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# VALUE CHAINS FOR EMPOWERMENT AND STRONGER AGRICULTURAL SECTOR IN SUB-SAHARAN AFRICA.

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#### ABSTRACT

This study comprises an assessment of existing literature and documents on mainstreaming women and youth into agricultural value chains for sustainable development. Mainstreaming women and youth into agricultural value chains in most African countries has been a challenge due to inadequate information of the potential benefits that will accrue to African economies. In this research, we draw on available empirical data from journals and articles related to the topic which indicate that in sub-Saharan Africa, the agricultural sector accounts for 32% of Gross Domestic Product (GDP) growth. Studies revealed that women and youth are confronted with numerous constraints, including owning less land, limited access to financial and technical resources. Other factors militating against participation in agricultural value chains are socio-cultural and economic in nature. It is imperative to address these barriers both at the institutional and policy levels by removing the challenges and consider farmers and other value chain actors.

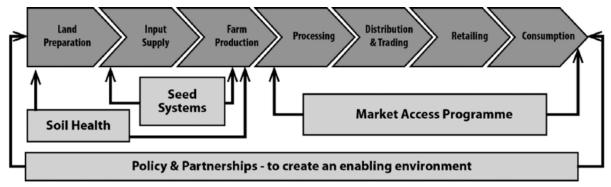
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## INTRODUCTION

Agriculture is a principal source of livelihood in Africa and women and youth play an essential role in agricultural production (Mmasa, 2013). Women provide as high as 40 percent of agricultural labour force in Africa especially at the bottom of the value chain (Njiraini, Ngigi & Barake, 2018). Although agriculture is a vital instrument of growth and poverty reduction in African countries, the sector is underachieving because women and youth, who are often extremely important in agriculture and the rural economy, face challenges that reduce their productivity (FAO, 2011). Women and youth make essential contributions to the agricultural and rural economies of all developing countries even though their roles vary between and within regions. African women are an integral part of the agricultural sector and spend nearly 60% of their time on agricultural activities (Njobe 2015). Agriculture in Sub-Saharan African consists of small holder farmers and many of them are women (Adeniyi, 2010). Despite diverse agricultural policies adopted by various African countries, the agricultural sector has continued to suffer neglect albeit agriculture has a strong potential in growth and employment creation in Africa. However, the vital role played by women and youth in the rural economy and in food production notwithstanding, majority of them have little or no access to land, finance, farm inputs and other resources than the men due to cultural practices and discriminations they faced in African countries (FAO 2016, World Bank 2018).

In sub-Saharan African, the diminishing capacity of agriculture to provide for household sustenance has increased the workload shouldered by women and youth as men withdrew their labour from hired agriculture. Adeniyi (2010) revealed that women had to increasingly make for the family's food deficit by working as casual hired labour on larger farms. Women and youth's low participation in national and regional policy formulation may imply that those issues of most concern to them had been neglected in the design and implementation of many development policies and programs (Njobe, 2015). Thus, their role in agriculture remain isolated from national agricultural planning and policies. Furthermore, the efforts of women are not rewarded equally to those of men and often face insecure and unsafe working conditions (Njiraini, et. al 2018). As stated by FAO (2016), the potentials of agriculture in African countries will be better achieved if the productive potential of women and youth are maximized. Similarly, the World Bank (2015) and the UNDP (2016) have observed that if women and men had the same access to productive resources along the agricultural value chains; it would be possible to increase total agricultural output in developing countries by 2.5 - 4.5 percent which will in turn reduce poverty and hunger in the world by 12-17%. Beyond just food chains and agricultural production, women and youth are also often excluded from market opportunities and the benefits of cash crop production (Pyburn, Belanger, Dido, Guronga & Flink, 2015).





Source: FAO 2016

Value Chain in agriculture, are set of actors and activities that bring a basic agricultural product from production in the field to final consumption and at each stage, value is added to the product (FAO 2016). As shown in Figure 1 above, it involves the flow of product, knowledge and information from farmers to consumers (Porter 1985). This include whole range of goods and services that are necessary for an agricultural produce to move from the farmer to the final consumer. However, women and youth entrepreneurship is becoming popular across the world and their participation is being recognized as a major contribution to economic growth. Entrepreneurship is considered as a relevant vehicle for economic development by which women and youth contribute significantly (Mohammed, Abul & Rosni, 2015). According to Devita and Mari (2013), 187 million women were involved in creating and operating enterprises. Moreover, women and youth occupy an important position in the economic growth of the developing countries by playing a leading role in generating productive activities especially in Agricultural Value Chain for sustainable development. Some of the gender gaps in agricultural value chain includes land, labour markets, financial services, education, technology etc (Patil & Babu, 2018). In Africa, women and youth experience more poverty due to the traditions and culture which requires women to stay back and keep the home, while the children are required to help in house chores and partake in street trading (Alao 2015). Also, women and youth constitute a large percentage of the unemployed in various developing nations and this affects the socioeconomic growth of various African countries as observed by Kabir and Jazuli (2016). A 2010 study by UNRISD revealed that majority of women across the world rely on the informal sector for income whereas if women and youth were empowered, the possibility for economic growth and development becomes highly visible. Empowering women and youth in agriculture is, therefore, important for economic sustainability of global primary industries. Furthermore, in order to address the gender gaps and enhance empowerment of all household members, the use of practical tools for all stages of value chain intervention enhances women's economic independence which is an essential dimension of their empowerment. This is an innovative approach aimed at ensuring gender equality and social inclusion. This methodology has proven to increase impacts when mainstreamed to agricultural development operations. It is a participatory approach used to promote equitable intra-household relations, equitable division of labour and shared decision making processes. Experience in some African countries have demonstrated deeper and more sustainable improvement in rural livelihoods through ownership, high quality of beneficiary participation, empowerment and sustainable planning among others. The inclusiveness of an agricultural value chain depends on the extent to which they allow the most vulnerable groups such as smallholders, small enterprises, women and youth run enterprises to have access to the resources and

services they need and to participate in, and earn a living wage from their activities (FAO, 2016). Working towards inclusiveness, social justice and gender equality in agricultural food systems entails addressing all levels of the value chain, from production to the end market on a sustainable basis. Therefore, the purpose of this paper is to contribute to existing literature with a view to ensuring that women and youth are more systematically integrated into agricultural value chains so that they can benefit more from interventions. The paper sought to raise awareness and discussed the relevance and benefits of mainstreaming women and youth in agricultural value chains, build a common approach to work on gender sensitive issues and provide guiding principles for the mainstreaming of women and youth. These are expected to contribute to the improvement in women and youth participation in agricultural value chain which will have multiplier effects, including improvement in the overall welfare of the people.

