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Full Length Research Paper

The politics of actor involvement in local economic development in Ghana: Empirical evidence from the Accra Metropolitan, Keta Municipal and Shai-Osudoku District Assemblies

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The main objective of the article was to examine the forces that shape the behaviour of the actors in the local economic development implementation process in Accra Metropolitan, Keta Municipal and Shai-Osudoku District assemblies. Using qualitative data from multiple sources combined with multiple case studies, the study found that the three Metropolitan, Municipal and District assemblies implemented somewhat different LED strategies with multiple actors' involvement. Lack of due diligence, weak and lack of institutional independence, absence of political leadership commitment, and political expediency negatively impacted LED implementation in the Accra Metropolitan and Keta Municipal Assemblies while Shai-Osudoku District Assembly had smooth local economic development implementation. Dynamics such as the land tenure system, micro and macro politics, administrative and institutional procedures, and political leadership shaped the behaviour of the actors in the three assemblies. Based on these, the study recommends that politicians should desist from interfering in LED issues; governments should consider the interests of local government units' development needs in introducing local economic development interventions and broad consultations should be done before initiating local economic development initiatives.

Key words: Actors, local economic development, LED interventions, metropolitan, municipal and district assemblies.

INTRODUCTION

Decentralization is seen as the vehicle through which grassroots governance can be deepened in Ghana. As a result, both the *1992 Constitution* in Articles 35(6)(d) 240 (1) and 245(a) and the *Local Governance Act 2016* (Act 936) have made provisions for Ghana's local governance

and gave political, administrative, economic, social and developmental powers and authority to the Metropolitan, Municipal and District Assemblies (MMDAs) to create an enabling environment for development (Republic of Ghana, 1992: 36, 150, 152; Republic of Ghana, 2016: 19-

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20). The implementation of the economic vision for development regards local economic development (LED) as the main approach to attain the requisite local development because it has the capacity to:

- (i) Stimulate and transform the economies of Metropolitan, Municipal and District Assemblies (MMDAs),
- (ii) Create new jobs, and promote income-generating opportunities and infrastructural improvement for accelerated poverty reduction
- (iii) Align natural and human resources of localities to match both global and regional markets as well as the provision of employment opportunities that fits the people and the locality (Republic of Ghana, 2013:1, Government of Ghana and United Nations Development Programme (UNDP), 2011: 3; Blakely and Bradshaw, 2002: 24).

LED has generally been defined as a partnership between the public, private, non-governmental organizations and local government units (LGUs) with the principal goal of creating local employment through the utilization of available local resources (Republic of Ghana, 2013: 1-2; 2014: 3; World Bank, 2003: 1; The United Nations Human Settlement Programme (UN-HABITAT), 2005: 2). The above definition highlights the fact that LED implementation involves multiple actors with its associated complexity of joint action. This study therefore seeks to examine the political dynamics that characterized the actors' involvement in the LED implementation process using three local government units (LGUs) in Ghana.

Statement of the problem

Though substantial ink has been poured on LED globally, in Africa and Ghana, the focus fell on the emergence, strategies, beneficent outcomes, challenges, and the nexus between LED and poverty reduction and the role of actors in promoting LED. Most of these studies used the nation-state as the unit of analysis. Some also used LGUs as the unit of analysis but used a maximum of two. This study introduces innovation and fills the literature gap in LED by interrogating the political dynamics that shaped the actors' participation in the LED implementation process using a multiple case study approach of three of Ghana's LGUs namely: the Accra Metropolitan Assembly (AMA), Keta Municipal Assembly (KeMA) and Shai-Osudoku District Assembly (SODA).

Objectives of the study

The article is guided by four-fold objectives. These are to:

1. Briefly discuss the LED strategies implemented in the three MMDAs,

2. Discuss the actors and their roles in LED implementation in the three MMDAs,
3. Examine the interaction between the local governance structures and the actors, and
4. Examine the dynamics that shaped LED implementation in the AMA, KeMA and SODA.

LITERATURE REVIEW

General Studies on LED

LED like other social science and development terminologies has no single universally-accepted definition. Scholars define it based on the purpose of deployment. Some of these definitions concentrated on the strategies, actors and the end result which is to reduce poverty and improve the quality of life of the natives (World Bank, 2003; UNHABITAT, 2005). This article briefly reviews definitions which are focused on the actors.

The World Bank sees LED as a process by which public, business and non-governmental sector partners work collectively to create better conditions for economic growth and employment generation (World Bank, 2003:1). The International Labour Organization (ILO) on its part defined LED as a participatory development process that encourages partnership arrangements between the main private and public stakeholders of a defined territory enabling the joint design and implementation of a common development strategy, by making use of the local resources and competitive advantage in a global context, with the final objective of creating decent jobs and stimulating economic activity (ILO, 2004). These two definitions echo the significance of actors. The study will add up by examining the factors that shaped the behaviour of the actors in the process.

On LED strategies, classical scholars on LED like Matulef (1987) posit five strategies: economic revitalization, support for economic revitalization, project coordination, financial assistance and capacity building. Feiock (1987) limits the tools to four, namely, promotion, service coordination, business nonfinancial assistance and incentives. Eisinger (1998) adds to the strategies by identifying supply-side policies and demand-side policies as the two broad strategies of LED. The supply-side refers to traditional incentives to attract economic activities into a locality. The demand-side policies include efforts to discover, develop, expand or create new export markets for local goods and services, strategies to promote new business creation and small business expansion and governmental assistance to new product development and market expansion through subsidizing research and development and through strategic investment. He refers to the supply-side as traditional and the demand-side as entrepreneurial. Clarke and Gaile

(1989) take the discussion on the strategies further by distinguishing between conventional and entrepreneurial approaches. The former refers to public interventions to attract economic activities and the later represents greater government flexibility, innovation and risk, efforts to stimulate new enterprise, use of government authority to shape market structure and opportunity, joint public-private ventures and public strategic investment.

From these classical authors on LED strategies emerged contemporary authors such as Helmsing (2001, 2003) who identify three new generations of LED initiatives, namely, community economic development, enterprise development and locality development and it is from these initiatives that LED programmes, interventions and strategies are derived. Strategies such as “One Village One Product” (OVOP) in Malawi, beekeeping in the West Nile in Uganda, tourism, Multi-Purpose Community Centres (MPCC) in South Africa have been examined in Africa (Rogerson and Rogerson, 2010; Enzama, 2008; Edoun and Jahed, 2009). Rogerson and Rogerson (2010) advised that the effectiveness of the strategies requires an enabling local business environment for small enterprise development. Rodriguez-Pose and Tijmstra (2005) expand the discussion on enabling environments by enumerating economic hardware, economic software and organizational capacity or “orgware” as the enabling environments in LGUs which allows for the flourishing of LED.

On the dividends derived from LED, Helmsing (2002, 2003) categorized the beneficent outcomes into social and economic. Socially, LED strategies empower local societies and allow for local dialogue and citizens’ participation. It also makes local institutions more transparent and accountable thereby strengthening the growth and development of civil society organizations (CSOs). Sustainable and decent employment, income generation and poverty reduction are some of the economic benefits (Masuku et al., 2014; Ramukumba, 2012).

Lack of resources, inadequate qualified personnel, human hindrances such as attitude to work, inadequate information systems, lack of systematic feedback and the absence of clear-cut responsibility, absence of poverty reduction targets and integration of the various LED partners, land availability, lack of government capacity, poor governance, data shortcomings, lack of funding, conceptual impression and theoretical underdevelopment, poor LED networks and unsustainable knowledge platforms, among others are some of the challenges to LED (Blakely and Bradshaw, 2002; Rodriguez-Pose and Tijmstra, 2007; Hofisi et al., 2013).

On the actors in LED, Yatta (2015), Helmsing (2003), Rogerson and Rogerson (2010), Nyawo and Mubangizi (2015) identified local government and their institutions, community organizations, local producers and their associations, and their roles in the promotion of LED.

Rogerson and Rogerson (2010) advised that the actors, especially small towns and LGUs should be strengthened to make them attractive and viable, and there should be engagement between LGUs and entrepreneurs to ensure local sourcing and supplier linkages. The Republic of Namibia (2008) extends the studies on the actors by classifying the actors into two categories, viz; public and social actors. The former comprises state-owned enterprises (SOEs), regional and traditional authorities while the latter consists of employers, non-governmental organisations (NGOs), community-based organisations (CBOs) and faith-based organizations. Nyawo and Mubangizi (2015) intimated that the lack of cooperation between the LGUs and other actors, politicization of the LED, and unnecessary bureaucracy negatively affected the actors in attaining LED objectives.

On the politics of LED, Wolman and Spitzley (1996) indicated that the various actors in the LED process pursue different interests. They indicated that politicians are engaged in LED programmes because of the electoral success that they stand to gain, credit claiming and the avoidance of blame. The natives’ interests in the LED process are always aimed at safeguarding their economic and social survival. This is because most LED projects bring about the need for relocation. Entrepreneurs’ interest is linked to the availability of economic incentives and the returns on their investments. Wolman and Spitzley (1996) espouse that the decision of each actor in the LED process is partly based on the expected action of the other players.

Ghanaian studies of LED

Ghanaian studies on LED have focused on the factors that influenced the adoption of LED, the policy perspectives, actors and institutional frameworks, strategies, financing, the typologies of LED and the challenges (Agbevade, 2018; Mensah et al., 2013a; Mensah et al., 2013b; Mensah et al., 2017; Oduro-Ofori, 2016; Akudugu, 2013; Akudugu and Laube, 2013; Ofei-Aboagye, 2009).

Agbevade (2018) hints on the fact that different historical contexts and diverse situations such as unemployment, poverty and infrastructure deficit as well as national government policies are some factors that influenced the implementation of LED in Ghana’s MMDAs.

On the policy perspectives, Mensah et al. (2017) analyze the policy trajectory of LED implementation in Ghana from the pre-independence era to date and describe the period preceding 1987 as the “lost decades of LED implementation” because development plans were mostly top-down with little or no input from the grassroots and these development plans were sectorial rather than territorial. The period from 1988 where Ghana

started implementing decentralization, the promulgation of the 1992 Constitution, the passage of various Acts of Parliament and national development frameworks that promoted the role of MMDAs in local development and preparation of the National LED policy and its operational Manual by the Ministry of Local Government and Rural Development (MLGRD) as the period of “policy maturity” were considered. Mensah et al. (2013a) similarly identify the 1992 Constitution, District Assembly Common Fund (DACF), Ghana Vision 2020, Ghana Poverty Reduction Strategy (GPRS 1), and Growth and Poverty Reduction Strategy (GPRS 2) as some legislative policies and frameworks of LED. The National Development Planning Commission (NDPC), MMDAs, MLGRD, Ghana Regional Appropriate Technology Industrial Services (GRATIS) projects, rural banks and traditional authorities were the institutional frameworks for LED implementation in Ghana (Mensah et al., 2013b). Oduro-Ofori (2016) indicate that though these frameworks supported MMDAs in the promotion of LED, they failed to specifically stipulate what the MMDAs were supposed to do and how. In addition, the frameworks also failed to provide sanctions to MMDAs which did not actively get involved in LED.

With respect to the actors, Oduro-Ofori (2016) identifies local government units (LGUs) and institutions such as the Business Advisory Centre (B.A.C.), Agriculture Development Unit, the Office for National Culture, Departments of Town and Country Planning, Cooperatives, Works and Community Department as well as Sub-Committees such as Development Planning, Culture, Tourism and Agriculture as directly involved in LED promotion at the various LGUs. In spite of these arrays of institutions, LED could not be effectively implemented due to lack of institutional coordination between the local government institutions (Mensah et al., 2013; Oduro-Ofori, 2016).

On the LED strategies and initiatives, Ofei-Aboagye (2009), Mensah et al. (2013b), and Oduro-Ofori (2016) identified micro-credit provision, agro-processing, structural development, health and educational activities, upgrading the skills of artisans, human resource development and infrastructure provision as LED interventions. In the views of Oduro-Ofori (2016), LED has had minor impact due to the focus on “hardware” aspect of LED which was infrastructure instead of the “software” aspect which encompasses training programmes, access to credit and other intangible strategies that promote LED.

Agbevade (2018) intimated that the sources of financing LED programmes in Ghana could be classified into three main categories namely; inter-governmental transfers, donor or private sector funding and internally-generated funds. He further posits that the ability of an MMDA to attract funds was largely determined by factors such as the strategic nature and category of the MMDA, its leadership, political and personal commitment of some

top level staff to LED implementation, the available economic development incentives and the immediate returns that investors expect to gain from their investments.

On the typology of LED programmes, scholars had varied views. While Mensah et al. (2017) identify five variations of LED in Ghana; namely, central-government led LED, local-government championed LED, local organizations and local NGO-spearheaded LED, international organization-initiated LED and individual-led LED, Akudugu and Laube (2013) on their part states traditional LED and contemporary LED as the variations.

With respect to the role of international organizations in LED implementation in Ghana, Akudugu and Laube (2013) and Mensah et al. (2017) identified the ILO, GIZ and UNDP as actors. Whereas Akudugu and Laube (2013) see the actors as drivers of LED in Ghana, Mensah et al. (2017) opine that these international organizations have reinvigorated the spirit of LED in Ghana. Both sets of authors intimate that though these organizations used different approaches, they however had the search for endogenous development based on local actors, resources and capacities as their prime focus.

Akudugu and Laube (2013) analyzed the enabling environment for LED implementation in Ghana. They identified that the environment for LED implementation was disabling because of the intact power relation between the National Development Planning Commission (NDPC) which made LED a top-down development prescription, imposition of LED intervention on the citizens by the MMDAs, political pressure, weak private sector, inadequate human and financial resources and capacity, varying rationalities and interests of actors hence LED not flourishing.

Lack of finance, inadequate agricultural assistance, poor road network, market accessibility, inadequate technical and incompetent human resource ineffective coordination among the District Assemblies (DAs) and development partners, improper targeting of beneficiaries and lack of capacity to monitor and evaluate the impact of the programmes, top-down approach to implementation, and poor formulation of national LED policy that was incapable of providing strategic direction for LED promotion were identified as bottlenecks to LED implementation in Ghana (Mensah et al., 2013; Akudugu, 2013).

Justification of the study areas and their profiles

Ghana has a three-tier district categorization namely, the Metropolitan, Municipal and District Assemblies (MMDAs) (Republic of Ghana, 2016). For a geographical area to be designated either as a Metropolitan, Municipal or District Assembly (MMDA), the area must have a minimum

population of 250,000, 95,000 and 75,000 people, respectively. In addition, the area must have the economic viability to provide the basic infrastructure and other development needs from the locally generated resources (Republic of Ghana, 2016:13). Ghana has a total of 216 MMDAs with the breakdown as follows: six (6) Metropolises, forty-nine (49) Municipalities and one hundred and sixty-one (161) Districts. For a meaningful comparative analysis, it is imperative that MMDAs are selected across the three categories.

The AMA was established in 1988. The AMA as it exists now was created in 2012 with Legislative Instrument (L.I.) 2034 following the carving out of the La Dadekotopon Municipal Assembly. It is the district capital, the regional capital for the Greater Accra Region as well as the national capital and the economic hub of Ghana. The centrality of economic activities in this assembly culminated into the low level of unemployment of 7.2% as compared to 38 and 30.8% in the KeMA and SODA respectively.

The Keta Municipal Assembly (KeMA) with Keta as the municipal capital is one of the 25 administrative districts in the Volta Region. It was carved and created out of the former Anlo District by L.I. 1475 in 1989. It was upgraded to a municipal status in 2007 with L.I. 1868. It lies within Longitude 0.30°E and Latitudes 5.45°N and 6.005°N. It is located to the east of the Volta estuary, about 160 km from Accra.

The Shai-Osudoku District Assembly (SODA) is situated in the South-eastern part of Ghana in the Greater Accra Region. The SODA was created following the L.I. 2137 in June, 2012 which mandated the splitting of the Dangbe West District Assembly into two districts namely, the Ningo Prampram and Shai- Osudoku District Assemblies. Table 1 presents some statistics on the three MMDAs.

METHODOLOGY

The study used qualitative data collected from both primary and secondary sources. Qualitative research approach was chosen over quantitative approach due to the following nine reasons (Bryman, 2012):

1. It provides for the importance and significance of the researcher's views which provides the orientation for the study.
2. It allows for close relationship between the researcher and the researched and makes the researcher understand the study through the respondents' eye.
3. It makes room for concepts and theories to emerge out of the data collected.
4. It is flexible in that it is attuned to unfolding events over time and to the interconnections between the actions of the respondents of social settings.
5. It is invariably unstructured. This enhances researchers' ability to arrive at how actors/respondents understand concepts emerging from data collected.
6. It allows for the understanding of values, beliefs and behaviour within the context of the study.

7. It provides the study with rich data due to the prolonged engagement and involvement with the research setting.
8. It is characterized with the meaning of the actions of the actors involved in the study, and
9. Respondents are always studied in their natural environments.

A multiple case study approach was adopted. Data for the study were collected between April 2017 and March 2018 using different sampling techniques due to the multiple populations. In the case of the MMDAs, each of the Planning Officers, Directors of the Business Advisory Centres and Directors of Finance and Budget were interviewed. The LED scheduled officers were also interviewed as well as other private sector actors in the LED process. The instruments used for data collection were face to face interviews and review of official documents. Member checking was used to ensure data reliability and validity.

FINDINGS AND DISCUSSION OF THE STUDY

LED strategies implemented in the three MMDAs

The MMDAs adopted different strategies in the implementation of LED. The AMA implemented both public private partnerships (PPPs) and business development programmes as its LED intervention, the KeMA implemented both traditional handicraft and non-traditional LED initiatives and the SODA implemented software and hardware LED. Comparatively, the AMA's PPPs and hardware interventions implemented by the SODA are similar since they were aimed at infrastructure provision. In addition, both the AMA and SODA leveraged on the available lands to woo investors to their respective localities. The AMA for instance, offered lands as its equity to the PPPs and the SODA also offered land and enabling environment for companies such as the Golden Exotics Company Ltd (GEL) and Sheenfeel Company Ghana Ltd.

The business development programmes by the AMA, software LED by the SODA and the non-traditional LED interventions by the KeMA are also similar because the end results were to develop the capacities of the indigenes and their business establishments through resourcing them to be capable both financially and skills-wise. In addition, the three MMDAs implemented LED programmes aimed at value addition. For instance, the capacity development programmes at Keta and Srogbe for making beads and weaving bags from straw and raffia (*ketsi*) enabled the natives to utilize the natural resources by way of value addition. The capacity development programmes for mango farmers in Dodowa and Agomeda and for rice farmers in Asutauare ensured that the beneficiaries got the maximum yield from their farming activities (Fieldwork, January, 2018). Furthermore, both the AMA and SODA sought to take advantage of national and international markets. This was done in the SODA by the Millennium Development Authority (MiDA) through the establishment of business linkages between the mango farmers and the business

Table 1. Key statistics of the Study Areas.

Name of MMDA/Areas of comparison	AMA	KeMA	SODA
Land size	139,674 km ²	753.1 km ²	968,361 km ²
Population	1,665,086	147,618	51,913
Level of Unemployment	7.2%,	38%	30.8%
Level of poverty	10.6%,	10% and 14.9%	23.2%
Average number per household size	3.7	3.8	4.4

Source: Compiled by Author from various publications of the Ghana Statistical Service.

world whilst that of the AMA was done by fusing quality control measures, advertising and marketing into the product and training programmes. The KeMA's capacity development programme had no direct intention of taking advantage of the marketing opportunities; however, it had a separate initiative of creating marketing opportunities through attending and exhibiting LED products at trade fairs in the country (Fieldwork, January, 2018).

A critical examination of the LED interventions also revealed some differences. For instance, whilst the AMA's LED programmes were focused on PPPs and the indigenes taking advantage of both national and international markets, the KeMA was concerned with indigenous capacity development, value addition to the natural resources and the provision of marketing opportunities for the products of the LED beneficiaries locally and nationally. In terms of infrastructure provision, while the AMA used PPP arrangements, the GEL which is a company in SODA spearheaded the infrastructure provision as part of its (GEL) corporate social responsibility (CSR).

Even though the KeMA and SODA used their available natural resources for the implementation of LED initiatives (Appendix Table 2a), there were some variations. In the KeMA, apart from the bag weaving which made use of the natural resource endowment of the municipality, the other initiatives such as batik, tie-dyeing, hair dressing did not use raw materials from the locality. In contrast to the KeMA, the SODA took advantage of the water-logged and fertile nature of the land for rice production to undertake large scale rice production and also leveraged on the 22 kilometer stretch of the Volta River that washes the north-eastern portions of the district to promote fish (*tilapia*) farming in the district.

In terms of financial accessibility as a LED intervention, the partners of the AMA in the Accra City Car Parks Ltd., (Appendix Table 4a) namely, Merchant Bank (now Universal Merchant Bank Ghana Ltd (UMB)), First Africa Group, Labour Enterprise Trust, ELGA Ghana, OMNIA, and Seth Adjei and Consortium provided a total of US\$ 5.5 million for the project in 1997 and the Social Investment Fund (SIF) funded the business development services programmes whilst the KeMA and SODA relied on the use of Microfinance and Small Loans Centre

(MASLOC) (a government initiative to boost local entrepreneurship) and financial institutions (Dangbe and Shai Rural Banks) respectively (Fieldwork, January, 2018).

The actors in the led intervention process and how they facilitated the implementation of LED

The three MMDAs had actors collaborating with them in the implementation of their respective LED programmes. The actors in the three MMDAs are classified into primary and secondary actors (Table 2). Table 2 shows that both the AMA and SODA had seven sets of primary actors, whilst the KeMA had four.

Comparing the primary actors in Table 3, the AMA, KeMA and SODA were the key LGUs responsible for the implementation of LED within their respective jurisdictions. The AMA and the SODA initiated and hosted the implementation of LED whilst the KeMA only hosted the LED initiative and left the initiation and implementation to the Municipal Coordinator (MC) of the Business Advisory Centre (BAC) of the municipality. The AMA was the only assembly that had the Public Investment Division (PID) of the Ministry of Finance and Economic Planning responsible for the coordination of its LED interventions whilst the coordination in SODA and KeMA was done by the SODA and KIS together and BAC respectively.

For financing of LED interventions, the AMA had partners who joined forces to fund the Accra City Car Parks project (Appendix Table 3a) and the SIF financed and served as the implementing agency for the business development services programmes while the Rural Enterprise Programme (REP) was the sole financier of LED interventions in the KeMA. The SODA had the GEL which financed projects as part of its CSR in the district. With respect to the delivery of capacity development programmes, the AMA had four (4) consultants, the KeMA had the Adidome farms in addition to the individual resource persons as facilitators whilst the Millennium Development Authority (MiDA) facilitated for the SODA. The GEL and Sheenfeel Company Ghana Ltd of the SODA and the Accra City Car Parks Ltd of the AMA were the corporate actors directly involved in employment

Table 2. LED actors in the AMA, KeMA and SODA.

Name of MMDA	Primary actors	Secondary actors
AMA	AMA, Public Investment Division of Ministry of Finance, UMB, First Africa Group, Labour Enterprise Trust and contractors, Social Investment Fund	Transaction Advisors (TAs) 1. Ernst and Young 2. Shawbell Consulting Ltd 3. Deloitte and Touché 4. Kwame Ansah and Associates 5. CPCS International 6. PKF 7. C-Nergy Capacity development facilitators 1. J.S. Addo Consultants Ltd 2. Project Management Consultants Ltd 3. Management Development and Productivity Institute (MDPI)
KeMA	KeMA, BAC, REP, Adidome Farms, Indigenes	Capacity development facilitators
SODA	SODA, KIS, GEL, Sheenfeel, Indigenes, MiDA, GRIB.	Hopeline Institute, Wienco /Copa Connect, ABIANS, International Water Management Institute, Sustainable Farming Group, University Research Centre

Source: Fieldwork, January – February, 2018.

Table 3. The primary actors and their roles in the AMA, KeMA and SODA.

Name of MMDA	Name of primary actor	Role in LED implementation
AMA	AMA	1. Initiated the LED process 2. Provided land for PPP initiatives
	Public Investment Division (PID) of Ministry of Finance and Economic Planning	1.Coordinated the implementation of PPPs 2. Did due diligence and ensured that everything was set for PPP implementation
	Universal Merchant Bank	Provided funds for the implementation of the Accra City Car Parks Ltd
	First African Group	Provided funds for the implementation of the Accra City Car Parks Ltd
	Labour Enterprise Trust	Provided funds for the implementation of the Accra City Car Parks Ltd
	Social Investment Fund	Financed and implemented the business development service programmes
KeMA	KeMA	Hosted the implementation of LED programmes
	BAC	Initiated and championed the implementation of LED
	REP	Funded all LED programmes in the KeMA
	Adidome Farms	Organised capacity development programmes for LED beneficiaries in poultry farming
	Indigenes	1. Initiated the demand for LED programmes 2. Participated in capacity building programmes as trainees
SODA	SODA	1. Initiated the LED process through need identification 2. Funded LED projects 3. Monitoring and evaluation 4. Gave approval

generation as a LED initiative.

In the area of indigenes' involvement in the LED

process, the KeMA and SODA had their indigenes involved in the process. This made the LED programmes

Table 3 Contd. The primary actors and their roles in the AMA, KeMA and SODA.

Kpong Irrigation Scheme (KIS)	<ol style="list-style-type: none"> 1. Initiated LED programs through baseline surveys 2. Provided land and year-round irrigation services to rice farmers and GEL 3. Implemented, monitored and evaluated LED programmes related to rice farming
GEL	<ol style="list-style-type: none"> 1. Provided infrastructure to the community 2. Generated employment opportunities
Sheenfeel Company Ltd	<ol style="list-style-type: none"> 1. Generated employment opportunities
MiDA	<ol style="list-style-type: none"> 1. Capacity development programmes for mango farmers in Agomeda and Dodowa
GRIB	<ol style="list-style-type: none"> 1. Input supply 2. Mechanization services 3. Market price negotiation 4. Agro-business support services
Indigenes	<ol style="list-style-type: none"> 1. Initiated the LED process by making a demand on the KIS 2. Beneficiaries of LED interventions

Source: Fieldwork, January – February, 2018

to be demand driven, bottom-up and timely. The involvement was through programme initiation and participation in the capacity development programmes. In the case of the AMA, the interventions were top-down with no involvement of the indigenes hence participants had challenges such as poor timing, little information about the programmes and low participation for the business development services interventions. The low participation was evidenced by only ninety-four (94) individuals participating in the business development services programme in the AMA (AMA, January, 2012). The non-involvement of the indigenes in the LED process in the AMA also resulted in the reluctance of the indigenes to release land for the PPP projects (Fieldwork, February, 2018). The SODA was the only MMDA among the three which had a primary actor providing agricultural input support services. This stemmed from the fact that most of its LED interventions were agriculture related.

In the case of the secondary actors, the AMA had seven transaction advisors (TAs) and three capacity development facilitators and SODA had six actors while the KeMA had one (Table 4).

The TAs performed the following two key roles in the LED implementation process:

- (i) Undertook ten feasibility studies for all proposed PPP projects in the Accra metropolis (Appendix Table 1a). These enabled the AMA to decide whether the PPP projects were worth implementing and
- (ii) Assisted in the procurement process following the laid down regulations in the National Policy on Public Private Partnerships (2011) (Republic of Ghana, 2011) and the provisions of the Public Procurement Act, 2003 (Act 663).

After the procurement process, the TAs were engaged in negotiations, commercial and financial close (Fieldwork,

January, 2018). These roles performed by the TAs aided the implementation of LED initiatives in the AMA because, due to the feasibility studies, the AMA committed itself to PPPs that had value for money. The PPP processes, however, were truncated at the procurement stage due to three main reasons. Firstly, during the due diligence stage, the PID revealed that the AMA did not have land title for all the lands labeled for its PPP initiatives. Secondly, there were administrative and institutional breaches from the AMA. As a result of political expediency, the AMA did not follow the due process in PPP implementation including receiving approval from the Environmental Protection Agency (EPA), National Fire Service, land documentation and equity on board. The PPP projects ended at the Approval stage (issuance of procurement documentation, proposal evaluation and report submission to the Public Investment Division of the Ministry of Finance).

It emerged that the AMA did not only project identification, but failed to submit a developed concept note to the PID and registered the projects before recruiting the TAs to conduct the feasibility studies and submitting the procurement documentation to the PID. In spite of these breaches, the PID gave conditional approval to the AMA to continue with the PPP process with the proviso that it regularized the administrative and the PPP process since 2016 was an election year and there was the urgent need to implement tangible projects to woo the electorates to vote for the incumbent government (National Democratic Congress (NDC)) (Fieldwork, February, 2018). Thirdly, there was a change in government after the 2016 general elections which saw the incumbent NDC losing political power to the opposition New Patriotic Party (NPP). The NPP having won political power needed to reward its financiers and

Table 4. Secondary actors and their roles in AMA, KeMA and SODA.

Name of MMDA	Name of secondary actor	Role (s)
AMA	Transaction Advisors (TAs)	Undertook ten feasibility studies and assisted in the procurement process
	Capacity development facilitators	Facilitated the capacity development programmes for LED beneficiaries
KeMA	Resource persons	Facilitated the capacity development programmes for LED beneficiaries
	Hopeline Institute	Machinery services
SODA	Wienco/Copa Connet	Inputs/credit, marketing of produce and extension services
	ABIANS	Input credit and marketing of produce
	International Water Management Institute	Field trial and demonstration on mixed organic fertilizers (Fortifier Compost)
	Sustainable Farming Groups	Input support, marketing, machinery hire and extension services
	University Research Centre	Field trial on nutrient management

Sources: SODA, Ministry of Food and Agriculture Department, November, 2017 and Fieldwork, January, 2018.

economically empower its “foot soldiers”. As a result, all PPP project processes were put on hold for review (Fieldwork, January, 2018).

In the KeMA, the secondary actors were the resource persons who facilitated the capacity development programmes. Their roles aided the implementation of LED because they equipped LED beneficiaries with the requisite skills for hair dressing, cream production, batik, tie-dying, and beads making. In the case of SODA, the secondary actors were mainly into the provision of agricultural support services such as chemicals, fertilizers and agro-business services.

The roles played by both primary and secondary actors in the three MMDAs facilitated the implementation of LED. For instance, after the AMA identified a specific project for PPPs with the prior approval of the General Assembly, the transaction advisors undertook feasibility studies and also engaged in negotiations and the PID ensured that the AMA got value for money through due diligence. The PID through its due diligence role partly contributed to the truncation of the ten PPP projects which saved the AMA from land litigation challenges (Fieldwork, February, 2018). In the KeMA, the actors were also involved in the process. Since most of the LED initiatives were demand driven, it implied that the beneficiaries were actively involved in the selection of the LED programmes to be implemented. Once the demand was presented, the BAC then prepared a budget which was sent to the REP (the financier of LED projects in KeMA). When approved, the LED initiative was then implemented.

The case of SODA was not different from the other two Assemblies as there was an active involvement of all the actors. For example, in the case of rice farming initiative, the LED initiatives were mostly demand driven, thus the rice farmers requested for what they wanted. In addition, the KIS and the Ministry of Food and Agriculture Department of SODA jointly initiated the kind of initiative

to undertake. Furthermore, the General Assembly, the planning officers, engineers and other departmental heads were also involved in the process. The planning officers also initiated the process for budgetary allocation for LED, the finance office put the figures together and then it got approval from the General Assembly. The engineers and other departmental heads including the planning officer(s) undertook monitoring and evaluation of the implemented LED programmes.

The KIS' involvement took the form of baseline surveys to identify potential projects, rice varieties and the demands of the rice farmers. It also included project identification, education and sensitization of the local citizens on the benefits of the project, initiation, management and implementation, monitoring and evaluation to identify lapses in projects and recommendation of appropriate interventions to help improve the project. The active involvement of the KIS was attributed to it being a government agency and was bound to implement government policy of poverty reduction through initiation of projects at the door step of the populace. GRIB was also involved in the entire process of LED pertaining to rice farming.

On mango farmers, the Dodowa farmers indicated that LED programmes were imposed on them. Their Agomeda counterparts however, intimated they were involved in the process from 2003 to 2012 at the instance of the assembly member of the electoral area. However, with a change of the assembly member due to electoral defeat, they were no more involved in the process. This implies that in SODA, the involvement of the LED beneficiaries was diverse. The Golden Exotics Ltd was also involved in the LED process through their CSR. This company identified the needs of the community or sometimes got requests from the SODA before undertaking infrastructure improvement programmes.

From the foregoing, it can be inferred that all the three MMDAs had different combinations of actors involved in

the LED process. For instance, in the AMA and the SODA, they were involved in the adoption and implementation of LED but in KeMA, the opposite was the case as LED implementation was entirely left in the hands of the Business Advisory Center (BAC). In addition, among the three MMDAs, the SODA had the highest level of involvement of the actors in the LED process as all the actors saw the need to improve the economic and infrastructure development of the area. In both KeMA and SODA (rice farmers), the LED initiatives were demand-driven. In terms of infrastructure provision, whilst the AMA determined the kind of infrastructure to provide before advertising for transaction advisors, the SODA mostly gave room to the Golden Exotics Limited (GEL) to determine the kind of projects to embark on as corporate social responsibility (CSR). On balance, the actions of the actors did facilitate the implementation of LED in the KeMA and SODA while their inactions hindered the continuation of PPP projects in the AMA.

Interaction between the actors and the local governance structures

Local governance structures refer to the rules, regulations and institutions within which the MMDAs and the LED actors operated. These structures either promoted or hindered the effective implementation of LED.

In the AMA, the structures promoted the implementation of LED. This was because the structures allowed for TAs to apply through the procurement department of the AMA and the TAs also did their feasibility studies and made their recommendations. However, the AMA failed to continue its PPPs because of reasons such as:

- (i) Change in government in 2017,
- (ii) Weak state institutions. This is referred to as the inability of state institutions to achieve their stated objectives due to lack of capacity to design and implement policies. The weak institutions in this context encompass inadequate human, institutional, regulatory and financial capacities. These weaknesses have made the institutions to lack independence (the capacity to take policy decisions with interference from politicians).
- (iii) Inability to obtain land title for the ten sites earmarked for the projects (Fieldwork, January, 2018).

In the KeMA, the structures hindered the implementation of LED due to power play. This was because, LED budgets presented as part of the Assembly's budget never made it to the General Assembly for discussion. Lack of leadership commitment from the Municipal Chief Executives (MCEs) and Municipal Coordinating Directors (MCDs) from 1988 to 2016 to the implementation of LED as a vehicle for local development accounted for this hindrance (Fieldwork, January, 2018).

In SODA, all the actors (KIS, GRIB, Golden Exotic Company Ltd, Sheenfeel Company Ghana Ltd and the LED beneficiaries) indicated that the local governance structures promoted their activities. The KIS for instance, gave the reason that they were all government institutions and understood the "language of public sector management". However, there were instances where the actors in SODA faced challenges with the leadership of the Assembly not siding with their suggested LED programmes.

In comparative terms, whilst lack of due diligence, weak and lack of independence of state institutions and political expediency hampered the implementation of LED in the AMA, the functionaries in the KeMA itself rather hindered the implementation of LED. In SODA, there was effective interaction among all the actors. The impact of the personalities on LED in KeMA resulted in difficulties in LED financing and the assembly not implementing hardware LED interventions whilst the challenges in the AMA resulted in the truncation of all the PPP projects except the Accra City Car Parks Ltd. SODA however, experienced a smooth implementation of LED initiatives.

The dynamics in LED programme implementation

Local governance in Ghana is influenced by political, economic, cultural, geographical, leadership, and natural resources (for example land) factors. The political factor is important because whatever happens at the national level politically impacts the local governance system through the political recruitment process (hiring and transfer of central and local government personnel) and the transfer of fiscal resources from the center to the periphery. For instance, a change in government equally affects the leadership of the various MMDAs.

The study found that due to political expediency coupled with 2016 being an election year, in the AMA's bid to secure the votes through infrastructure provision, the Assembly did not adhere to the administrative process for the implementation of PPPs. In addition, the change in government in January 2017 following the defeat of the NDC by the NPP in the 2016 general elections halted the continuation in the PPPs. Though Article 35(7) of the Constitution of the Republic of Ghana, 1992 stipulates that ... *"a government shall continue and exercise projects and programmes commenced by previous governments"* (Republic of Ghana, 1992:36), due to political transition, the new Metropolitan Chief Executive (MCE) requested for a review of all the PPPs. The review process is ongoing since August, 2017 (Fieldwork, February, 2018).

The issue of land tenure system also exacerbated the dynamics. Most lands in the Accra metropolis are owned by families and clans and therefore, the AMA must acquire them from the owners before use. However, the AMA did not have the land titles to the ten lands

proposed as PPP sites (Fieldwork, February, 2018).

In the KeMA, the Municipal Chief Executives (MCEs), Municipal Coordinating Directors (MCDs) and assembly members from 1988 to 2016 did not have the required commitment and will to implement LED programmes. As a result, LED did not receive much executive support. However, with the change in government following the 2016 general elections and the subsequent appointment of a new MCE and the transfer of new MCD to the KeMA in August, 2017, LED had started receiving greater attention. This was evidenced by the MCE contributing GH¢ 2,000.00 in October 2017 from his personal resources for the commencement of a leatherwork training for the youth of the municipality (Fieldwork, January, 2018). In addition, LED started receiving attention in KeMA in August 2017 as a result of the NPP government's flagship rural industrialization programme christened "One District One Factory (1DIF)". It was also found that LED activities were vibrant in the municipality during the election period because politicians injected a lot of money into community-based organisations (CBOs) to boost their chances of winning elections either as constituency executives, parliamentary candidate or Members of Parliament (Fieldwork, January 2018).

The SODA had a mixed experience as far as the dynamics were concerned. For instance, between 2003 and 2004, the Dodowa mango farmers indicated that the then District Chief Executive (DCE) and District Coordinating Director (DCD) showed interest in LED programmes. However, with election 2004 in which President Kufuor was returned to power, both DCE and DCD were changed. The new officials did not give the necessary attention that their predecessors gave to the LED. On the other hand, a change in the Assembly member of the Agomeda electoral area in 2014 due to electoral defeat resulted in the Agomeda mango farmers no longer participating in LED activities that directly affected their mango businesses.

It is clear that the AMA had administrative, procedural, institutional, land tenure system as well as politics impacting the implementation of its LED intervention. The KeMA had politics through political recruitment and political leadership in terms of style, interest and approach impacting the implementation of LED. The dynamics impacting LED at SODA were not different from that of the AMA and KeMA because political leadership and recruitment as well as micro politics also brought some dynamics in the implementation of LED. Putting the AMA, KeMA and SODA together, the implementation of their LED interventions was shaped by national and local politics through political recruitment and resource allocation.

Conclusion

The study pointed out that all the three MMDAs pursued

similar LED interventions such as capacity development programmes; however, the use of PPPs as a driver of infrastructure provision was implemented by the AMA while infrastructure provision was championed by GEL in the SODA as part of its CSR. The KeMA did not record any infrastructure provision in its LED programmes.

In addition, micro and macro politics and leadership shaped LED adoption and implementation in the three MMDAs and brought some dynamics in resource allocation towards LED. Finally, the AMA had issues with land acquisition, procedure, due diligence and environmental, health and safety permits which severely hampered the implementation of PPP projects.

RECOMMENDATIONS

1. LED intervention implementation should not be tied to the tenure of office of the Metropolitan, Municipal and District Chief Executives (MMDCEs) and DCDs at the MMDAs; rather, it should be continued even when there is a change in leadership at the MMDAs. Related to this recommendation is that the central government should desist from interfering in recruitment through transfers at the local governance level. This does not augur well for the continuation of LED policies.
2. The independence of state institutions such as the PID should be protected. This should be done by ensuring permanent tenure for the key officers. Their independence will allow them to apply rules and regulations without fear or favour.
3. Politicians at all levels should desist from the over-politicization of LED interventions. They should rather make those resources available to the MMDAs to facilitate the implementation of LED.
4. Central government's involvement in the implementation of LED should not be driven purely by the electoral fortunes it stands to gain, but rather should fall within the general development plan of the nation and the MMDAs in particular.
5. The MMDAs as the lead state institution at the local level should allow for broader stakeholder consultation at all the stages of the LED process. Some of the stakeholders to engage include the traditional authorities, CBOs, indigenes, NGOs, private business entities etc. The consultation process provides the opportunity for all the actors to make inputs into the interventions thereby making room for total ownership of the LED programme and the generation of the needed support (political, financial and land) for the implementation of the LED initiatives.

From the foregoing discussion, the article highlights the following which have implications for LED, local governance and politics in Ghana:

1. The existence of actors in the implementation of LED is not sufficient for its successful implementation. The

actors must be willing to cooperate with each other and they must also have the requisite resources and capacities in the right mix, at the right time and deployed for the right purpose.

2. Local governance structures impact LED implementation in diverse way; either positive or negative depending on how the actors relate with the structures.

3. The success of LED depends a lot on the commitment of LGU leadership and political commitment in promoting, marketing the resource endowment and the economic potential of the locality to the outside world. The marketing assists not only in attracting the needed investment into the area but also show cases the MMDAs' products and the economic potential to outsiders.

4. The implementation of LED was impacted by not only local level politics but national politics as well.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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APPENDIX

Table 1a. Summary of AMA PPP projects.

Item	Project	Transaction Advisor	Estimated Land Size in acres	Estimated Value in US\$	Contractor after Request for Proposal (RFP)
1	Mallam Market	CPCS International	5.84	17,680,000.00	
2	Makola/31 st December Market	Deloitte and Touché	7.5	29,046,600.00	Excellent and Wilson
3	Tuesday Market	Kwame Ansah and Associates	4.08	24,345,862.00	Pro Design Ltd
4	Salaga Market	Kwame Ansah and Associates	1.27	4,055,946.00	
5	London Market	Kwame Ansah and Associates	0.7	2,766,986.00	
6	City Corner Residential Housing	C-Nergy	7.27	307,436,607.00	Excellent, Buddos and Sino Ltd
7	Convention/Community Center	C-Nergy	3.77	156,558,513.00	
8	Mallam Atta Market	Ernst and Young, Ghana	12.08	89,000,000.00	
9	Katamanto Market	Shawbell Consulting	10.71	25,200,000.00	
10	PWD and Kwasiadwaso	PKF	11.4	50,700,000.00	Consiki with EBID
11	Accra City Car Parks	-	0.4	5,500,000	Seth Adjei and Consortium

Source: Public Investment Division of MOFEP and Fieldwork, January, 2018.

Table 2a. LED initiatives in the AMA, KeMA and SODA.

Name of MMDA	Led programme	Classification	Intervention
AMA	PPPs	PPPs	Partnership with the private sector for infrastructure provision
	Business Development Services	Business Development Services	Capacity development programmes
KeMA	Traditional handicraft and Non-traditional handicraft	Traditional handicraft Bag weaving with straw and raffia, leatherworks, beads making, batik, tie and dye.	Capacity development programmes, access to finance, creation of marketing opportunities
		Non-traditional Hair dressing, cream production, tomatoes puree poultry farming, creation of enabling environment, business linkages	
SODA	Software LED and Hardware LED	Software LED Creation of enabling environment, easy permitting for businesses Hardware LED Provision of infrastructure	Capacity development programmes and private sector involvement

Source: Fieldwork January, 2018.

Table 3a. Shareholding structure for financing the Accra City Car Parks Ltd in the AMA.

Name of actor	Amount in US\$	Equity in Percentage
AMA	550,000	10
UMB	594,550	10.81
First African Group	2,051,500	37.3
Labour Enterprise Trust	1,217,150	22.13
ELGA Ghana	748,000	13.6
OMNIA	128,150	2.33
Seth Adjei and Consortium	210,650	3.83
Total	5,500,000	100

Source: Accra City Car Parks Ltd, February, 2018.

Table 4a. Cost of implementing capacity development programme in the AMA in January, 2012.

S/N	Name/Type of Intervention	Cost in US Dollars
1	Technological improvement for SSEs Development	19,798.57
2	Enhancing local and national for SSEs	15,782.50
3	Creating enabling environment and dialogue	17,245.53
4	Promoting SSEs development	14,680.98
	Total	67,507.58

Source: Social Investment Fund, March, 2018.

Full Length Research Paper

Using the sustainable livelihood approach to explore determinants of off-farm diversification by land reform beneficiaries in Sanyati District-Mashonaland West Province-Zimbabwe

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The study explored the socio-economic determinants of off-farm diversification by land reform beneficiaries in Sanyati District, Mashonaland West Province, Zimbabwe. The major aim of the study was to establish the reasons for off-farm diversification by resettled farmers. It established sustainability of resettled farmers' livelihoods and investigated farmers' perceptions of agriculture and land reform policy. Although resettled farmers got access to land, large tracts remain idle, indicating that farmers are engaged in livelihood activities other than farming. A cross sectional research design was employed and the data collection instruments were a questionnaire, focus group discussion, and structured interviews. The study found that land reform beneficiaries were diversifying from agriculture to artisanal gold mining, employment, as well as small business ventures. The research established that the livelihoods of Intensive Resettlement Scheme and Model A1 farmers who did not engage in any form of off-farm activities were not sustainable. The study concluded that off-farm diversification was having a negative impact on agricultural productivity and it recommended that government put in place credit facilities to adequately support farmers for the enduring success of the land reform programme.

Key words: Determinants, land reform, off-farm diversification, Sanyati, sustainable livelihood.

INTRODUCTION

Off-farm diversification refers to a farm household's attempt to reduce its vulnerability by having more than one livelihood activity (Cain et al. 2004). In a diversified household, if one productive activity does not provide enough or fails completely, there are other sources of livelihood that the household can fall back on (Janvry and Sadoulet, 2002). However, a household's capacity to

engage in off-farm activities depends on aspects such as level of education, income, assets, size of household and farm size (Matshe and Young, 2004). The traditional image of farm households particularly the land reform beneficiaries has been that they focus exclusively on farming and do not participate in any other off-farm activities (Hall, 2000). The Zimbabwean Government

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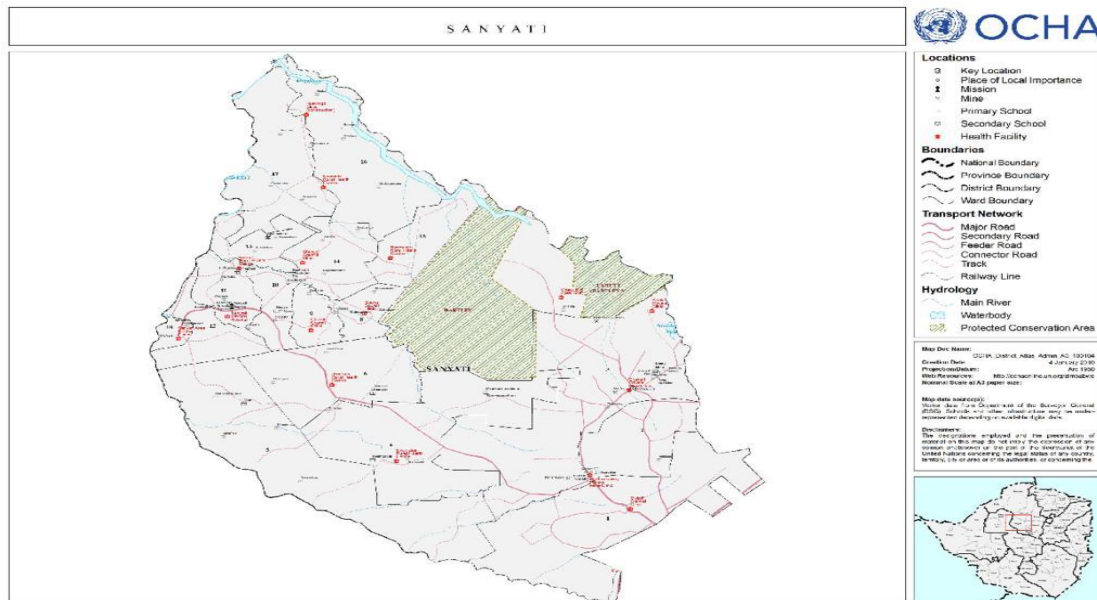


Figure 1. Sanyati district location map.
Source: Wikipedia (2014).

embarked on land reform programmes which comprised the Intensive Resettlement Programme of the eighties and then the Fast Track Land Reform between 1997 and 2004. The objective among others was to economically empower the black majority and so achieve sustainable livelihoods through agriculture (Government of Zimbabwe, 2001). Other objectives were to relieve pressure on the land in the communal areas, encourage better agricultural productivity and thus ensure food security (Government of Zimbabwe, 1981). Through these land reform programmes, resettled farmers got access to land in high potential areas (Rukuni, 2006). However, this land is not being utilised to its maximum potential as evidenced by continued reliance on donor assistance and support and the exportation of grain from neighbouring South Africa, Zambia and Mozambique (Mandizha, 2014). It is on this basis that the research sought to establish the socio-economic determinants of off farm diversification by resettled farmers in Sanyati District with a view to understanding the implications of policy on the livelihoods of resettled farmers in order to encourage maximum utilisation of land resources. The beneficiaries' success in the resettlement areas in terms of agricultural output and livelihood improvement at household level is what this research also seeks to determine. The findings from this study may form a framework to help government in revising the agriculture and land reform policy for the improvement of agricultural productivity and sustainable livelihoods of the land reform beneficiaries. This research will also add on to existing literature on land reform and will provide guidance on land allocations in future land reforms around the world.

MATERIALS AND METHODS

Study area

The study was carried out in Sanyati District whose coordinates are 17°57'00"S, 27°18'27"E and is located in Mashonaland West Province (ZNSA, 2013). It spans over 4 832.98 square kilometres, has 18 administrative wards and has a total population of 112 897 (Central Statistics Office (CSO), 2012) as well as a population density of 23.4inh./km² (ZNSA, 2013). It has a humid subtropical climate. The area is in natural region III of Zimbabwe's agro ecological zone. It receives moderate mean annual rainfall ranging between 600-700mm per year. The rainy season is between November and March. Temperatures range between 28 and 32°C and may experience some severe dry spells and a relatively short growing season. The vegetation is predominantly mopani woodland and the main crops grown in the area are mostly cotton, maize, soya beans, groundnuts and sunflower. The district is predominantly a cotton producing area although the production of small grains such as sorghum, millet and rapoko, though not so popular is currently being encouraged by the government. The area is also very rich in gold deposits and the area is characterised by small scale/ artisanal gold mining. Below is a map showing the geographical location of the area under study (Figure 1).

Research design

Considering that data collection involved more than one group, the study employed the cross sectional design. The groups were Intensive Resettlement farmers, Model A1 and Model A2 farmers. This design was employed because it was easier to manage its economy. Triangulation where both qualitative and quantitative approaches are used, offered the prospect of enhanced confidence in the findings. It also captured a more complete, holistic, and contextual portrayal of the three resettlement models. A qualitative approach was relevant to the research as it sought to answer questions by examining various socio political and economic

settings and the individuals who inhabit those settings. The research attempted to understand human behaviour and institutions by getting to know people's values emotions and beliefs. Quantitative data derived from interviews and questionnaires explored the relationship between off-farm activities and land reform.

Target population

The target population consisted of 280 farms in Sanyati District of Mashonaland West that were acquired for resettlement purposes with close to 4000 land reform beneficiaries. There are about 600 Model A2 farmers, 1800 A1 Model farmers and slightly more than 1200 people resettled under the Intensive Resettlement scheme. The strata consisted of Intensive Resettlement farmers, Model A1 and Model A2 farmers in the small and medium scale category for ease of comparison.

Sample and sampling method

Considering that the target population was not homogenous, stratified random sampling was used. Three strata were identified and these comprised the Intensive Resettlement Scheme, Model A1 and Model A2 farmers in the small and medium scale category. 24 farms were purposively selected on the basis of accessibility as follows: 4 Model A2 farms, 8 Intensive Resettlement farms and 12 Model A1 farms as proportionate allocation. Stratified random sampling was adopted in selecting participant households where 5 land reform beneficiaries were randomly selected from each farm. Only small (1-15 ha) and medium scale (15-90 ha) Model A2 farms were used in the study for ease of comparison with the other resettlement models. The primary research instruments used were personal interviews, focus group discussions, questionnaires, as well as the researcher's general observation. Questionnaires were distributed to some farmers whilst personal interviews were conducted with other farmers and AGRITEX officials, as they gave the researcher the freedom to explore reasons and motives.

Data collection

The primary research instruments used were personal interviews, focus group discussions, questionnaires, as well as the researcher's general observation. Questionnaires were distributed to Intensive Resettlement and Model A1 farmers whilst personal interviews were conducted with A2 farmers. A focus group discussion with the AGRITEX officials also formed part of the data collection methods.

Data analysis

The study analysed quantitative data using Excel because the researcher is familiar with it and it is user friendly; it was suitable for the data to be analysed. Data were presented in the form of tables, graphs and charts.

RESULTS AND DISCUSSION

Determinants of off-farm diversification

A focus group discussion with 20 AGRITEX personnel provided a variety of findings. The focus group

discussion revealed that land reform beneficiaries were diversifying to other livelihoods activities besides farming. The most common activities engaged in were artisanal mining, formal and informal employment, small businesses ventures such as selling firewood, buying and selling second hand clothes, brick moulding and hunting (those living close to Hartley Safari). Mubvami (2004) notes that economic activities by land reform beneficiaries that are not necessarily agricultural but land based have a negative effect on the environment through loss of vegetation cover. Wood harvesting has become rampant in areas close to urban areas and Kadoma has been affected by this trend.

It was also established that there were several causes for off-farm diversification chief among these being erratic rainfall that is characterised by delayed onset of the rainy season as well as its uneven distribution in the district. Very high temperatures ranging between 28 to 32°C are experienced in the district between August and December (Feresu, 2010). One participant noted that this has also affected pastures. It was noted by the AGRITEX officials that *'even some wild plant species, particularly those that are palatable to livestock are being affected by the high temperatures'* (Participant 2, 31 July 2015). This is consistent with Manyeruke et al. (2013) who noted that livestock in Sanyati is at risk due to deteriorating pasture conditions.

Low producer prices were cited as another cause for off-farm diversification during the focus group discussion. Low producer prices for cotton and maize offered by private buyers have rendered the agriculture sector in the district non-viable, particularly considering that the district is predominantly a cotton producing area. Non-payment and delayed payment of maize delivered to the Grain Marketing Board has had a serious effect on the farmers' ability to timeously engage in farming activities with disastrous consequences on yield as a result. The prices offered by private buyers who pay cash for maize were not sustainable for agricultural production. The prices range between US\$120 and US\$180 dollars per tonne for maize compared to the US\$325 dollars (CFU, 2010) offered by GMB. The same applies to cotton where the low prices of cotton ranging from US\$0.35 to US\$0.46 per kilogramme has since triggered a decline in land area put under cotton as farmers opt for better paying commodities.

In addition, some AGRITEX demonstration officers were of the view that land reform beneficiaries were diversifying; they are on the land for speculative reasons. The underutilisation of land then led Moyo (2011) to suggest that under and unutilised land be taxed and incentives be created to bring this land forth for expropriation. Matondi and Dekker (2011) note that others continue to hang onto the land hoping they will get it right in future.

The AGRITEX officials added that some Intensive Resettlement Scheme and Model A1 farmers had

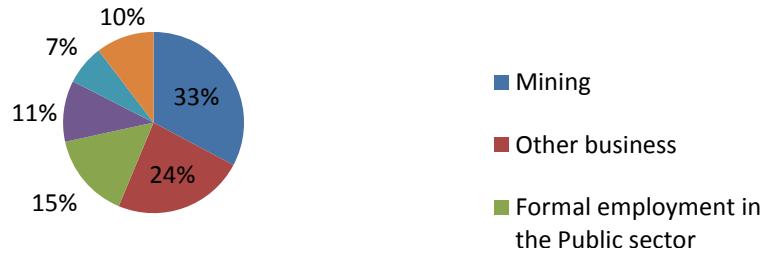


Figure 2. Off farm activities of intensive resettlement farmers.
Source: Researcher’s Data.

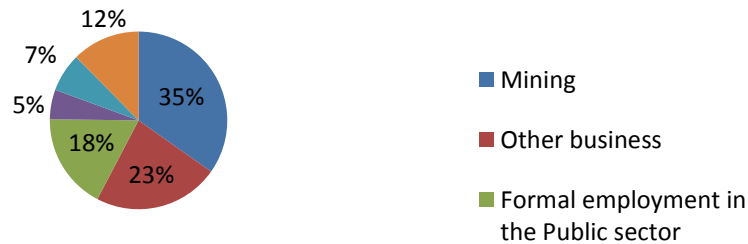


Figure 3. Off farm activities of Model A1.
Source: Researcher’s Data.



Figure 4. Off farm activities of Model A2 farmers.
Source: Researcher’s Data.

developed a dependency syndrome where they expected hand-outs in the form of inputs as well as relief aid. As a result, they were not putting much effort in farming. In 2013 the Government of Zimbabwe launched the National Food and Nutrition Security Policy to ensure adequate food and nutrition security for all people at all times. The initial activities included maize distribution to address shortages (United Nations Zimbabwe, 2013).

From the questionnaire the study established that of the land reform beneficiaries sampled across all models, more than 30% are engaged in artisanal gold mining activities. Mining is the most common off-farm activity. About 24% of Intensive Resettlement scheme farmers, 23% of Model A1 and 29% Model A2 farmers are engaged in other business ventures. The businesses ventured into mostly are clothing and grocery retail, grinding mills as well as transport (pirate taxis). The study found that 33% of the Intensive Resettlement Scheme farmers are engaged in mining activities. The other 24%

concentrate on various business ventures whilst 15% are formally employed in the public sector. About 11% are employed in the private sector ranging from white collar jobs in the nearby towns to blue collar jobs on other farms. Approximately 10% sell firewood whilst 7% are engaged in brick moulding. Figure 2 shows the off-farm activities of the sampled Intensive Resettlement Scheme beneficiaries.

Figure 3 is a pie chart illustrating off-farm activities by Model A1 farmers. The study found that 35% of sampled Model A1 farmers are engaged in mining activities, whilst 23% business people of various disciplines and 18% in the public sector. About 12% sell firewood, 7% are brick moulders and only 5% are in the private sector. Figure 4 is a pie chart showing the off-farm activities of Model A2 farmers in the small and medium scale category. Small and medium scale Model A2 farmers engage in mining activities more than the other farmers in the other resettlement models. This is probably due to the fact that

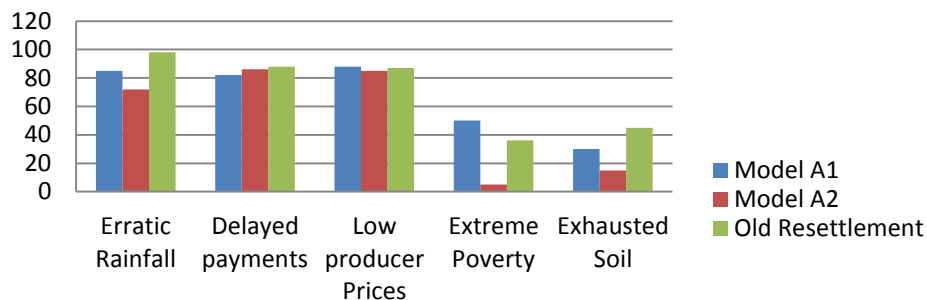


Figure 5. Land reform beneficiaries reasons for off-farm diversification. Source: Field data, (July, 2015).

they have more land on which to peg gold claims. In addition, 29 percent have other businesses that are not related to agriculture and 28% are formally employed in the public sector. Only 6% of the sampled beneficiaries are employed in the private sector. A similar study by Scoones et al. (2010), in Masvingo Province in 2007 revealed that half of the land reform beneficiaries were from communal areas, a third were civil servants and the remaining sixth was made up of business people and former farm workers. This is almost consistent with this research finding where almost 30% of Model A2 farmers are in formal employment.

Findings from the questionnaire as well as interviews with the sampled land reform beneficiaries provided similar results from the outcome of the focus group discussion. More than 80% of Model A1, Model A2 and Intensive Resettlement Scheme farmers highlighted low producer prices as well as delayed payments for maize deliveries to the Grain Marketing Board (GMB). The non-viability of the agriculture sector as a result, has led to the farmers engaging in other economic activities. The depressed producer price for cotton pegged at USD\$0.30 per kilogram has had a negative impact on the economic situation of farmers in Sanyati District. This is primarily because Sanyati is predominantly a cotton producing area. The soil type, temperatures and rainfall experienced in the area are not ideal for other cash crops such as tobacco. Maize, groundnuts and soya beans are mostly grown at a subsistence level by Model A1 and Intensive Resettlement Scheme beneficiaries. Those that sold their produce to the GMB, although the prices were reasonable, have been disappointed as they have not been paid within reasonable time. Figure 5 is a graph illustrating the determinants of off-farm diversification by land reform beneficiaries from the findings of the questionnaire.

More than 80% of Model A1 and Intensive Resettlement Scheme farmers cited erratic rainfall as a reason for diversification. *'There are no irrigation facilities on most A1 farms and where they exist, they are not functional as infrastructure has been vandalised. We do not have the financial muscle to resuscitate the equipment'* (Respondent

11, 31 July 2015). Gonese et al. (2002) noted government's capacity to assist the newly settled farmers with necessary infrastructure and social services as a serious challenge. About 48% of Model A2 farmers cited erratic rain fall and another 42% cited security of tenure as a reason for diversification. Of all the Intensive Resettlement Scheme and Model A1 farmers, security of tenure was not an issue.

Extreme poverty was cited by more than 40% of A1 farmers as a reason for off-farm diversification. They acknowledged that although land had been availed to them, they did not have sufficient means to work the land. According to ZNSA (2013) 76% of rural households are poor. The absence of draught power and finance for inputs was forcing them to look for employment elsewhere, engage in other forms of economic activity such as artisanal gold mining, selling firewood and hunting. However the proceeds from these activities were not sufficient to lift them from poverty, as they were living hand to mouth. Kang'ethe and Serima (2014) note that resettled small scale farmers have remained poor despite perhaps affording to get food for consumption due to low capacities to drive farming. Matondi and Dekker (2011) concur that on average cattle wealth has halved over the past decade resulting in a profound increase in the number of poor among newly resettled farmers.

From interviews with the farmers as well as observation, close to 60% of sampled Model A1 farmers expressed contentment. *"The move to new plots has made a significant difference to our social lives because we used to be very crowded and the soils back in the communal areas were exhausted"* (Respondent 13, 2015). Homesteads comprising of reasonable dwellings of 4 roomed brick houses, blair toilets, sheds and livestock comprising cattle, goats, free range chickens, guinea fowl and pigeons were observed for the majority of Model A1 and Intensive Resettlement Scheme farmers. However there was concern that most of the farmers were selling off their assets in order to meet their basic financial needs. *"The harsh economic environment is forcing us to sell our livestock to pay for children's school fees and other basic needs."* Respondent 27, July 2015.

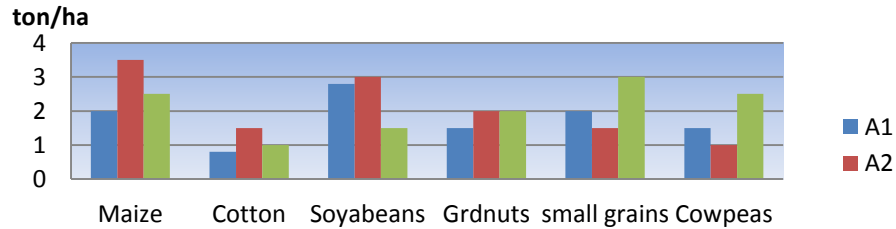


Figure 6. Crop Production by Land Reform Beneficiaries (2014-2015 season).
Source: Field data, (July, 2015).

Impact of off-farm activities on agriculture production in Sanyati District

Another outcome of the focus group discussion with AGRITEX officials was that generally Sanyati District's agricultural productivity has declined over the past few years. However this decline varied according to crop and area within the district. After the FTLRP most small holder farmers shifted from producing traditional crops such as maize to more drought resistant crops (Ministry of Economic Affairs, 2014). According to AGRITEX (2014), maize has declined from an average of 1.5 tonnes per hectare to 0.7 tonnes per hectare over the past two years. Furthermore cotton has declined from an average output of 0.7 to 0.4 tonnes per hectare. The production of small grains has also declined from 1.5 to 0.9 tonnes per hectare. However there was a slight increase in maize production from 1 to 2.2 tonnes per hectare of maize in wards 4, 5 and 6 due to conservation agriculture practices as well as early planting done by farmers in those areas. From interviews with the land reform beneficiaries (Figure 6), the study found that the main crops grown in Sanyati District are maize, cotton, soya beans, groundnuts, cowpeas and small grains such as rapoko, sorghum and millet. Maize output averaged 1.5 tonnes/ha for Model A1 farmers, 2.5 tonnes per ha for Intensive Resettlement farmers and 3.5 tonnes per ha for Model A2 farmers. These findings vary from the statistics that the AGRITEX officials provided.

This is probably because the respondents inflated their yield per hectare in order not to present a bad impression. Output was lowest for Model A1 farmers since they do not practice conservation farming which requires minimum inputs yet very labour intensive. In addition the limited financial resources to purchase adequate inputs were cited as another reason for low yields.

"It is not feasible to practice conservation agriculture due to its nature which is labour intensive. Labour in this area is very expensive and there is no way to practice it on 6 ha. What we need are inputs to be productive." Respondent 41 (5 August, 2015)

Most Intensive Resettlement Scheme farmers practice

conservation agriculture, hence their yields are better. This is consistent with the outcome of the focus group discussion where maize output had increased in wards 4, 5 and 6. Kinsey (2004) noted that there had been negative evaluations both within and outside government that the intensive resettlement programme had failed to have a positive impact on agricultural productivity and rural income. However results of the study indicate otherwise.

Model A2 farmers have the best yields due to mechanisation as well resources for inputs. Most Model A2 farmers noted that output would be better if water was adequate.

"The only solution to the rainfall issue is to plant early or invest in irrigation infrastructure." Respondent 56, (6 August 2015).

Soya beans are the next most popular crop grown in the district. Output is highest among the Model A2 farmers with an average yield of 3 tonnes per ha, Model A1 farmers' average yield is 2.8 tonnes per ha and Intensive Resettlement farmers' average output is 1.5 tonnes per hectare. Soya beans has become a better alternative to cotton and Model A1 farmers are eager to grow it as it can perform with little or no fertilizer. The low yield from the Intensive Resettlement Scheme farmers is probably due to technical expertise of growing the crop.

The research showed that output from small grains was 2 tonnes per ha for Intensive Resettlement Scheme farmers, 2.7 tonnes per ha for Model A2 farmers and 2 tonnes per ha for Model A1 farmers. Model A1 and Model A2 mostly grow sorghum which has a commercial market, whereas millet and rapoko are grown by the Intensive Resettlement Scheme farmers to ensure food security in the event of drought.

Ground nuts and cowpeas are grown on a very small scale by all land reform beneficiaries although output is highest among the Intensive Resettlement Scheme and Model A2 farmers. The few farmers who continue to grow cotton yield between 1 and 1.5 tonnes per ha. This is because farmers who grow the crop usually do so under contract farming, therefore all the necessary inputs comparing various crop production output among land reform beneficiaries for the 2014 -2015 season. Figure 7

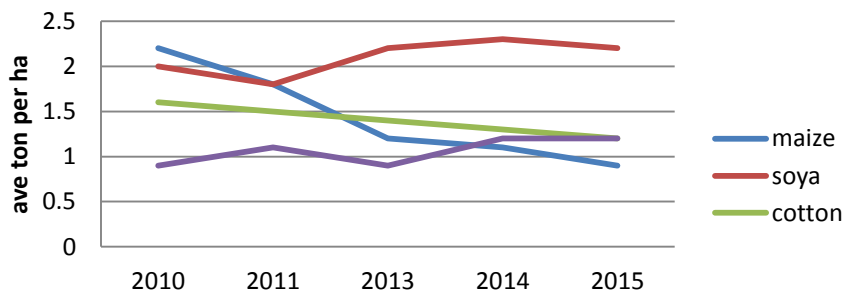


Figure 7. Trend of Crop Productivity 2010- 2015 in Sanyati District
Source: AGRITEX Sanyati District.

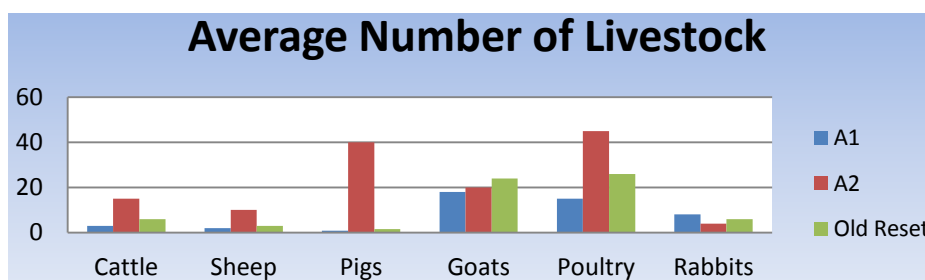


Figure 8. Average number of livestock per household.
Source: Researcher's data.

is another graph showing the trend in crop productivity for Sanyati District. Findings from the study show that off-farm activities have had both positive and negative impacts on agriculture production for Model A2, Model A1 and Intensive Resettlement Scheme farmers. This has also influenced the trend in crop productivity over the past 5 years in the district as illustrated in Figure 7. Maize and cotton production have been on the decline since 2010. Small grain production has fluctuated slightly over the years whereas soya beans declined in 2011 though it has begun to increase gradually since.

Interviews with the land reform beneficiaries revealed that formal employment in the public sector has presented opportunities to source agriculture inputs such as fertilizers and seed from various institutions. Formal employment in the private sector has enabled some farmers to access loans from their employers, which they have invested in agriculture inputs. *“I am privileged that my employer has a lending facility which I have used to get a loan and I have invested the money in my farming operations, of cause I could have bought a car, sofas or anything else.”* (Respondent 48 August 2015). Some have been able to save money from their monthly earnings and bonuses in order to purchase agriculture inputs. The profits from other business ventures have also been invested in agriculture and farm development. Others have gotten into contract farming. Kang’ethe and Serima (2014) note that through contract farming small

scale farmers were given the opportunity to overcome barriers of entry into crop and animal specific sectors.

Those that have successfully engaged in mining have bought livestock and improved their homes, hence presenting a better outlook. From the questionnaire, there is an average of 15 cattle per Model A2 household, 6 cattle per intensive resettlement household and 3 cattle per Model A1 household. Almost every household that responded have more than 10 poultry, and at least 2 goats. Figure 8 shows a bar graph illustrating the average numbers of livestock of the land reform beneficiaries across all resettlement models.

However, off-farm activities have also cost agriculture production in a number of ways. First, farming is a full time business and requires a lot of attention if maximum results are to be expected. Off-farm activities are consuming much of the farmers’ time. ‘Cell phone farming’ where beneficiaries are not hands on in farm activities, is common practice and this is affecting productivity negatively. Also, considering that off-farm activities are taking a lot of farmer’s time, they are not able to timeously engage in land preparation, planting, weeding, pest control and even harvesting which also affects the overall yield.

The study also noted that farmers who are engaged in off-farm activities such as selling firewood, buying and selling Chinese products, brick moulding and hunting and yet not making sufficient to invest in agriculture are

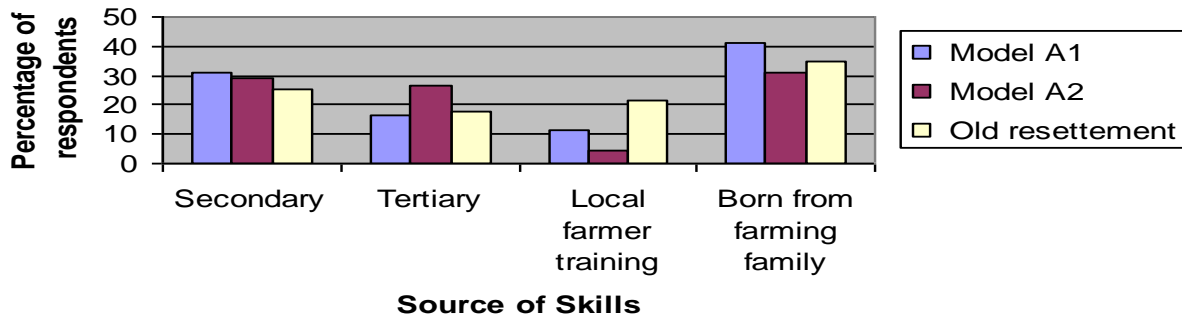


Figure 9. Land reform beneficiaries agriculture knowledge and skills.
Source: Research data.

responsible for the low averages yields recorded. One such farmer pointed out that “*there is need for more government intervention to capacitate us in order that we may be productive on the land so that we do not spend a lot of time doing other livelihood activities*” (Respondent 33 August 2015). Such households, from observation, have little if anything produced and so the cycle of poverty continues.

Sustainability of land reform beneficiaries livelihoods

A livelihood is described as sustainable when it can cope with and recover from stress and shocks maintain and enhance its capabilities and assets and provide sustainable livelihood opportunities for the next generation (Cousins and Scoones, 2010). The research explored the land reform beneficiaries’ livelihood assets at household level in Sanyati District. The assets which comprise of human, social, natural, physical and financial assets were compared to desired livelihood outcomes against the vulnerabilities in order to gauge the sustainability of the farmers’ livelihoods. Findings from the exploration of assets are outlined below.

Cross tabulations done on the different land reform models according to agriculture knowledge and skills, extent of land utilisation and size of households showed different results for the different models. Of the land reform beneficiaries who responded to the questionnaire, 41.2% of Model A1 farmers attributed their farming knowledge to what they learnt from being raised in a farming set up in the communal areas. About 31.2% of the A1 farmers acknowledged secondary school agriculture as their source of skills, whereas 16.4% had tertiary training at either, Mlezu, Gwebi or Chibero Agriculture Training Colleges. Only 11.2% had local farmer training and acquired Master Farmer certificates among the Model A1 farmers. Figure 9 shows a bar graph showing land reform beneficiaries’ agriculture knowledge and skills.

Of the Model A2 farmers who responded to the questionnaire, 31.2% attributed their farming knowledge

to being raised in a farming family. About 28.8% took agriculture as a subject at secondary school and only 4.48% attributed their farming skills to local farmer training. On the other hand, of the farmers from the Intensive Resettlement Scheme, 21% had Master Farmer certificates, 25.6% did agriculture at secondary school level and 34.8% had farming backgrounds, whereas only 18% had learnt agriculture at tertiary level. From these findings secondary school agriculture has had a very positive impact in equipping individuals with skills that have found relevance in the land reform programme. These findings are further illustrated in the form of bar graphs. These finding are almost consistent with Scoones et al. (2010), who noted that in Masvingo Province, 46% of land reform beneficiaries had Master Farmer certificates and 91% had been to education of form three and above. From the findings, land reform beneficiaries at household level are equipped with human assets in the form of agriculture skills at various levels as well as able bodied family members. Figure 10 shows land utilisation by land reform beneficiaries across all resettlement models also considering the average size of the plots as well as size of household. From the questionnaire the study found that there is an average of 6 people per household for Model A1, 9 people per household for Intensive Resettlement Model and an average of 5 people per Model A2 household. In all the cases there are at least 3 people aged between 13 and 60 years. Model A1 and Intensive Resettlement have the least amount of hired labour and family members are the source of labour, whereas Model A2 has the most frequency of hired labour. This is because Model A2 plots are larger and were designed to be operated commercially and beneficiaries had to apply and prove their capabilities to run the farm before they were allocated. Table 1 summarises the land reform beneficiaries’ household background. Following interviews with the land reform beneficiaries the following livelihood outcomes were noted. The researcher also used observation to compare what was said against what was observed with regard to ascertaining the sustainability of the resettled farmer’s livelihoods.

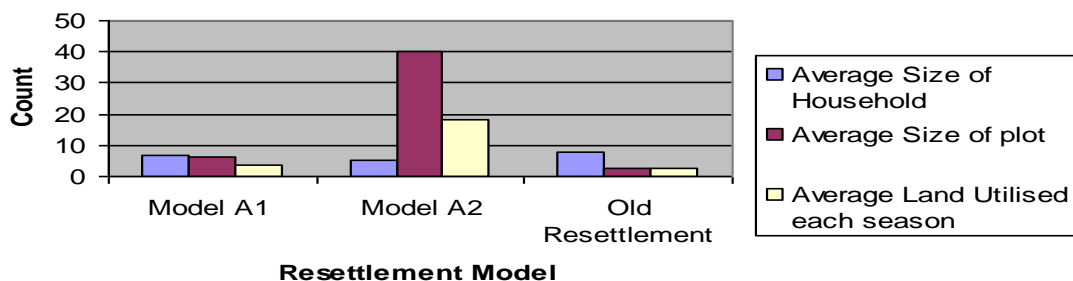


Figure 10. Land utilisation by land reform beneficiaries.
Source: Research data.

Table 1. Summary of land reform beneficiaries' household background.

	Model A1	Model A2	Old resettlement
Average size of household	6	5	9
Average numbers of school going children	3	3	4
Hired labour (most frequent response)	Sometimes	Yes	No
Average size of plot	6 Ha	20 Ha	3 Ha
Percentage land size utilised every year	60%	50%	100%

Source: Field Data, (July, 2015).

Table 2. Coping strategy effectiveness for $\geq 60\%$ of the respondents.

Livelihood Outcomes	Model A1	Model A2	Intensive resettlement
Children's school fees	2	5	4
Food and clothing	4	5	4
Home Improvement	3	4	3
Inputs for next season	2	4	3
Purchase of livestock	3	4	4
Purchase of farm implements	2	3	3
Construction	2	5	4

Source: Field data (July, 2015).

5 - All the time / every year, 4 - Quite often / every other year, 3 - Once in a while / once in 3 years, 2 - Hardly at all / in over 4 years, 1 - Never.

The study shows that Model A2 farmers' livelihoods are the most sustainable as evidenced by the fact that most are able to prepare for the next season unassisted as there is little credit on the market for farming. They are better able to absorb the stress and shocks of erratic rainfall, delayed payment by GMB and depressed producer prices. As a result they are in a better position to diversify from cotton to other crops such as sesame, beef, poultry and pig production as well as horticultural products making them less vulnerable.

Intensive Resettlement farmers and Model A1 farmers have failed the sustainability test. They have human assets in the form of labour and agriculture skills that are complemented by AGRITEX extension services. Additionally social networks in the form of village administration and leadership and natural assets in the form of the land, wildlife, water, gold and biodiversity,

they are strongly lacking the physical assets such as good roads, irrigation infrastructure and electricity. Financial assets are also inadequate as there is no credit available from banks or any other institution. Findings from the questionnaire and interviews with the farmers revealed that 80% of Model A1 and Intensive Resettlement Scheme beneficiaries are barely able to afford sending their children to school. They cannot adequately set aside resources for the next season and most rely on government support, which is barely able to produce meaningful yields (10 kg seed, 50 kg Compound D and 50 kg Ammonium Nitrate). The off-farm activities they engage in provide income to only to ensure the next meal. Their vulnerability contexts are very high and are not sufficiently able to absorb the stress and shocks mentioned in the first section. Table 2 compares the livelihood outcomes of the land reform beneficiaries

against coping strategy effectiveness.

Land reform beneficiaries' perceptions

Of the land reform beneficiaries who responded to the questionnaire and those interviewed across all the resettlement models, 100% were in support of the land reform programme. About 90% of Model A1 farmers responded that they were now better off than they were in their former settings. Just 6% said their lives had not changed much, whereas 4% remarked that they were worse off for various reasons. This is consistent with (Moyo, 2011) who noted that land redistribution also brought along increased access to and better distribution of the benefits from natural resources such as water, indigenous forests and wildlife, as well as other social advantages realised from such resources. Some individuals gained more direct access to these resources than others.

Of the Intensive Resettlement Scheme farmers who were sampled, 100% said that they are better off than they were in the communal areas and issues related to poverty and food insecurity are a result of one not working hard enough since the major resource which is land had been availed. Commenting on the issue of failing to pay school fees for their children, failing to improve their homes and farms and diversifying to other income generating ventures, a beneficiary responded as follows:

"The economic challenges that Intensive Resettlement Scheme farmers are facing are not a permanent situation. We have done well in the past during the eighties and late nineties. We could afford to send our children to boarding schools through cotton farming. If God is gracious and gives us rain we will farm other crops since cotton has let us down." (Respondent 78, 23 July 2015).

Of the Model A2 farmers sampled 100% were of the view that the land reform programme had adequately dealt with the issue of poverty and food security at household level.

"Income from farming was better than that from formal employment, regardless of the harsh economic environment we are operating in. Agriculture returns could be better with the availability of affordable credit for the purchase of inputs and farm equipment." (Respondent 56, 25 July 2015).

However, almost half of the Model A2 farmers who were interviewed expressed concern on the issue of security of tenure. They cited clause no.7 of the Model A2 offer letter. It states that:

The Minister reserves the right to withdraw or change this offer if he deems it necessary or if you are found in breach of any of the set conditions. In the event of a withdrawal or change of this offer, no compensation arising from this offer shall be claimable or payable whatsoever. A study by Matondi and Dekker (2011) in Mazowe (Zimbabwe) found that due to tenure insecurity, newly settled farmers were less willing to invest in conserving their natural resources

AGRITEX personnel's perceptions

During the focus group discussion with AGRITEX personnel, it emerged that the policy on land reform has improved the livelihoods of most its beneficiaries although there are some who appear not to be serious about farming. They cited issues of productivity among Model A1 farmers.

"There are quite a number of Model A1 and A2 farmers who appear to be holding on to land for speculative reasons since their plots have been lying fallow for a number of years now". (Respondent 5, 31 July 2015).

Matondi and Dekker (2011) note that new settlers were juggling their livelihoods through hanging on to land and pretending to use it.

Another respondent noted that:

"Some Model A1 farmers are not eager to participate in demonstration exercises conducted by the AGRITEX officers. It is mostly the elderly who attend training and demonstrations among Model A1 beneficiaries as the youth are not interested". Respondent 9, (31 July 2015)

Some AGRITEX officials were of the view that the policy on land reform was not being effective in alleviating poverty among all the land reform beneficiaries although there are some who are doing quite well in the new settings.

"The absence of affordable credit to invest in farming is the major drawback for most land reform beneficiaries. Engaging in other income generating ventures such as mining, selling firewood, was generating income enough to only meet the basic needs." (Respondent 18, 31 July 2015).

There was general consensus that the land reform programmes were not being totally effective at economically empowering people since more than 50% of the Model A1 and Intensive Resettlement Scheme beneficiaries were facing serious economic hardships. The absence of affordable credit for agriculture and other supporting facilities have been the draw back for the success of the policy.

Conclusions

Off-farm activities are an important factor in household economies and food security as they affect the performance of agriculture (Asmah, 2011). A number of conclusions were arrived at: First the study concluded that depressed producer prices of cotton and the low prices offered for maize by private buyers were the some of the reasons for off-farm diversification. In addition, delayed payment of maize deliveries to the Grain Marketing Board, the harsh economic environment coupled with the absence of affordable credit for farming were other reasons noted. Erratic rainfall pattern characterised by long dry spells, due to climate change and variability was another reason that Intensive Resettlement Scheme, Model A1 and Model A2 land reform beneficiaries in Sanyati District were engaged in off-farm activities. The most common off-farm activities were gold mining and small business ventures unrelated to farming as well as formal and informal employment in Kadoma. Artisanal gold mining was the most popular off-farm activity among most the land reform beneficiaries, because it was perceived to be more viable than farming. From the research data and findings, the study concluded that overall off-farm activities have had a negative impact on agricultural productivity, with ripple effects on food security at household level particularly amongst Model A1 and Intensive Resettlement Scheme farmers. It also been observed that off-farm activities have cost agricultural production in terms of time, dedication and commitment. Crop yields per ha among the Model A1 and A2 resettlement models have been on the decline in the district over the past 3 years, with the exception of Intensive Resettlement Scheme model, which registered a slight growth due to conservation farming.

The research further established that of the majority of the Intensive Resettlement Scheme and Model A1 farmers livelihoods were not sustainable when they relied solely on agriculture. This is because they were failing to cope, and recover from the shock and stresses of the difficult economic environment. Most were selling off their assets in order to get by. The off-farm activities they engaged in only generated enough to meet very basic needs. Most Model A2 farmers' livelihoods are sustainable since off-farm activities are a livelihood strategy that was cushioning them from the stresses and shocks of the socio economic and natural environment. From observation, the research concluded that off-farm activities by all resettlement models allowed greater access to income. Increased access to off-farm activities has therefore lead to positive indirect effects on the sustainability of farmer's livelihoods.

Recommendations

Land reform is incomplete unless there is access to land and a set of institutional reforms that would facilitative

agricultural competitiveness of beneficiaries (Adams and Howell, 2001). Based on the findings the study recommends that Government facilitates for offer letters of all resettlement schemes to be used as security or collateral when seeking financial support from banking institutions for investment in farm inputs and infrastructure projects. The repayment intervals should be synchronised with harvesting and marketing and not monthly or otherwise. That way the indigenous Zimbabweans would have been economically empowered through land as a valuable resource.

Given that the study established that most land reform beneficiaries' major issues were related to unavailability of resources to purchase inputs for crop production, the study recommends that Government subsidise the price of fertilizers and seed to make them affordable. The Government usually assists Model A1 and Intensive Resettlement Scheme farmers through the Presidential Input Scheme, the study recommends that adequate inputs to cover at least an acre should be distributed to the benefiting households.

Moreover there are other crops such as sesame (*runinga*), black and white-eyed cowpeas that have a ready export market. These crops are suitable for the climatic and soil conditions in Sanyati and require very little rainfall and inputs. Free-range chicken farming is also becoming very popular. There is need to inform farmers about these and other options accompanied by relevant training so that farmers adapt to the ever-changing climatic conditions and ensure sustainable livelihoods.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

The relationship between women's reproductive factors and household socio-economic status: A case of Morogoro district, Tanzania

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Women's poor socio-economic status (SES) is linked to multiple contributing factors, most of which are related to performing multiple roles that include family, childcare and reproductive responsibilities in general. However, the relationship between women's reproductive factors and household SES remains uncertain. This study explored the association between selected reproductive factors and households' SES among rural households with women of reproductive age. A cross-sectional study, involving six randomly selected villages from three wards of Morogoro district, Tanzania, was used. A total of 542 participants consisting of women from male and female-headed households were involved in the study. Data analyses were performed using the IBM SPSS® software. Ordinal logistic regression model was used to estimate the relationship of the study variables. The number of children a woman wished to have had negative association with SES, whereby wishing to have more than 5 children was associated with less likelihood to attain the higher SES. The mean age at first pregnancy was 18.5 years, with 56.5% of the participants becoming pregnant for the first time at age 18 or below, which indicates predominance of teenage pregnancies. The age at first pregnancy had significant and positive relationship with SES, whereby being pregnant at the age of more than 18 years increases the chance of attaining a higher SES. In conclusion, teenage pregnancies and the desire for relatively many children (>5) constrain the attainment of higher SES. The study recommends strengthening reproductive health education particularly family planning and advocacy on teenage pregnancies in rural communities.

Key words: Women, socio-economic status, reproductive factors, rural, Tanzania.

INTRODUCTION

Socio-economic status (SES) remains one of the areas of interest for researchers in the area of economic development. The phenomenon (SES), is an indicator of well-being of the members of households that is commonly used to depict an economic difference in

society as a whole (Abraham, 2016). