities. As Odufuwa (2008) asserts, these additional responsibilities can cause women to experience psychological stress when using the transport system. From this perspective reliability of transport services is of utmost importance to enable women to travel and reduce stress levels. Shorter journey times will also help, as women will then be able to accommodate the needs of their business more easily around their family responsibilities.

Secondly religious barriers further compound the constraining factors women face. The literature describes the barriers faced particularly by Muslim women who are, to varying degrees, prohibited from taking transport vehicles operated by men and being in the same means of transport as men. For example, as the interviews identified that during some religious festivals such as the 'oro' festival women's mobility is limited because they are unable to venture outside throughout the duration of the festival. This is made more complex by various cultural issues that have an impact on the ability of women to use some transport services such as Okada (something which was apparent from this research as many of the women made comments pertaining to their dislike of Okada use for a variety of reasons). These barriers mean that women are constrained in their movement which affects their ability to conduct business activities which require travelling beyond their local village. This means that the availability of suitable transport modes will be vitally important – transports services need to meet the needs of women as well as men.

Thirdly, as the GTTG (1999) have highlighted, women tend to make more trips overall than men, combining agricultural activities with domestic responsibilities, yet women are far more likely to be reliant on public transport services than men as they are less likely to have access to motorised vehicles (even those intended specifically for them according to the World Bank 1999) and as such be more reliant on public transport. It is clear therefore that while women need transport services to be available to them, they also need them to be affordable so that they are able to use them.

The high cost of transport may disproportionately affect women and discourage them from travelling. As the literature highlighted, women often lack access to money and face financial difficulties in managing both the home and investing in a new business. In this regard therefore it is important that where transport services exist, they are affordable for their intended market. Affordable loans specifically for women to access transport services may assist in helping women to tackle this barrier.

A further issue that was only raised briefly in the transport barriers section was the issue of personal safety and security. It is apparent that there are some risks posed by robbery, and these are likely to be encountered by men and women. The literature pertaining to safety issues and women focusses on urban areas (for example Odufuwa, 2012) identified that women were more likely to experience crime when using public transport than men. This demonstrates women's vulnerability to crime in urban areas but the primary research has highlighted that this is also an issue in rural areas. While the women in the survey stage of research noted safety issues relating to tribal conflicts or clashes, women questioned during the in-depth interviews described fears of kidnapping, robbery and rape and some proffered personal experiences of being a victim of crime. These safety issues reinforce a feeling of vulnerability amongst women and discourage them from using public transport services, particularly when travelling independently or late at

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¹¹ Nevertheless it is important to recognise that this doesn't necessarily mean that they can't engage in business, as Zakaria (2001) identified, seclusion does not prohibit business activities taking place within the home.

night. This has an impact on business viability because it restricts when and how women feel that they are safe to travel, and this will be especially problematic if they feel unsafe at times when, for business reasons, they need to travel.

These factors highlight that the transport needs of women will be inherently different to those of men, and as a result the barriers will disproportionately affect women and women entrepreneurs. Transport services consequently need to be designed, through participatory planning and joint decision making, to take account of women's requirements to enable them to be more mobile and engage in economic activities.

5.3 The bigger picture

Thus far, this section has discussed the transport barriers that have been identified and their likely impact. It has also considered which of the barriers will have an impact on everyone, and which will have more of an impact on women. This section considers the ways in which women have overcome the barriers, and the role of rural transport planning and policy within this.

5.3.1 Overcoming barriers

One of the areas covered in the interviews related to how the women had overcome the transport barriers that they had identified. It was clear from the primary research that the women, to some extent, tended to live with the barriers because, while they were problematic, they were not fatal from a business perspective.

However the interviews also revealed that women have sought their own solutions to overcome some of the barriers. In general, the solutions posited addressed the main transport issues encountered on a day to day basis, rather than the larger gender, social and cultural issues identified. This could be because these issues are much larger, and are unlikely to be ones that individuals can tackle on their own. Tackling these issues is also likely to be a long term project, rather than something with an immediate impact. This is compounded by the fact that the participants lacked the support of gender sympathetic transport policy to really tackle the underlying gender, social and cultural issues they face. Therefore it is no surprise that the most commonly suggested solutions involved making changes to their business arrangements (for example through a change in business location, or making regular arrangements with transport operators), in particular the "ideal" solution suggested was to buy a car and learn to drive. This is clearly a case of tackling the symptoms of the problem rather than the cause (i.e. the gender, social and cultural restrictions, the poor conditions of the transport network and the lack of a clear, gender balanced transport policy).

In order to assess whether other transport improvements might help the women, a number of suggestions were made during the interview. Women responded positively to a number of these suggestions which included improvements to the quality of the road network, regular road maintenance (especially prior and post monsoon season) better regulation of transport services, the development of women's transport services and finance to help women purchase their own business vehicles — potentially accomplished through policy intervention and wider institutional reform. These suggestions, if implemented, may ensure that rather than failing women entrepreneurs, transport services support them, assisting them to set up and successfully run businesses.

5.3.2 Awareness of transport policies

The participants were asked about their awareness of government transport policies designed to support them. In general, the level of awareness was very low, which is unsurprising since the literature identified a lack of a comprehensive, formally adopted, transport policy in Nigeria. Although a "Draft National Transport Policy" (circa 2010) is available it is not adopted, and therefore rural transport planning and policy which could improve women's access to facilities, services and entrepreneurship is vague and largely absent. This is further compounded by the content of Nigeria's National Gender Policy, which only briefly mentions transport. Furthermore, the participants who were aware of some policies in general knew very little about the detail. However it is important to bear in mind that this may not represent a failure in transport planning and policy since it is possible that the women were simply unaware of policy initiatives (although the wider absence of formal policy does make this somewhat likely).

Nevertheless it is clear that the lack of published policies and formal rural transport planning could lead to the needs of women being overlooked. It appears from the literature that some significant projects have

and are taking place to improve infrastructure in rural areas (for example the RAMP projects), but it is important that these are followed up by rural transport planning and policy to put in place regulated, safe, affordable transport services using the improved infrastructure that the RAMP project will hopefully deliver. As this research has shown, the transport system as a whole is failing women entrepreneurs and this needs to be addressed at all levels.