# LITERATURE REVIEW

Although gender awareness has increasingly informed analysis of entrepreneurial behaviours in the last three decades, however, there are popular assumptions that men and women are fundamentally not the same and that female owned business will under-perform when compared to those of men (Ahl & Marlow 2012). Nevertheless, proving this assumption has been difficult (Robb and Watson, 2011). Gender equality is an important determinant of entrepreneurial activity (Coleman, Henry, Orser, Foss & Welter 2018). Women are not adequately represented among the population of entrepreneurs. They operate smaller and less dynamic businesses than men and they operate in non-capital intensive sectors which often have lower potential for generating a high and sustainable income (European Commission & OECD 2017). According to the International Labour Organisation (ILO), nearly 98% of rural women are classified as economically active in agriculture. Women and youth famers contribute substantially to commercial and subsistence agriculture, including livestock and fishing as well as casual labourers and unpaid family workers. Women carry the major responsibility for both subsistence agriculture, particularly food crop production and domestic work (AgDevco, 2017). Africa cannot build sustainable democracies, economies, provide employment generation and achieve food security if it does not fully integrate women and youth into policy responses (Deeksha, 2014). Women and youth empowerment has direct impact on agricultural productivity and household food security (Sraboni, Mlapi, Quisunbing & Ahmed, 2014). For this reason, relevant stakeholders in the development of agriculture in Africa are increasingly targeting women and youth as well as strengthening their investment so as to empower themselves (Gates, 2014). According to Akter, Rutsaert, Luish, Htwe, San, Rahario and Dustika (2017), empowerment in agriculture is one's ability to make decisions on matters related to agriculture as well as one's access to the material and social resources needed to carry out those decisions. However, Alkire, Meinzen-Dick, Peterman, Quissumbing, Seymour and Vaz (2013) reveal that women and youth have an unmanageable workload and lack access to credit or have no power deciding over credit. All existing empirical studies on women and youth in agriculture consistently show that women and youth lack access to and control over resources such as land and capital as well as other agricultural inputs and technology (Fletschner and Kenney, 2014). According to FAO (2011), women produce up to 60 - 80% of the food in developing countries, including staples such as rice and maize. This supports the assertion by Okwu and Umoru, (2009) that rural women and youth are actively involved in the process of food production, processing and marketing, however, social and economic constraints have placed barriers around their access to scientific and

technological information. The women and youth farmers do not have the required technical knowledge to enable them derive productive use of farm input for optimum yield. As Croppenstedt, Goldstein and Rosas (2013) observed, African women farmers labour without crucial support that could raise their productivity. Inputs such as improved seeds, credit etc rarely get to women and youth in Africa, as the adult male farmers have the overwhelming access to agricultural extension services than women and youth (Akter, Krupnik, Rossi & Khanam 2016). Ironically, as a result of risks and uncertainties as well as better livelihood opportunities available in urban areas, most of the men are migrating and rural women and youth are held back with the task of carrying out agricultural activities (Deeksha, 2014). A typical value chain describes all activities that are required for bringing a product or service from conception through the different phases of production, which involves a combination of physical transformation and the input of various producer services, delivery to final consumers (Mutua, Njuki, & Waithanji 2014). The study further explains that the complex network of activities carried out by different actors in multiple enterprises along a value chain require that attention must be paid to the activities that people are involved in and how they are linked together through such services as transportation, insurance, telecommunication, quality control and management coordination. Whilst the flow of goods is crucial in value chains, other determinants of value chain participation such as credit/finance flows, changes in ownership rights and markets also need to be considered (Coles and Mitchell 2011). Mainstreaming women and youth into a value chain approach, therefore, provides an opportunity for all actors to understand each other's functions and the activities involved, increase their viability, visibility, voice and market share and identify and correct barriers and gaps that cause inefficiencies (Riisgaard et, al 2010). Empowerment should be about changing gender relations to enhance women and youth ability to shape their lives (Mutua et. al. 2014). Thus, to the authors, empowerment is about addressing the inequalities that women and youth face as they participate in value chain activities with the goal of increasing their visibility, voice and choice. Moreover, financially empowering women and youth in rural areas promotes sustainable economic growth and helps alleviate poverty (UN, 2014).

Women and youth face barriers that significantly constrain their production and entangle them in low productivity. These barriers encompass cultural norms, gender division of labour, resource constraints and limited access to other farm inputs (Nyasimi and Huyer 2017). Women farmers in rural communities bear a double burden since they work much longer days than their male counterparts and are responsible for both housework and work on farms (Kasente 2012). Recent studies by Oyakhilomen and Zibah (2014) and Kabir and Jazuli (2016) have all revealed that through entrepreneurship in agribusiness, a greater number of women and youth had been empowered thereby leading to inclusive growth, employment generation as well as sustainable livelihoods. In addition, it has contributed in improving agriculture and food security in most African countries. Unfortunately, women still lag behind in the stream of development in the developing world as observed by Alao (2015) as their positions, including in governance, are subject of continuous and systematic agitation. In addition, Doreo Partners (2013) stated that agricultural entrepreneurship through agribusiness provide the major panacea to women and youth unemployment which has been increasing at the rate of 16% per annum in some African countries. Isah and Nafiu (2013), posited that a society with greater equality, experience faster economic growth and benefit from greater agricultural productivity and improved food security.

#### Major Constraints in mainstreaming Women and Youth into Agricultural Value Chains

#### (a) Land

There are substantial gender specific barriers in integrating women and youth into the agricultural value chain. These barriers relate to difficulties that women and youth face in obtaining credit, land, extension services etc to support their agribusiness. Integrating women and youth into agriculture value chains is hindered by women and youth lacking land rights and therefore work on small land holdings and have less access to resources. Land is the central factor of production in agrarian economies and consequently the manner in which it is accessed, allocated or transferred, controlled and used is an important consideration in the socio-economic policies and associated legislative environments and institutional forms (Obeg-Odoom 2012). Unequal rights to land borne out of diverse statutes, religious, customary and local norms put women and youth in poverty and entrench gender inequality in Africa (Doss et.al. 2015). Women represent 15% of agricultural land holders that ranges from 3% in Mali to 30% in countries such as Botswana and Malawi and more than 50% in Cape Verde (Njobe, 2015). Table 1 shows the share of household agricultural land area held by women and men in some African countries. Increasing women and youth control over land can, therefore, positively and significantly influence the welfare of the country's next generation (Deeksha 2014). In addition, uneven land rights are one of the main causes of the productivity gap between men and women as land represents the most important input in agricultural production (Njiraini et.al, 2018). Majority of African women farmers are small scale and do not own the land compared to their men counterpart who tend to own the medium and large scale farms. With other responsibilities, women and youth farmers find it difficult to effectively advocate for a better policy environment (Saridakis, Marlow & Storey 2014).

Country (Date)	Definition of Ownership	Women	Men	Joint
Ethiopia (2011-12)	Registered	15%	45%	39%
Malawi (2010-11)	Owned	40%	42%	18%
Niger (2011)	Owned	9%	62%	29%
Nigeria (2010)	Right to sell/Use as collateral	4%	87%	9%
Tanzania(2010-11)	Owned	16%	44%	39%
Uganda (2009-10)	Owned	18%	34%	48%

Table 1: Share of Household Agricultural Land Area Held by Women, Men or

Source: Doss et.al, 2015.

Jointly by both

#### (b) Finance

Agricultural finance in Africa is another factor and has remained the most difficult type of finance to secure and women and youth farmers experience greater constraints than the men (Njobe, 2015) as a result of the nature of their business or land size. Some of these barriers stem from existing cultural norms that restrict women and youth; making raising capital more difficult for women and youth than men (Carter, 2000). According to Alsos, Isaksen and Ljunggren (2006), men obtain more generous external financing than women. This also led to male-owned enterprises to grow more rapidly than female owned (Tominc et.al 2018). Access to finance is a major constraint for inclusive entrepreneurship in Sub-Saharan Africa, whereas access to financial services assists the uptake of innovations, technologies that are essential for participating in value chains and enable producers to hedge themselves against risks (FAO, 2011), in Botswana, Kenya, Malawi, Namibia, Rwanda, Tanzania, South Africa and Uganda, for instance, women are less likely to access formal financial banking services (Aterido, Beck & Iacavone 2013). Thus, the gender gap in financial inclusion is measured at 11% in Kenya, 9% in Tanzania, 15% in Uganda and 13% in Nigeria (Njiraini et. al, 2018). In Ghana, 50% of women have formal bank accounts but are faced with additional limits in their borrowing for farming activities and evidence has shown that women and youth entrepreneurs often rely on informal financial mechanisms which prevents them from investing in technologies (Ngigi, Mueller, & Birner 2017). Financial exclusion of women has long term impact on their income, even though value chain finance can help small scale producers integrate into higher value markets. Moreover, there is a human driven gap that inhibits women and youth entrepreneurs from being as equipped as their men counterparts to manage a business as shown in Figure 2 (ZBS, 2010).

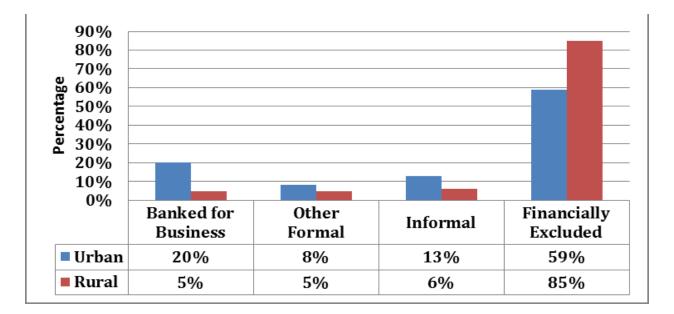


Figure 2: Access to Financial Service, Rural and Urban Entrepreneurs

Source: Zambia Business Survey 2010.

## (c) Access to relevant inputs and other related constraints

Overall, African women farmers experience greater constraints than their male counterparts. Women and youth farmers in Africa also have limited access to seeds, fertilizer, pesticides, farm equipment and machinery. They

also lack access to energy and water which increases their burden as well as their ability to optimize the use of modern technology (Njobe, 2015). There is also a preference driven gap perspective which shows that there are clear differences in the motivations and approaches that men and women entrepreneurs have towards their businesses. It is a well-known fact that knowledge and training in agricultural activities are important for both men and women farmers. However, despite the critical role played by African women and youth in agriculture, they are not regarded as farmers and the women and youth tend to have less access to agricultural information (World Bank 2018). They usually receive second hand information. Women and youth's status is still low in Africa going by all social, economic and political indicators. Most of the jobs done by rural women are physically strenuous and leave no opportunity for the girl child to attend school. Women and youth's situation remains vulnerable while increasing food insecurity has gender dimensions (Williams 2004). Women and youth farmers also have limited access to reliable road connectivity, transport storage, processing and preservation facilities as such women and youth in Africa face difficulties in accessing input and output markets due to insufficient and poor quality of infrastructure. The level of agricultural infrastructure development in most African countries is lower than that of other regions of the world and hence leading to low agricultural productivity (FAO, 2011). Despite the high importance of female entrepreneurship and its contribution to job creation and economic growth, however, there are gender-specific obstacles on the path to high growth (Klapper & Parker, 2011, Tominc & Rebernik 2006). Women are often limited in their access to the market because of mobility constraints, having multiple responsibilities at home, vulnerability to sexual harassment and violence (AgDevco, 2017). Despite contributing to agricultural production, female farmers in Sub-Saharan Africa face numerous constraints that limit their productivity and their inclusion in smallholder schemes (Saridakis et.al 2014). There are cultural factors that pose as constraints to integrating women into entrepreneurship while some are associated with personal choice. Women have different motivations for self-employment and entrepreneurship from men with the ability to better manage work life (Marlow & McAdam, 2013). Lack of entrepreneurial skills is considered to be of the most important constraints to successful business start-ups, women are generally perceived to be self-confident in entrepreneurial skills and knowledge needed to start a business. A study by Kelley, Baumer, Brush, Greene, Mahdavi, Majbouris, and Heavlo (2017) revealed that innovation entrepreneurial education contributes to the improvement of innovation and entrepreneurial skills. Again fear of business failure may also be an important constraint for entrepreneurship as it is more pronounced for women than men (Tominc et.al 2018). Women and youth entrepreneurs tend to have less experience with and access to external sources of debt and equity in general (Robb & Coleman, 2010). Welter et.al 2006 stated that women and youth do not have sufficient personal financial capital to grow their firms, experience to attract external capitals and social capital networks to provide links with needed sources of funding. They equally have fewer resources to start-up business, less successful in business goals achievement and business performance. In order to make women and youth to be properly integrated into agriculture, they must be trained adequately. The training of women and youth is very critical especially with the adoption of modern agriculture techniques that are tailored to local conditions, most of the agricultural extension services and information on new technologies are directed at men (Kelkar 2011). According to Okwu and Umoru (2009), women and youth are burdened by domestic tasks and family obligations and controlled by social restraints such that they are constrained time-wise to be away from home to attend extension training programs. The underperformance of women and youth in entrepreneurship could also be attributed to these constraints. Women and youth suffer inequalities and their access to resources are limited (Boserup, Tan, Toulmin & Kanji 2007).

However for effective mainstreaming of women and youth into the agricultural value chain, the following specific constraints require consideration as observed by AgDevco, (2017). Limited access to resources and services, including hired labour, equipment, technology, finance and markets, less exposure to education and training, limited control and power to decide over income from production and other benefits, limited participation and leadership in farmers organisations and the community, workload due to multiple responsibilities, mobility constraints, sexual harassment and violence. Unless women and men have equal access to opportunities, women will continue to be hindered by these constraints (Harison & Blake, 2009). Again, women are under-represented in successful entrepreneurial ecosystems (McAdam, Harrison & Leitchet 2018). Estrin and Mickiewicz, (2011) opine that in order to improve their living standards, they should be provided with equal opportunities without discrimination. However, women entrepreneurs everywhere are in a minority even though there are observable variations across countries. Generally, gender differences in access to capital are viewed as an impediment to enterprise growth and job creation in a number of innovation driven economies (Coleman et.al. 2018). The challenges that women identify in starting a business include discouraging social and cultural attitudes, lower levels of entrepreneurship skills, greater difficulty in accessing start-up financing, smaller and less effective entrepreneurial networks and policy frameworks that discourage women's entrepreneurship (European Commission & OECD, 2007). Similarly, women and youth participation in entrepreneurship is considerably lower in almost all societies (Gupta, Goktan & Gunay 2014) but if women and youth have access to productive resources as men, they could increase yields on their farm by 20 to 30% (FAO, 2011). Women in agriculture value chain rely on their own ingenuity, hard work and creativity to succeed. Oftentimes women and youth are responsible for food preparation, fetching water and gathering of firewood. In all farming related activities, decision making continues to be male dominated even when women and youth contributed the majority of the labour. Furthermore, inadequate personnel and finances to carryout analysis and action on agriculture oriented gender issues has been a challenge (Boserup et.al 2007).

## Success Stories in Mainstreaming Women and Youth in Value Chains

IFC Intervention in mainstreaming women and youth in agriculture in Africa had yielded positive results in input provision and use, production and yield increases, post-harvest processing and storage as well as in transportation, marketing and sales of agricultural products. At each stage of value chain, women and youths were able to intensify potential benefit from closing gender gaps. Furthermore, Feed the Future Programme improved production, post-harvest handling and marketing products by women and youth. The Programme assisted in removing barriers to land and capital which generally articulated a clear benefit in the areas of building assets and skills that allow to generate increase income via mixed livelihood, increases production services. In order to successfully engage women and youth in Agricultural Value Chain for sustainable development and sustainability, it is important to facilitate access to land and credit, improve and develop agriculture, strengthening education in agricultural sector. Other Funded Donor Agencies like Rural Finance Institution Building Programme (RUFIN), Agricultural Transformation Agenda Support Programme Phase-1 (ATASP-1), FADAMA, Value Chain Development Programme (VCDP) etc successfully rescued women and youth out of poverty through financial inclusion, through access to credit. The Programs trained selected women and youth in Nigeria on how to be financially literate which includes proper savings culture, investment in agribusiness and access to micro loans facilities, loan repayment, accountability and self-reliance.

#### **Connecting Smallholder Farmers to Markets**

In Benue, North Central Nigeria, smallholder farmers particularly women and youth are engaging in new market opportunities and taking the first steps out of poverty through a contract farming scheme in which farmers were guaranteed markets to sell their rice and cassava crops. The International Fund for Agricultural Development (IFAD) assisted Value Chain Development Programme (VCDP), have linked over 3,603 rice farmers in Benue to Olam international, a major off taker and key player in the Nigeria rice sub-sector to buy rice paddy off rice growers. This linkage with Olam through VCDP has ensured women and youth farmers growing rice in Benue get a ready market for their produce. In 2019, Olam bought about 997 tonnes of paddy from rice farmers in Benue, later processed and sold in the Nigerian market. Olam provided the farmers with necessary inputs; certified seeds, fertilizers, and agrochemicals with guaranteed "buy back" at prevailing market price at the end of the season. The company joined VCDP in farmer mobilization, validation, profiling and training events, bringing their experiences in out-growers scheme to bear. Olam also co-funded extension services using private sector providers to ensure that farmers meet productivity potentials of the preferred rice varieties. In addition, Olam provided financial credit to farmers to meet their equity contribution in the VCDP matching grant through a commercial bank in Nigeria.

## **Empowering Young People through Agribusiness**

The ATASP-1 and VCDP Programs in collaboration with the Federal Government of Nigeria's commitment to reduce youth unemployment and poverty, is creating a new generation of farmers in agriculture. The programmes is targeted at women and youths that are interested in agriculture by creating rural youth groups and providing them with important training in techniques that generate new economic opportunities and income. Some of the youth were been hired to spray farms with herbicides. The skills were acquired when ATASP-1 and VCDP trained the youth as spray gangs. That has become an extra source of income for the youth.

#### Improved access road secures life and agribusiness

Roads were constructed for easy access to farms by some of the Donor Funded Agencies, these are projects of the Government of Nigeria, the International Fund for Agricultural Development (IFAD), Africa Development Bank (AfDB), The World Bank etc. The purpose of the rural access road programme is to create access for farmers to transport produce from their farms and for off-takers (bigger-scale produce buyers) to reach farm gates to take produce off farmers.

#### Improving farmers' access to land for rice and cassava production

Spurred by the need to create more arable land and produce more food, ATASP-1 and VCDP are helping farmers in Nigeria to develop land for rice and cassava crops cultivation. There has been increase in the number of people having access to land, especially women and youth. Land development has also provided room for farm mechanisation. "The farmers stated that the use of farm mechanisation increases efficiency, reduces cost of production and improves on the yield of the farm." Across Southern Nigeria, farmers usually open up virgin land by slashing and burning vegetation. The density of rainforest vegetation limits the area of land they can farm. And at the end of the planting season, they move on to fresh land, leaving the former to fallow. Opening up land involves a lot of physical labour, and hiring tractors is too expensive for farmers are not having access to land, and when they do, most of this land is not tractorable according to the farmers. The need to develop land under VCDP has created a culture of growing use of mechanisation among farmers working with the programme— creating services for farmers and jobs for mechanisation service providers.

#### Improving livelihood and savings

New knowledge, better farming practice and access to market through ATASP-1 and VCDP have assisted youth farmers to improve rice yield and income. Youth were trained in dry-season rice farming and they were able to grow rice at least two seasons a year. Presently, most of the benefited women and youth have expanded their small farming enterprises to processing commercial quantities. The supported women and youth confirmed that they have been gainfully empowered and that their living standard have equally improved tremendously. In addition, there is wide evidence of the success of female entrepreneurs in the economic development of African countries with regards to their contribution to job creation and economic growth as well as to diversify the economy (Tominc, Rebernic, Hojnik & Sirec 2018).

#### Key Success Factors in Mainstreaming Gender in Research for Development

One of the evidence of success factors in mainstreaming gender in Africa was a joint programme developed by Food and Agriculture Organization (FAO), International Fund for Agricultural Development and World Food Programme (WFP) on Accelerating Progress toward the Economic Empowerment of Rural Women (JPRWEE) as a response to the multiple challenges facing women and youth by unlocking their potential as Farmers Entrepreneurs and Agents of Change in some African Countries. The activities implemented under this Programme include:

- 1) Training on Entrepreneurship,
- 2) Business Plan Development,
- 3) Value Chain Development,
- 4) Numeracy and literacy skills,
- 5) Access to financial services with support for opening bank account and establishing saving groups.

To this end, JPRWEE action created income generating opportunities for rural women and youth and supported their sustainable livelihoods. The Project also created and strengthened enterprises led by women and youth and promoted the role of women throughout value chains and enhanced linkages to high value markets. Women and youth overcome constraints on the supply side thereby enabled greater access to market opportunities. This action also assisted women and youth to enhance their decision making power and leverage their voices to influence policy processes. The training developed the leadership skills and capacities of women and youth organization into and participated in cooperatives and producer organization as well as build their knowledge. Although International NGOs and Donor funded organisations have increased their support to women and youth in agriculture (European Commission & OECD 2017). They have been involved in integrating women and youth in agricultural value chains and lay emphasis on women and youth empowerment. Grassroots women groups are also increasing. The contribution made by women and youth to agriculture are under appreciated despite the dominant role women play in the sector (Tiernan and Nelson, 2018). Women compete more favourably with their men counterpart in agricultural activities and contribution to household economy and food security. According to World Bank (2009), it is encouraging to see women in business growing as the number of firms with female participation in ownership is 29% in Sub-Saharan Africa. Agriculture and food processing is the largest sector of the economy in Africa that employs women and youth while small holder women farmers are limited to the production end value chain. Study by Mmasa (2013) reveals that when value chain programs are designed with gender equitable principles foster both competitiveness and gender equity goals to enhance poverty reduction impact. Gender analysis uncover the unique constraints and barriers that both women and men face in moving along the value chains, accessing markets and credits as well as growing their businesses. For example poor rural infrastructure, such as lack of post-harvest storage facilities available to women cooperatives and limited transportation system can impede rural women farmers' access to urban markets. However, improvements in these areas would help reduce post-harvest loss and allow women to engage in agricultural markets and improve their economic status (European Commission & OECD 2017). According to Jennings and Brush (2013), women have contributed substantially to national agricultural output, maintenance of environment and family food security. They have successfully managed human and economic resources to achieve optimum results, contributors to food production and employers of labour thereby reducing unemployment. Participation of women and youth in agriculture has reduced rural-urban migration as observed by Tiernan and Nelson (2018). Moreover, women and youth empowerment in agricultural value chain is paramount as women are responsible for as much as 80% of the staple food items, 70 – 80% of agricultural labour in Tanzania, 90% labour in Uganda, 75% in Kenya, 90% in Rwanda and 70 – 80% in Burundi (Mmasa, 2013). African women also produce 60 - 80% of the continent's food (Njobe, 2015). Through agribusiness entrepreneurship, substantial percentage of women and youth had been empowered and this has led to inclusive growth, employment generation and sustainable livelihoods (Kabir & Jazuli, 2015). In Nigeria, for example, successive governments have attempted to stimulate women and youth interest in agricultural production and processing since the 1980s. Specifically, in 1986, the federal government of Nigeria established the National Directorate of Employment (NDE) to provide vocational training to the youth and in 1987, the Better Life Program was established to empower women, especially female youth in the rural areas. Furthermore, the People's Bank and Community Banks were established in 1989 and 1990 respectively to provide credit facilities to low income earners embarking in agricultural production and other micro enterprises with special attention to women and youth. In 1992, the FADAMA program was initiated to enhance food self-sufficiency, reduce poverty and create job opportunities for women and youth. Removing the constraints arising from the proper integration and empowerment of women and youth into agricultural value chains in African has the potential to produce a significant gain for the continent by increasing agricultural productivity, reducing poverty and hunger, employment generation as well as promoting economic growth. According to the World Bank (2018), deliberate investment and strong institutional policies on women and youth could yield great benefits to the continent. FAO (2011), revealed that if women and youth had the same access to productive resource as men, they could increase yields on their farms by 20-30% and raise total agricultural output by 2.5-4%. The paper also reveals that the gains in agricultural production could lift 100 to 150 million people out of hunger. Furthermore, the World Bank (2011) and UNDP (2016) observed that if women and men had similar access to productive resources along the agricultural value chains; it would be possible to increase total agricultural output in developing countries which will in turn reduce poverty and hunger in the world by 12-17%. The integration of women and youth in agricultural value chain for domestic, regional and global markets has a significant role to play in poverty reduction. It is a way to increase women and youth incomes through opportunities (Njobe, 2015). Empowering women and youth through agriculture could translate into a generation of Africans who are better fed, better educated and better equipped to make productive contributions to their economies within the agricultural sector.

### RECOMMENDATION

Best-fit practices and promising experiences in gender mainstreaming

- 1. Conduct gender-sensitive value chain analysis experiences
- 2. Enhance women's access to resources
- 3. Establish or improve gender-sensitive producers' organizations
- 4. Utilize gender-sensitive information mechanisms
- 5. Address the root cause of gender inequality (Gender Transformative Approach)

## How to achieve each of the recommendations above

#### **Recommendations #1:**

• Dedicate sufficient time to conduct a thorough gender analysis. If time allows, an analysis can be performed over several months to capture seasonal variations.

• Use participatory approaches, including multiple rounds of data collection, to validate the data and to explore explanations underlying the findings.

• Utilise gender analyses as an opportunity to highlight women's "invisible" work and gaps in the value chain where women or men may not be active.

• Conduct gender-sensitive analysis throughout the life of a project (monitoring and evaluation).

# **Recommendation #2**

• Facilitate access to resources such as land, credit/capital, inputs, etc.

• Where appropriate (taking care not to deepen inequalities), create linkages between men's and women's agricultural activities.

• Provide literacy and numeracy training where needed.

## **Recommendations #3:**

• Ensure that cooperatives and other types of groups are accessible to farmers with small operations and/or low purchasing power, and that they provide equitable benefits to these farmers.

• Become familiar with the local context to determine whether mixed-sex or women-only groups would be most appropriate and effective.

- Do not limit cooperative membership to one member per household.
- Implement strategies and/or trainings to encourage women's participation in public meetings.
- Establish quotas and other policies mandating women's participation in groups.

## **Recommendation #4**

- Use communication mechanisms that are accessible for low-literacy populations.
- Mitigate low technology literacy by combining ICT with in-person information delivery mechanisms.
- Provide information in a variety of languages, including local languages or dialects.
- Increase the number of female extension agents by using gender-sensitive recruitment tactics.

## **Recommendation #5**

• Implement participatory research tools that use the Gender Transformative Approach (GTA) in order to uncover specific gender norms inhibiting women's agricultural production.

• Encourage men to support women's participation.

## CONCLUSION

In this paper, we collated the empirical evidence on the participation of women and youth in agricultural value chain and the potential gains from removing the challenges hindering their participation thereby setting the stage for further research on gender differences in agriculture. Women and youth comprise over 45% of the agricultural labour force in Africa (FAO, 2011). However, this figure covers considerable variations across regions and within countries according to age and social class. Furthermore, the labour burden of rural women exceeds that of men and this includes a higher proportion of unpaid household chores which women and youth are responsible for. The contribution of women and youth to agriculture and food production is clearly significant but it is not empirically possible yet to verify the share produced by women and youth because agricultural value chains in Africa are usually a business involving household members and driven by a range of resources and inputs that cannot be readily assigned by gender. From the forgoing, removing the constraints arising from the gender gap in agriculture has a significant gain for the continent in increasing agricultural productivity, reducing poverty and hunger, as well as promoting sustainable economic growth and development. Targeting investment and empowerment on women and youth farmers that will address these challenges could yield enormous benefits for women, youth and families. In addition, government at all levels as well as international donor agencies need to pay more attention to the development of sustainable agribusiness ventures and support agricultural infrastructure that will meet the needs of women and youth entrepreneurs. Special agricultural programs and policies targeted at African women and youth empowerment should be developed. Barriers limiting women and youth empowerment needs to be removed through holistic policy formulation. Addressing these challenges will help increase food security and improve livelihoods and sustainable economic development for Africa's growing population. In addition, mainstreaming women and youth into value chains should be the norm rather than the exception. The consequences of gender inequality include undermining the potential contributions of women, who constitute almost 50% of the population, to economic development (IFAD 2018). The Nigerian Agriculture Promotion Policy (2016-2020) and other policy documents in Africa recognize that implementation of policies are inadequate in ensuring the inclusion of women and youth in Agricultural Value Chains or addressing gender inequalities in agriculture such as gender biases in access to land where women and youth face more difficulties than men. It is, therefore, imperative to develop and launch entrepreneurship platforms that create pathways for women and youth to engage in SMEs and entrepreneurial activities, review the subsisting gender policy document with a view to improving the implementation activities, expand training of key leaders and influencers across government Ministries, Departments and Agencies to ensure women and youth concerns are integrated into decision making; expand capacity building for women and youth for entrepreneurship, including technical training and access to financial services, facilitate dialogue with farmer groups and service providers for women and youth to expand their pool of ideas. Mainstreaming women and youth into value chains provides necessary insights on the roles of men, women and youth and other stakeholder groups in value chains, the constraints they face and the opportunities that exists for optimizing the benefits from value chain development.

# REFERENCES

Acs, Z., & Szerb, L (2007), Entrepreneurship, economic growth and public policy. *Small Business Economics*, 28(1), 109-122.

Adeniyi, A (2010), "Women Farmer's and Agriculture Growth: challenge and perspective, "Conference paper presented at the 3<sup>rd</sup> African Association of Agricultural Economist, Cape Town, South Africa; September 19-23, 2010.

AgDevco(2017), Successful modules to empower women into grower schemes, DFID and Master Card Foundation, London.

Ahl, H., & Marlow, S (2012), Exploring the dynamics of gender, feminism and entrepreneurship: advancing Debate to escape a dead end? *Organization*, *19* (5),543-562.

Akter, S, Rutsaert P, Luish, J, Htwe, NM, San, SS, Raharjo, B & Dustika, A (2017), Women's Empowerment and Gender Equity in Agriculture: A different perspective from Southeast Asia, *Food Policy* vol. 69, pp. 270-279.

Akter, S, Krupnik, Tj, Rossi, F, & Khanam, F (2016), The influences of gender and product design on farmers' preferences for weather-indexed crop insurance, Global Environmental Change, vol. 38 pp. 217-229

Alao, E.M. (2015), "Inequality, poverty among Nigeria women and youth and the challenges of inclusive growth in post 2015 Millennium Development Goal (MDG), *International Journal of Development and Economic Sustainability, Vol. 3, no. 5 pp. 15-25.* 

Alkire, S, Meinzen-Dick, RS, Peterman, A, Quissumbing, AR, Seymour, G & Vaz, A (2013), The women's empowerment in agriculture index, *World Development*, vol, 52, pp 71–91

Alsos, AG, Isaksen, JE & Ljunggren, E. (2006), New Venture Financing and Subsequent Business Growth in Men and Women led Business, *Entrepreneurship Theory and Practice* vol. 30, no.5, pp 667-686.

Alsos, G., Ljunggren, E, & Hytti, U (2013), Gender and innovation: State of the art and research agenda. *International Journal of Gender and Entrepreneurship*, 5 (3), 236-256.

Aterido, R, Beck, T & Iacavone, L (2013), Access to finance in sub-Saharan Africa: Is there a Gender Gap? World Development, (42) 102 – 120.

Boserup, E, Tan, S, Toulmin, C, & Kanji, N (2007), *Women's Role in Economic Development*. London: Routledge.

Brush, C., Edelman, L., Manolova, T., & Welter, F (2018). A gendered look at entrepreneurship ecosystems. *Small Business Economics*. Doi: <u>https://doi.org/10.1007/s11187-018-9992-9</u>

Carter S (2000), Gender and Enterprise and Small Business, Principles, Practice and Policy, Pearson Education. United Kingdom.

Coleman, S (2000), Access to Capital and Terms of Credit: a comparison of men and women-owned small business, *Journal of small business management*, vol. 38, pp.37-52.

Coleman, S, Henry, C, Orser, B, Foss, L & Welter, F (2018), Policy Support for Women Entrepreneurs Access to Financial Capital: Evidence from Canada, Germany, Ireland, Norway and United States, *Journal of Small Business Management* pp. 1-27.

Coles, C & Mitchell, J (2011), Gender and Agricultural Value Chains: A review of current knowledge and practice and their policy implications, FAO, ESA working paper No. 11, Rome, Italy, FAO.

Croppenstedt A, Goldstein, M & Rosas, N (2013), Gender and agriculture, Inefficiencies, segregation and low productivity traps, Development Economics. The World Bank Policy Research, Working Paper.

Deeksha, D (2014), Women in agriculture: Constraints and opportunities, Research Gate Publication

Devita, L & Mari, M 2(013), Women entrepreneurs in and from developing countries: Evidence from the Literature, *European Management Journal, Vol. 32 pp. 451-460.* 

Doreo Partners, (2013) The Nigeria Unemployment Challenges, Africa Report Features.

Doss, C, Kovarik, C, Peterman, A, Quisumbing, A & Vandenbold, M, (2015), Gender inequalities in ownership and control of land in Africa: Myth and reality, *Agricultural Economics*, vol. 43, (3) pp. 403 – 435.

Estrin, S, & Mickiewicz, T (2010), Institutions and female entrepreneurship. *Small Business Economics*, *37*(4), 397-415. doi:<u>https://doi.org/10.1007/s11187-011-9373-0</u>

European Commission, & OECD, (2017). Policy Brief on Women's Entrepreneurship. Retrieved from Luxembourg:

Fletschaer D & Kenney, L (2014), *Rural women access to financial services, credit, savings and Insurance*, Agricultural Development Economics Division, FAO, Rome.

Food and Agriculture Organisation (2011), The role of women in agriculture, ESA working paper, No. 11 - 02, Agricultural Development Economics Division, FAO, Rome.

Food and Agricultural Organization (2016), *Developing gender-sensitive value chains: A guiding framework*, UN Food and Agriculture Organization, Rome.

Gates, M.F (2014), Putting women and girls at the centre of development, *Melinda Gate's science*, vol. 345, (6202) pp. 1273-1275

Gupta, VK, Goktan, AB & Gunay, G (2014), Gender differences in evaluation of new business opportunity: A stereotype threat perspective. *Journal of Business Venturing*, 29(2), 273-288. doi:<u>https://doi.org/10.1016/j.jbusvent.2013.02.002</u>

Hanson, S, & Blake, M (2009), Gender and entrepreneurial networks. Regional Studies, 43 (1), 135-149.

IFAD (2018), Livelihood Improvement Enterprises Project in the Niger Delta of Nigeria (LIFE-ND) Project Design Report.

Isah, A & Nafiu, LA (2013), Women empowerment as essential tool for national transformation: Niger State Experience, *International Journal of Mathematics and Statistics Vol. 2 (2) pp. 1-16.* 

Jennings, J & Brush, C (2013), Research on women entrepreneurs: challenges to (and from) the broader entrpreneurship literature *The Academy of Management Annals*, *17* (1), 663-715.

Kabir, MS & Jazuli, MB (2016), Youth and women empowerment through agribusiness for sustainable livelihood in Kano State", *Journal of Sustainable Development, Vol. 13, (1) pp.1-6* 

Kasente, D (2012), Fair Trade and Organic Certification in Value Chains: Lessons from a gender analysis from coffee exporting in Uganda, *Gender and Development*, vol. 20, no. 1, pp 111 – 127.

Kelkar, G (2011), Gender and Productive Assets: Implications for Women Economic Security and Productivity, *Economic and Political weekly*, vol. 46, no. 23, pp 59-68

Kelley, D, Baumer, B, Brush, C, Greene, P, Mahdavi, M, Majbouris, M, Heavlow, R (2017), *Global Entrepreneurship Monitor 2016/2017 Report on Women's Entrepreneurship*. Retrieved from Boston.

Klapper, L, & Parker, S (2011), Gender and the business environment for new firm creation. *World Bank Research Observer*, 26(2), 237-257.

Marlow, S, & McAdam, M (2013), Gender and entrepreneurship: Advancing debate and challenging myths; exploring the mystery of the under-performing female entrepreneur. *International Journal of Entrepreneurial Behavior & Research, 19* (1), 114-124. doi:10.1108/13552551311299288

McAdam, M, Harrison, R, & Leitch, C (2018), Stories from the field: women's networking as gender capital in entrepreneurial ecosystems. *Small Business Economics*. doi: <u>https://doi.org/10.1007/s11187-018-9995-6</u>

Milanov, H, Justo, R, & Bradley, SW(2015), Making the most of group relationships: The role of gender and boundary effects in microcredit groups. *Journal of Business Venturing*, *30*(6), 822-838. doi:<u>https://doi.org/10.1016/j.jbusvent.2015.04.001</u>

Mmasa, JJ (2013), Participation of women in agriculture in Tanzania: Challenges and Policy Recommendations, *Policy Brief*, No: 8

Mohammad, DH, Abul, BB & Rosni, B (2015), Entrepreneurship development and poverty alleviation", *An Empirical Review Journal of Asian Scientific Research, Vol. 4, no. 10, pp. 558-573.* 

Munoz BA, Petesch, P, Turk, C & Thumala, A, (2012), *On Norms and Agency Conversations about Gender Equality with Women and Men in 20 Countries*. Retrieved from Washington:

Mutua, E, Njuki. J & Waithanji, E (2014), *Review of gender and value chain analysis, development and evaluation, toolkits,* Nairobi, Kenya, International Livestock Research Institute (ILRI)

Ngigi, MW, Mueller, U & Birner, R (2017.), Gender differences in climate change adaptation strategies and participation in group base approaches: An intra-house analysis from rural Kenya, *Ecological Economics*, (138), 99 – 108.

Njiraini, G, Ngigi, M & Barake, E (2018), Women in African Agriculture: Integrating women into value chains to build a stronger sector" Zef center for Development Research, University of Bonn, working paper. Research for Agricultural Innovation

Njobe, B (2015), Women and Agriculture: The Untapped Opportunity in the Wave of Transformation, An Action plan for African Agricultural Transformation. United Nations, Economic Commission for Africa, Dakar, Senegal.

Nyasimi, M & Huyer, S (2017), Closing the gender gap in agriculture under climate change, *Agriculture for Development*, vol. 6 (30)

Okwu, Oj & Umoru, BI (2009), A study of women farmers' agricultural Information needs and accessibility: A case study of Apa Local Government Area of Benue State, Nigeria, *African Journal of Agricultural Research*, vol. 4, (12) pp.1404-1409

Oyakhilomen, O & Ziba, RG (2014), Agricultural production and economic growth in Nigeria, implication for rural poverty alleviation, '*Journal of International Agriculture*, vol.53 (3) pp. 207 – 223

Patil, B & Babu, V.S (2018), Role of Women in Agriculture, *International Journal of Applied Research* (4 12) pp. 109–114.

Pines, A. M., Lerner, M., & Schwartz, D (2010), Gender differences in entrepreneurship: Equality, diversity and inclusion in times of global crisis. *Equality, Diversity and Inclusion, 29*(2), 186-198.

Porter, ME (1985), *Competitive advantage: creating and sustaining superior performance*, The Free Press. New York

Pyburn, R, Belanger, GA, Dido, S, Guronga, G, & Flink, I (2015), Unleashing Potential: Gender and Youth Inclusive Agrifood Chains KIT working paper.

Riisgaard, L, Fibla, A & Ponte, S (2010), *Gender and Value Chain Development*, Copenhagen, Denmark, Danish Institute for International Studies

Robb, A & Coleman, S (2010), Financing Strategies of New Technology-Based Firms: A Comparison of Women-and Men-Owned Firms. *Journal of technology management & innovation*, 5 (1), 30-50.

Robb, AM & Watson, J (2011), Gender differences in Firm Performance: Evidence from new Ventures in the United States, *Journal of Business Venturing*, vol. 10, (2)

Robb, A & Watson, J (2012), Gender differences in firm performance: Evidence from new ventures in the United States. *Journal of Business Venturing*, 27 (5), 544-558. doi:10.1016/j.jbusvent.2011.10.002

Saparito, P, Elam, A & Brush, C (2012), Bank –firm relationships: do perception vary by gender? *Enterprise Theory practice* vol. 37. pp 837-858

Saridakis, G, Marlow, S & Storey, DJ (2014), Do different factors explain male and female self-employment rates? *Journal of Business Venturing*, 29, 345-362.

Sraboni E, Malapit Hj, Quisumbing AK & Ahmed, AU (2014), Women's empowerment in agriculture: What role for food security in Bangladesh? *World Development* vol. 61, pp. 11-52

Tegtmeier, S & Mitra, J (2015), Gender perspectives on university education and entrepreneurship: A conceptual overview. *International Journal of Gender and Entrepreneurship*, 7(3), 254–271.

Tiernan, M & Nelson, C (2018), *Women in Public Service Project, Case Studies of Women in Tanzanian Agribusiness*, Woodrow Wilson International Centre for Scholars. University of California Berkeley.

Tominc, P & Rebernik, M (2006), *Female Entrepreneurship Growth Aspiration in Slovenia: an unexploited resource. A Global Research Perspective*. Ashford Colour Press, Gosport, Hampshire, pp.330-348,

Tominc, P, Rebernic, M, Hojnik, BB & Sirec, K (2018), *Danube Region Entrepreneurship Observatory: Entrepreneurship* Ecosystem, Women and Youth Entrepreneurship, Ashford Colour Press, Gosport, Hampshire.

UN-Women (2014), World survey on the role of women in development 2014: Gender equality and sustainable development. Retrieved from USA:

United Nations Development Programme (2016), Africa-Human Development Report 2016, Accelerating Gender Equality and Women's Empowerment in Africa, UNDP, Regional Bureau for Africa, New York

United Nations Research Institute for Social Development (2010), Combating Poverty and Inequality: Structural change social policy and politics, Geneva.

Welter, F. (2010), Contextualizing entrepreneurship - conceptual challenges and ways forward. *Entrepreneurship, Theory and Practice*, 35(1), 166-184.

Welter, F, Smallbone, D & Isakova, N (2006), Enterprising Women in Transition Economies. Aldershot: Ashgate.

Williams, M. (2014), Current and emerging Gender Issues in the Multilateral Trading System, Background Document for the Women's Affairs Ministerial Meeting, New Delhi.

World Bank (2011), World development report 2012: Gender equality and development. Retrieved from Washington, D. C. :

World Bank. (2018a, November 2017), Labor force, female (% of total labor force). Retrieved from December, 18, 2018 <u>https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS</u>

World Bank (2018), Labor force, female (% of total labor force). Retrieved From December, 18, 2018, https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS

World Bank, (2018). *Unrealized Potential: The High Cost of Gender Inequality in Earning*, World Bank, Washington D. C.

FAO, IFAD & World Food Progamme, 2020. Retrieved from May 8, 2020 https://www.empowerwomen.org/en/who-we-are/initiatives/rural-women-economic-empowerment

Zambia Business Survey-An analysis of Micro, Small and Medium-sized Enterprises, 2010. Working Paper vol.2

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