5.4 AFCAP/IFRTD Indicators.

The AFCAP/IFRTD Indicators have been developed, in light of existing unsuitable indicators, to measure rural transport development within Africa, by assessing how good rural transport services are at providing access for rural people. As previously highlighted rural roads are a vital factor in economic development and poverty reduction, it is therefore imperative that to fully understand the transport context of each area, and the impacts of projects should be monitored to assess their success and value for money. The AFCAP/IFRTD Indicators enable this, through scoring each aspect of the transport system to help generate an overall picture of the degree of satisfaction with it from a range of perspectives. The indicators are still relatively new, and as such have not been widely tested and fully evaluated for effectiveness yet. However we would assert that they appear to be comprehensive, and represent a positive contribution to rural transport planning resources. It is particularly positive that some of the results are disaggregated by gender because this will further our understanding of women's satisfaction with the transport system, and enable further exploration of their needs to take place if required.

For the purpose of this study, it appears that the "user satisfaction" indicators are the most relevant to our participants' experiences of the rural transport system and the barriers that they cited. While they were not applied within our survey or interviews, many of the aspects that the AFCAP/IFRTD Indicators sought to score mirrored the barriers identified in this study. In particular

- Passenger fares, and variability of fares;
- Journey times;
- Service frequency;
- Service predictability;
- Passenger capacity;
- Freight capacity;
- Comfort: surrounding baggage;
- Road safety;
- Personal Security; and
- Passenger Interchange (number of times and transit mode).

This reinforces the significance of the indicators that have been selected and reflects positively on their potential utility.

The development perspective indicators are also potentially useful, in-particular because there is one specifically in relation to women's empowerment which could lead to transport improvements specific to the female gender. Although women's empowerment was not specifically raised by the respondents, this development indicator was implied through references to other user satisfaction indicators, in particular security. The empowerment of women was also inferred during discussion regarding developing transport specifically for women through the promotion and implementation of a women's transport association, providing for example women only taxi services and administered through a formal and regulated body. This could empower women giving them more control over their transport needs.

One of the major barriers raised by respondents, poor road conditions, is not an AFCAP indicator (although road maintenance adequacy is included) because the AFCAP/IFRTD Indicators were developed to sit alongside the World Bank Rural Access Indicator This barrier was reported to be the underlying cause of many other barriers identified within our study, and is therefore of great importance. Therefore it should be

stressed that it is of utmost importance that these indicators are used together in order to provide a complete picture.

Reviewing the AFCAP/IFRTD Indicators against the real world experiences of rural women entrepreneurs has demonstrated the importance and relevance of some of the indicators, while highlighting that it will be important to apply them alongside existing indicators such as the World Banks rural access indicator to ensure that the complete picture is provided.

5.5 Summary

This section has provided an overview of the findings from the primary research within the context of the literature review, and has started to draw some conclusions based on this. One of the main findings is that the transport system as a whole needs improving, in order that it is fit for purpose. This is accompanied by the recognition that the specific needs of women need to be understood (and it to be recognised that these may differ in different geographic locations within Nigeria) and these needs should be taken into account through a more formalised rural transport planning and policy process.

Nevertheless, in the meantime there are smaller steps that can be taken to improve the situation for women more quickly. These include helping women to set up their own transport services, and ensuring that affordable finance is available for women to be able to buy their own vehicles.

Finally, the AFCAP/IFRTD Indicators clearly offer a valuable tool to assess the current situation, enable the "best" solutions to be designed and the results of projects to be measured. The fact that the results of some of the indicators can be disaggregated by gender is incredibly useful, and will enable further knowledge on the particular transport needs of women to be collated.

6. Conclusions

This research set out to explore the failure of rural transport planning and policy to support women's entrepreneurship in rural Nigeria. It sought to do this though ascertaining the reasons behind the failure, and using this knowledge to identify potential and practical solutions. As such, the findings from a literature review were combined with primary research (surveys and interviews) with Nigerian rural women entrepreneurs to identify the transport, and wider barriers affecting their business activities.

The transport barriers that were identified included poor road quality (including lack of routine and scheduled maintenance) a lack of availability of regulated transport services, expensive transport services, (including variability of public transport cost, according to level of passenger demand, and climatic conditions), unreliable transport services and unsafe transport services. These barriers were, unfortunately, experienced more keenly by women because of the wider gender barriers they face, including additional responsibilities for the home and the family, cultural and religious limitations that limit their movements (most notable in northern Nigeria), and the modes of transport they can use.

It is somewhat unclear the extent to which transport policy supports women entrepreneurs, because of the absence of a formally adopted National Transport Policy for Nigeria. However the issue of transport is only briefly mentioned in the National Gender Policy, indicating that the particular barriers that women face are not given any great consideration. It would seem that transport policy which recognises that women's needs differ from those of men is lacking, and that the production of such a policy would be beneficial to women.

As a result of the lack of a formal transport policy, and a lack of awareness of policy activities among the women who participated in this study, it is unclear exactly what action is being taken to minimise the barriers faced by women entrepreneurs, although action seems to be somewhat limited. The findings of this research suggest that while the women themselves (or at least the ones within our research) are taking some action to overcome transport barriers, it is still having a negative effect on their businesses operationally, and furthermore is affecting their profitability. Furthermore while the women appear to be overcoming the barriers, the root cause of the barriers is not being addressed, so the impact on business, both in terms of restricting further commercial growth and ultimately maximising profits will remain. It is also possible that women are prevented from becoming entrepreneurs because of the barriers, and these people would not have been included in the study.

In order to rectify this situation and enable the transport system across the three tiers of Nigerian government to become more supportive of women entrepreneurs, the transport system needs some significant investment and improvements from an engineering, institutional and regulatory context. Clearly the rural infrastructure is lacking, and projects such as RAMP are working to address this. However it is important that these projects are followed up by transport policy that recognises the needs of women and works to minimise the barriers that they articulate. The next chapter articulates our draft recommendations in this regard.

7. Recommendations

There is a continuing need for improvements to rural transport infrastructure, beyond the scope of the current RAMP projects. Work in this area is ongoing, and so this chapter will focus on improvements that can be made to minimise the barriers in the meantime, and measures that can ensure their benefits can be maximised for women after their completion.

7.1 General recommendations

- Continued improvement to road infrastructure, (including periodic and routine maintenance, before
 and after the traditional monsoon season) in rural areas should be a priority as better roads will have a
 direct impact on the range of transport barriers experienced by women, and lead to improving the
 commercial viability of their individual businesses.
- The needs of women should be explicitly considered in all transport planning and policy in order to ensure that policies and projects meet the particular needs of women, specifically how the lack of formal transport policy is a contributory factor in constricting commercial growth should be voiced.
- The AFCAP/IFRTD Indicators should be used to provide a baseline for policies and projects, and should
 also be used to evaluate their impact from a gender perspective. This will ensure that the impacts of
 policies and projects from a women's perspective are recognised and recorded.
- Regulation of existing transport services should be implemented at the national level and managed through organisations at local government level. This will help to ensure a higher degree of safety and minimise excessive charges levied by some operators. Regulatory organisations will need to have the resources to monitor and make random checks on transport services for quality, safety, and fare levels and to undertake surveys with transport users to scrutinise the level of service being provided. Regulation of existing transport services should also extend to including improved quality of vehicles, which have the ability to transport goods as well as people, and a structured (as far as possible) timetable of services.
- The formal regulation of public transport services should be encapsulated within institutional reform within the rural sector, thus providing sound governance within this sector. Any institutional reform must have a sound legal basis to ensure it effectiveness, and this can only be delivered through legislative reform granted through the Federal House of Assembly. A relevant example in this regard can be drawn from the LAMATA Law (2003). The LAMATA Law provided the mandate for the planning, regulation, and ultimately, the provision of effective public transport by a single authority within Lagos state. This legal framework demonstrates how, through the imposition of institutional reform, an authority has sufficient legal power to effectively run and operate public transport, and can be used as a template for other states to adopt.
- Regulation and institutional reform should also include the provision of operational subsidies to transit routes which would not normally operate to destinations that would be commercially unviable

 thus the "reach" and accessibility to public transport is improved for all users.
- The YouWin! Competition should be used as a vessel to support change for women entrepreneurs in enhancing access to goods and services through improved transport solutions.
- Wherever practicable, core data collation within interventions such as YouWin! should seek to capture transport data, preferable using tools such as the User Perspective indicators from within the AFACP Indicators.

7.2 Recommendations prior to road improvements

• Schemes that provide finance to enable women to learn to drive and purchase their own vehicles should be explored. Finance should be provided at a reasonable cost and administered at either local or state level of government. Access to a vehicle will enable women to overcome barriers associated with availability, cost, reliability and safety.

- Schemes to enable women to establish their own transport services should be provided by
 government departments or charities. This could include both support to buy vehicles, and training in
 their operation, and in the skills needed to effectively run a transport service. Transport services
 designed and operated by women are more likely to meet their needs and be acceptable from a religious
 and cultural perspective.
- Current legislation regarding the prohibition of paratransit in rural locations should be reviewed in terms of how it restricts local mobility. Rural people will benefit from as many potential transport services as practicable.

7.3 Recommendations post road improvements

- Participatory approaches should be used to develop a plan for public transport services on roads.
 These approaches should include women, and ensure that their views are considered in the design of new transport services. This should be extended to ensure that women are represented as a key stakeholder during the consultation stage of any scheme to improve rural transport. The formulation of "Women's Transport Associations" should have a legislative position within local and state government
- The impact of road improvements should be monitored via the AFCAP/IFRTD Indicators. This monitoring should specifically consider the impact of the road and transport service improvements on women.

8. References

Adenipekun, M.T. (2013), "Sustainable rural infrastructural development in Nigeria within the context of Vision 20:2020", International Journal of Development and Sustainability, 2(1), 254-269.

Aderamo, A.J. and Magaji, S.A. (2010), "Rural transport and the distribution of public facilities in Nigeria: A case of Edu local government area of Kwara state", Journal of Human Ecology, 29 (3), 171-179.

Adeyemi, O. (2001), "Moving Nigeria Forward: The Development Planning Approach", Ibadan: University of Ibadan Press.

AEO. (2012), "Promoting Youth Employment" African Economic Outlook 2012, 9 -28, Available from http://www.africaneconomicoutlook.org, last accessed February 2014.

Asinyanbola, R. A. (2010), "Transportation, Gender and Psychological Distress in Ibadan City, Oyo State, Nigeria", ASSET: An International Journal (Series C), 5(2), 26-51.

British Council. (2012), Gender in Nigeria Report 2012: improving the lives of girls and women in Nigeria, Available from

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67333/Gender-Nigeria2012.pdf, last accessed February 2014.

Bryceson, D. F. and Howe, J. (1993), "Rural household transport in Africa: reducing the burden on women", World Development, 21(11), 1715-1728.

Bryceson, D., D. Maunder, T. C. Mbara, R. Kibombo, A. S. C. Davis and J. Howe (2003), "Sustainable livelihoods, mobility and access needs", TRL Report 544, Transport Research Laboratory Limited.

Central Intelligence Agency. (2013), "Nigeria", Available from https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html, cited February 2013.

Daily Independent. (2010), "FG to create National Transport policy", Available from http://allafrica.com/stories/201008060208.html, cited February 2014.

Daily Independent. (2011), "FG moves to release national transport policy", Available from http://allafrica.com/stories/201101210269.html, cited February 2014.

Davis, J. R. and Bezemer, D. J. (2003), "Key emerging and conceptual issues in the development of the RNFE in developing countries and transition economies", NRI Report No. 2755, Natural Research Institute, Kent.

Dorosh, P., Wang H., You, L. and Schmidt, E. (2010), "Crop production and road connectivity in Sub-Saharan Africa: a spatial analysis", The World Bank (2010) Policy Research Working Paper.

Ehigie, B O., & Umoren, U.E. (2003), "Psychological Factors Influencing Perceived Entrepreneurial Success Among Nigerian Women in Small-Scale Businesses", *Journal of International Women's Studies*, 5(1), 78-95.

Ellis, F. (2001), "Diverse Livelihoods and Natural Resources: A Research Context". Sustainable Livelihoods in Southern Africa: Institutions, Governance and Policy Processes. SLSA Working Paper (7), DFID.

Fadare, S. O., & Morenikeji, W. (2001), "Gender-bias in intra-urban trip patterns in Niger State, Nigeria", International Journal of Transportation Studies, 1(1), 73-85.

Federal Ministry of Women Affairs and Social Development. (Undated), "About the Ministry", Available at http://www.womenaffairs.gov.ng/index.php/78-featured/72-welcome, last accessed February 2014.

Federal Republic of Nigeria. (2006), "National Gender Policy", Available from http://www.aacoalition.org/national_policy_women.htm, last accessed February 2014.

Federal Republic of Nigeria. (2007), "Rural Access and Mobility Project – Appraisal Report", Available from http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/NG-2007-038-EN-ADF-BD-WP-NIGERIA-RURAL-ACCESS-AND-MOBILITY-PROJECT.PDF, last accessed February 2014.

Federal Republic of Nigeria. (2008), "National Gender Policy Strategic Framework (Implementation Plan) 2008-2013", Available from

http://cewhin.org/pdf/STRATEGIC%20DEVELOPMENT%20RESULTS%20FRAMEWORK.pdf , last accessed February 2014.

Federal Republic of Nigeria. (2010), "Federal Government of Nigeria Draft National Transport Policy", Available from

http://www.accessbankplc.com/Library/Documents/2010%20Bankers%20Committee%20Conference%20Resources/Transportation%20Sector/Draft_National_Transport_Policy_Fed%20Rep%20of%20Nigeria.pdf, last accessed February 2014.

Femi, S. A. (2013), "Building Sustainable Policy Framework for Transport Development: A Review of National Transport Policy Initiatives in Nigeria", Journal of Sustainable Development Studies, 2(1).

Global Entrepreneurship Monitor Women's Report (2013), "Women's entrepreneurship growing worldwide", available from http://www.startupnation.com/business-articles/9890/1/women-entrepreneurship-growing-worldwide.htm?sf761400=1#LITp4VjuVzjwxOg4.99, last accessed February 2014.

Halkias, D., Nwajiuba, C., Harkiolakis, N., & Caracatsanis, S. M., (2011), "Challenges facing women entrepreneurs in Nigeria", Management Research Review, Vol. 34 Iss: 2, pp.221 – 235.

Howe, J. (2003), "'Filling the middle': Uganda's appropriate transport service", Transport Reviews: A Transnational Transdisciplinary Journal, 23:2, 161-176.

Ibok, E. E. (2010), "Rural development projects in Akwa Ibom State: A programme evaluation of the Ministry of Rural Development", Ph.D Thesis unpublished.

Ibok, E., & Daniel, E. (2013), "The Impact of Rural Roads and Bridges on the Socio-Economic Development of Akwa Ibom State, Nigeria: An Evaluation", Global Journal of Political Science and Administration, 1(1), 27-36.

IFAD. (2010), "Rural Poverty in Nigeria", Available from http://www.ruralpovertyportal.org/country/home/tags/nigeria, last accessed February 2014.

Igwe, C. N., Oyelola, O. T., Ajiboshin, I. O., & Raheem, S. (2013), "A Review: Nigeria's Transportation System and the Place of Entrepreneurs". Journal of Sustainable Development Studies, 3(2).

Igwe, P. A. (2013), "Rural Non-farm Livelihood Diversification and Poverty Reduction in Nigeria", PhD research, University of Plymouth, Rural Micro and Small Enterprises, http://hdl.handle.net/10026.1/1561

Institute of Transport Administration Nigeria. (2013), "Centres in Action", Available from http://www.iota.org.uk/cia/IoTANigeria.php, cited February 2014.

Jacobs, G. D. and N. Greaves (2003), "Transport in developing and emerging nations", Transport Reviews: A Transnational Transdisciplinary Journal, 23 (2), 133-138

Jamali, D. (2009), "Constraints and opportunities facing women entrepreneurs in developing countries, a relative perspective", Gender in Management: An International Journal, 24, (4), 232 – 251.

Kusters, K. (2010), "Which role for the non-farm sector in a forested landscape? Lessons from Krui, Indonesia", University of Amsterdam and Centre for International Forestry Research (CIFOR), 320 – 322.

Mijinyawa, Y., & Adetunji, J. A. (2005), "Evaluation of farm transportation system in Osun and Oyo States of Nigeria", International Commission of Agricultural Engineering (CIGR, Commission Internationale du Genie Rural) E-Journal, 7.

Mordi, C., Simpson, R., Singh, S., & Okafor, C. (2010), "The role of cultural values in understanding the challenges faced by women entrepreneurs in Nigeria", Gender in Management: An International Journal, 25(1), 5 - 21

Moti, U. G. (2011), "Decentralization and access to and use of services in rural Nigeria", 33rd AAPAM Round Table Conference, Malawi, 11-13th November 2011. Available from http://www.academia.edu/1138138/DECENTRALIZATION AND ACCESS TO AND USE OF RURAL SERVICE IN NIGERIA, last accessed February 2014.

Mwase, N. (2003), "The liberalisation, De-regulation and Privatisation of the Transport Sector in Sub-Saharan Africa: Experiences, Challenges and Opportunities", Journal of African Economies, 12, AERC Supplement 2, ii153 – ii192.

National Bureau of Statistics. (2013), "LSMS – Integrated Surveys on Agriculture: General Household Survey Panel 2010/11". Available from http://siteresources.worldbank.org/INTLSMS/Resources/3358986-1233781970982/5800988-1282216357396/7337519-1309178625309/GHS-Panel Wave 1 Survey Report.pdf, last accessed February 2014.

National Population Commission. (2009), "2008 Nigeria National Demographic and Health Survey", available from http://www.measuredhs.com/pubs/pdf/SR173/SR173.pdf, last accessed February 2014.

National Mirror. (2013), "Nigeria's Transport Policy captured in National Development Plans", Available from http://nationalmirroronline.net/new/nigerias-transport-policy-captured-in-national-development-plans, cited February 2014.

Njenga, P. and Davis, A. (2003), "Drawing the road map to rural poverty reduction", Transport Reviews: A Transnational Transdisciplinary Journal, 23:2, 217-241

Nnamdi O.M. (2009), "Breaking the Glass Ceiling in Nigeria: A Review of Women's Entrepreneurship", Journal of African Business, 10:1, 51-66, DOI: 10.1080/15228910802701361

Nwoye, M. (2007), "Gender Responsive Entrepreneurial Economy of Nigeria: Enabling Women in a Disabling Environment". *Journal of International Women's Studies*, 9(1), 167-175.

Odebode, S.O. (2012), "Gender Issues in Agricultural Extension and Rural Development in Nigeria", Rural Development - Contemporary Issues and Practices, Solagberu Adisa (Ed.), ISBN: 978-953-51- 0461-2, InTech, Available from: http://www.intechopen.com/books/rural-development-contemporary-issuesand-practices/gender-issues-in-agricultural-extension-and-rural-development-in-nigeria.

Odufuwa, B. (2007), "Women Participation in Household Automobile Decision Making in a Developing Economy-Nigeria". Pakistan Journal of Social Sciences, 4 (6), 739-74

Odufuwa, B., Oriola, S. & Otubaga, O. (2012), "Women and the Use of Public Transport in Nigerian Traditional City –Ibadan". Global Journal of Humanities and Social Sciences", 12, 10, 17-28.

Odufuwa, B. O. (2008), "Gender differentials, vulnerability and mobility stress coping strategies in Nigeria", Journal of Geography and Regional Planning, 1(7), 132-137.

Odufuwa, B. O. (2012), "Gender and Safety in Public Transportation: An Explorative Study in Lagos Metropolis, Nigeria". Unpublished Masters Thesis, Erasmus University, Available from http://thesis.eur.nl/pub/12208/, last accessed February 2014.

Ogunlela, Y. I., & Mukhtar, A. A. (2009), "Gender issues in agriculture and rural development in Nigeria: The role of women". Humanity & social sciences Journal, 4(1), 19-30.

Okafor, C., & Mordi, C. (2010), "Women Entrepreneurship Development in Nigeria: the Effect of Environmental Factors", Petroleum-Gas University of Ploiesti Bulletin, Economic Sciences Series.

Olusola, A. A., & Adenegan, K.O. (2011), "Rural Livelihood in South-West Nigeria: Strategies, Assets Ownerships and the Non-Farm Income", Research Journal of Applied Sciences, 6: 344-348.

Oni, S. I., & Okanlawon, K. (2006), "Nigeria's transport infrastructural development: an integral part of the national economic empowerment and development strategy (NEEDS)", Journal of Social and Policy Issues, 3(2), 7-13.

Oxford English Dictionary. (2014), "Gender", Available from http://www.oed.com/view/Entry/77468?rskey=u70pik&result=1#eid, last accessed February 2014.

Oyesiku, O. O., & Odufuwa, B. O. (2002), "Gender perspectives in travel behaviour of motorcycle passengers in Nigerian intermediate cities. *Urban Mobility for All, Lisse: AA Balkema, The Netherlands*, 13-19.

Pines, A. M., Lerner, M. and Schwartz, D. (2010), "Gender differences in entrepreneurship", Equality, diversity and inclusion in times of global crises:, An International Journal, 29, (2), 186 – 196.

Porter, G. (2002a), "Living in a Walking World: Rural Mobility and Social Equity Issues in Sub-Saharan Africa", World Development, 30(2), 285 – 300.

Porter, G. (2002b), "Improving mobility & access for the off-road rural poor through Intermediate Means of Transport", World Transport Policy and Practice, 8(4), 6-19.

Porter, G. (2003), "Spatio-temporal perspectives on the social benefits and costs of roads and road transport: a discussion paper with special reference to women and children", Bracknell, TRL Workshop on Framework for social benefits in transport planning.

Porter, G. (2007a), "Transport planning in sub-Saharan Africa", Progress in development studies, 7(3), 251-257.

Porter, G. (2007b), "Transport,(Im) Mobility, and Spatial Poverty Traps: Issues for Rural Women and Girl Children in Sub-Saharan Africa", *In Understanding and addressing spatial poverty traps: an international workshop, 29th March*, South Africa.

Porter, G. (2011), "I think a woman who travels a lot is befriending other men and that's why she travels': mobility constraints and their implications for rural women and girls in sub-Saharan Africa", Gender, Place and Culture, 18; 1, 65-81.

Porter, G. (2012), "Reflections on a century of road transport developments in West Africa and their (gendered) impacts on the rural poor", *EchoGeo*, (20).

Porter, G. (2013), "Transport services and their impact on poverty and growth in rural sub-Saharan Africa", Crown Agents /AFCAP/Durham University, United Kingdom, available from http://www.ifrtd.org/files/uploads/AFCAP%20TS%20POVERTY%20AND%20GROWTH%20COMBINED%20DOC%20Jan%207%202013[1].pdf, last accessed February 2014.

Porter, G. (2014), "Transport Services and Their Impact on Poverty and Growth in Rural Sub-Saharan Africa: A Review of Recent Research and Future Research Needs", Transport Reviews, 34(1), 25-45.

Porter, G., Blaufuss, K., & Owusu Acheampong, F. (2007), "Youth, mobility and rural livelihoods in sub-Saharan Africa: perspectives from Ghana and Nigeria", Africa insight., 37(3), 420-431.

Porter, G., Lyon, F., & The Nigerian Marketing Network. (2005), "Investigations On Building A Food Marketing Policy Evidence Base In Nigeria", Available from https://community.dur.ac.uk/nigerian.marketing/pro-poor%20food%20markets-full%20report.pdf, last accessed February 2014.

Rabirou, K., Ayanwale, A. B., Idowu, E. O., & Williams, S. B. (2012), "Effect of rural transportation system on agricultural productivity in Oyo State, Nigeria", Journal of Agriculture and Rural Development in the Tropics and Subtropics (JARTS), 113(1), 13-19.

Roberts, P., Kc, S., & Rastogi, C. (2006), "Rural access index: a key development indicator (No. TP-10)", Available at http://www.worldbank.org/transport/transportresults/headline/rural-access/tp-10-final.pdf, last accessed February 2014.

Singh, S., Simpson, R., Mordi, & C., Okafor, C. (2011), "Motivation to become an entrepreneur: a study of Nigerian women's decisions", African Journal of Economic and Management Studies, Vol. 2 Iss: 2, pp.202 – 219.

Starkey, P. (2007), "Rural transport services in Africa; Lessons from rapid appraisal surveys in Burkina Faso, Cameroon, Tanzania and Zambia", Sub-Saharan Africa Transport Policy Program, SSATP Working Paper No. 87-B, World Bank and UNECA, October 2007.

Starkey, P. (2012), "Developing indicators to assess rural transport services", Available from http://www.ruraltransport.info/RTSi/docs/RTSi-IFRTD-AFCAP-Starkey-RuralTransportServicesIndicators-120627-MozambiquePaper.pdf, last accessed February 2014.

Starkey, P. and Njenga, P. (2010), "Improving sustainable rural transport services, constraints, opportunities and research needs", AFCAP Practitioners Conference paper, November 2010, www.ifrtd.org.

Starkey, P. C. and Njenga, P. (2013), "Rural transport services: collecting relevant data for indicators", available from http://www.ruraltransport.info/RTSi, last accessed February 2014.

Starkey, P., Ellis, S., Hine, J., & Ternell, A. (2002), "Improving rural mobility: Options for developing motorised and non-motorised transport in rural areas", World Bank Technical Paper 525. World Bank, Washington DC, USA.

Starkey, P., Njenga, P., Kemtsop, G., Willilo, S., Opiyo, R., & Hine, J. (2013), "Rural transport service indicators (Final report)", African Community Access Programme, Sutton, Surrey, UK.

The Nation. (2011), "Only 15% of Nigerian Roads in Good Condition", available from http://www.thenationonlineng.net/2011/index.php/news/15442-%E2%80%98only-15%25-of-nigerian-roads-in-good-shape%E2%80%99.html, last accessed February 2014).

Ugboaja, P. C. (2013), "Sustainability Assessment of Nigerian Transport Policy", International Journal of Asian Social Science, 3(5):1208-1226.

Ume, N. C. & Nwachukwu, C.U., (2011), "Intermediate means of transport (IMT) and transport systems (tss): their relevance in the development of rural transport system (rts) in Ideato-North I.g.a of Imo State", Report and opinion, 3(11):14-18.

UNECA. (2005), "Economic Report on Africa: Meeting the Challenge of Unemployment and Poverty in Africa", available from http://www.uneca.org/sites/default/files/publications/era2005full.pdf, last accessed February 2014.

UNIDO. (2003), "A path out of poverty: Developing rural and women entrepreneurship", United Nations Industrial Development Organisation, Vienna, 2003, Available from http://www.unido.org/fileadmin/user_media/Publications/Pub_free/A_path_out_of_poverty.pdf, last accessed February 2014.

United Nations Economic Commission for Africa. (2012), "E-network for National Gender Machineries - Synthesis Report of E-discussion: "Gender Mainstreaming in National Policies and Programmes"", Addis Ababa, 14th May – 1st June 2012, available from http://www1.uneca.org/Portals/ngm/Documents/E-discussion%20on%20Gender%20Mainstreaming%20-%20Report.pdf, last accessed February 2014.

Woldie, A., & Adersua, A. (2004), "Female entrepreneurs in a transitional economy: Businesswomen in Nigeria", International Journal of Social Economics, Vol. 31 Iss: 1/2, pp.78 – 93.

World Bank. (1999), "Gender and Transport Thematic Group (GTTG)", The IDL group – comprising the World Bank and DFID (Washington, DC: World Bank).

http://www4.worldbank.org/afr/ssatp/Resources/HTML/GenderRG/Source%20%20documents%5CTechnical%20Reports%5CTR CD/PM5-2a%20women%20and%20transport%20presentation.pdf.

World Bank. (2006), "Gender and Rural Transport Initiative, Country Report 10: Nigeria". Available from GRTI country reports, last accessed February 2006.

World Bank. (2013a), "Gender and Transport" (Washington, DC: World Bank), available from http://www.worldbank.org/en/news/press-release/2013/09/24/societies-dismantle-gender-discrimination-world-bank-group-president-jim-yong-kim, last accessed February 2014.

World Bank. (2013b), "Rural Access and Mobility Project", Available from http://www.worldbank.org/projects/P072644/rural-access-mobility-project-ramp?lang=en&tab=overview, last accessed February 2014.

World Bank. (2013c), "Rural Access and Mobility Project – Phase 2", Available from http://www.worldbank.org/projects/P095003/ng-rural-access-mobility-project-phase-2?lang=en, last accessed February 2014.

World Bank. (2009), "An Assessment of the Investment Climate in Nigeria", available from http://elibrary.worldbank.org/doi/abs/10.1596/978-0-8213-7797-0, last accessed February 2014.

World Development Indicators. (2011), "Nigeria", Available from http://data.worldbank.org/country/nigeria, last accessed February 2014.

World Development Report. (2008), "Agriculture for Development", Washington, DC: The World Bank.

Yakubu, A. T. (2012), "Determinants of Earnings among Commercial Motorcycle Operators in Kwara State, Nigeria" International Journal of Economics and Management Sciences, 2(2), 11-17.

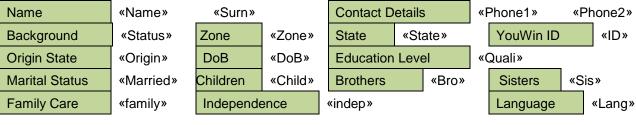
Zakaria, Y. (2001), "Entrepreneurs at home: secluded Muslim women and hidden economic activities in Northern Nigeria". Nordic Journal of African Studies, 10(1), 107-123.

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The Failure of Rura	l Transport Pla	nning and Policy	to Support W	omen's Entrepreneurship	/

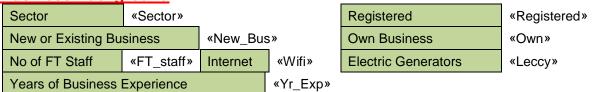
Appendices/

Appendix A: Telephone survey schedule

Personal details.



Business Background



A. Employment and Business Activities?

1. Please could confirm the location of your business? City Urban

Rural Town Village Hamlet

Note: If City, discontinue with Interview and if other locations continue with Interview.

2. How long has your business been in operation?

Less than 1 year

- 1 year
- 2 years
- 3 years
- 4 years
- 5 years

Above 5 years

- 3. How many persons were employed in your Business when you received the YouWin grant? [Enter 0 if None for each item]
- (a) Full-time
- (b) Part-time
- 4. How many persons are currently employed in your business? [Enter 0 if None]
- (a) Full-time
- (b) Part-time

B. Transport Usage Information

1. Do you use public transport for your business operations?

YES NO If **Yes** Continue with Question 2 – 5 but if **No** Go to **Question 6**

2. How often do you use the public transport?

Everyday		
Few days	weekly	
Few days	monthly	
Not very	often	
3. Which	of the following Pu	ıblic means of transport do you use?
Car Taxis		Motorised Tricycle (Keke)
Buses		Motorcycle
Danfo		Bicycles
Van, Truc	k and Pickup	Boat
4. How lo	ng (by distance an	d time) is the most frequently used journey?
(a) Distan	ce in Km of the mo	ost key destination
(b) Time o	of travel in minute	s of key destination
	•	equent journey
		ort for any of the following reasons?
Travel to	market to sell	Travel to market to buy
Supply cu	stomers	To receive deliveries
Move rav	v materials, produc	ce, inputs and purchases
Yourself/	Employees travel t	o work and business meetings
Family ne	eds – Personal/ ch	ild care/ school run/ hospital
Other, ple	ease state	
		ot use public transport in operating your business, what is the main reason
For Resp	ondents who state	ed that they own vehicles
7(a) Do y	ou use your own v	ehicles for your business operations?
YES	NO If Yes Co	ntinue with Question 7b – 9 but if No Go to Section C
7(b) How	often do you use y	our own vehicle for business operations?
Everyday		Few days monthly
Few days	weekly	Not very often
	•	ving means of transport do currently own? [Call out each of the item: Enter 0 icles owned in the boxes]

Van/Truck/Pickups

Car

Bus	Motorized Tricycle (Keke)						
Motorcycle	Bicycles						
Boat							
(8) How long	by distance and time) do you frequently use own vehicle?						
(a) Distance i	Km of the most key destination						
(b) Time of tr	(b) Time of travel in minutes of key destination						
(c) What is th	e main purpose of the frequent journeys						
	e own vehicles for any of the following reasons?						
Travel to mar							
Travel to mar	·						
Supply custor							
To receive de	iveries						
Move raw ma	terials, produce, inputs and purchases						
Yourself/Emp	oyees travel to work and business meetings						
Family needs	- Personal/ child care/ school run/ hospital						
Other, please	state						
C. Business C	perations and Transport Policy						
1. Do you thin not?	k that the present transport system in your local area limits the growth of your business or						
YES	NO DON'T KNOW (YES GO TO Q2, OTHERS GO TO Q3)						
2. If Yes, how	does the transport system impact on the growth of your business?						
Record verba	im						
Probe for issu							
Transport av	ilability						
Level and effi	iency of service						
Accessibility of	f market and other key destinations in terms of travel times						

The Failure of Rural Transport Planning and Policy to Support Women's Entrepreneurship/

YES GO TO Q10 NO END INTERVIEW													
10.	If	YES,	what	government	policies	are	being	implemented	at	what	level?	Record	verbatim
		•••••		•••••									
		The	ank yo	ou for sparin	g some	time	to pa	rticipate in th	ne T	releph	one In	terview	·.

Appendix B: In-depth interview schedule

Duration 20 - 30 minutes

Remember:

- State that we will be taping the discussion for reporting purposes but that everything that is said will be used for the purpose of this research only.
- Ask the interviewee to speak clearly for the tape.
- Where key issues about rural transport problems and policies are raised probe to explore how improvements could be made.

GENERAL INTRODUCTION (2 Minutes)

Welcome and thank you for taking time to participate in this call. My name is XXXXXX and with me is Community Access Programme.

The purpose of today's discussion is to learn more about your views and opinions on the extent to which, as Olatayo Balogun who you spoke with late last year. We are working on behalf of the YouWiN! (Youth Enterprise with Innovation in Nigeria), the Pan-Atlantic University and the Africa a female entrepreneur based in a rural area, the local road and public transport networks serve your business needs and whether there are any specific barriers that you face, as a woman, in using the transport systems in your local area. In addition, we are interested in finding out whether you have personal experience of overcoming any particular barriers you have faced in using transport in your local area or if you have any suggestions for making things better for women travellers in the future.

Before we start, I would request that you speak as clearly as possible during the discussion so that we can pick up your comments. Please be as frank and honest as you can about your views and opinions. There are no right or wrong answers to the questions we are going to ask you, we are mainly concerned with understanding your opinions in as much detail as possible.

This call should last no longer than 25 minutes and will be tape recorded for analysis purposes only. We will not attribute any comments that you make to you personally in our reporting to our client without gaining your permission to do so first.

PERSONAL INTRODUCTION (2 minutes)

I would like to start the call by reviewing what you said to Olatayo in your first interview:

[Interviewer to provide first interview OVERVIEW summary to participant based on information provided by Olatayo]

• Is this a correct summary of your personal situation and views? [IF NOT PROBE WITH: Please can you explain how your personal situation or view differs from what was stated?]

USE OF TRANSPORT FOR BUSINESS PURPOSES (5 minutes)

I would now like to gain a better understanding of the methods of transport that you use on a daily basis for your business operations. You said to Olatayo in your first interview that:

[Interviewer to provide first interview summary OF PUBLIC AND PRIVATE TRANSPORT USE to participant based on information provided by Olatayo]

• Is this a correct summary of your personal situation and views? [IF NO PROBE WITH: Please can you explain how your personal situation or view differs from what was stated?]

[WHERE PARTICIPANT INDICATED THAT THEY USE PRIVATE TRANSPORT]:

You indicated that you use a [car, van, truck, motorcycle or bicycle - ASK ONLY AS APPLICABLE]. Is this [car, van, truck, motorcycle or bicycle] owned solely by yourself/your business or do you have some other arrangements in place for using it?

[PROMPT (IF NECESSARY) WITH:

- o Is the car, van, truck, motorcycle or bicycle:
- o Jointly owned with a business partner / other business?
- Borrowed by / shared with a family member / other third party?
- Chartered / rented from a third party?]

[WHERE PARTICIPANT INDICATED THAT THEY USE PUBLIC TRANSPORT]:

- Does the road network in your local area limit the types of public transport options [buses, Danfo, Keke, Okada etc.] available to meet the needs of your business on a day to day basis? [IF YES PROBE WITH:
 - How does the road network limit the public transport options available to you?
 - Does this limited public transport service impact on the running of your business? How does it impact on the running of your business?
 - Does this limited public transport service impact on your plans for growing the business? What will it stop you from doing?]
 - Would better road maintenance in your local area help to solve this issue? [IF YES PROBE WITH:
 - o How would better road maintenance help?
 - Are you aware of any policies to improve the local roads?]

COST & JOURNEY TIMES) BY PUBLIC TRANSPORT (5 minutes)

I would now like to move on to discuss your views of the cost of public transport in your local area:

- If you were to solely use public transport for your business travel, would this significantly increase the cost of running your business or not? [IF YES PROBE WITH:
 - How do public transport fares compare to the cost of other goods and services you purchase to support the running of your business?
 - Why do you think that the cost of public transport is relatively expensive?

[PROMPT (IF NECESSARY) WITH:

- Does demand for locally licensed transport operators exceed the supply in your local area?
- Are the fares of transport operators regulated at all?
- Is there enough competition in the market for public transport services?
- Do you travel a long distance/at unusual times to / from the market for your goods / services?
- Are there toll payments or any other additional costs (e.g. security) to pay as part of the public transport fare?]

I would now like to move on to discuss your views on journey times by public transport in your local area:

- If you were to solely use public transport for your business travel, do you think that the journey times involved impact on the running of your business or not? [IF YES PROBE WITH:
 - How do public transport journey times compare to those by private methods of transport (e.g. car or taxi)?
 - For what reasons do you think that journey times by public transport are longer than for other methods of transport?

PROMPT (IF NECESSARY) WITH:

Having to wait for the Danfo / Keke to fill up before it leaves

- Poor/lengthy connections at interchange points
- Journeys by public transport are less direct due to road capacity/maintenance issues]

WOMEN'S TRANSPORT ISSUES (10 minutes)

Finally, and most importantly, I would like to ask you about any transport issues and barriers to travelling in your local area which relate specifically to women only.

• As a woman doing business in the local area what, if any, problems might you experience, which men would not, when attempting to use public transport?

[ALLOW FOR RESPONSE BEFORE PROBING WITH:

- o Is the personal safety and security of women travelling by public transport a significant problem?
- o Is the need to fit transport journeys around family / child care commitments a problem?
- What about the need to carry goods on public transport?
- Are there specific issues with perceptions of:
 - Women travelling independently or late at night?
 - Women using specific methods of transport (e.g. Okada)?
 - Women working at all?]
- Have you personally addressed and overcome any of these specific transport issues and barriers yourself? [IF YES PROBE WITH:
 - How have you addressed and overcome these challenges?]
- Are you aware of any local government policies which would help women to overcome these transport issues and barriers in the future? [IF YES PROBE WITH:
- What local government policies are you aware of? What do they aim to do?

PROMPT (IF NECESSARY) WITH:

- o Issuing of more transport operator licenses to allow better regulation / safer public transport provision
- Uniforms for Okada / Keke / Danfo drivers to improve perceptions of personal safety and security]
- Banning of motorcycles after 7pm
- Can you think of any other ways in which transport could be made easier for women to use, particularly when travelling for business purposes? DO NOT PROMPT.
- Which of the following suggestions do you think could be implemented in your local area in order to make transport easier for women entrepreneurs?

[READ FULL LIST. WHERE RESPONSE IS POSITIVE PROBE WITH: 'Why do you say that? & 'Do you think this would work in your local area?']

- Earlier and later services on particular routes as part of a local government transport license.
- Uniformed & licensed Okada and Keke riders
- Okada rider training for women
- Loans for transport
- A side pillion footplate, and extended rear seat grip to make sitting side-saddle easier
- Trailers for Okadas to carry more goods
- Extension of policies to replace Okadas with Kekes whenever road is capable
- A Womens' Transport Association
- Women only Taxi or Car Share service
- Better Maintained Roads

Thank you and close (2 minutes)

Interviewer to sum up key points from the discussion and ask participants for their views on the summary provided.



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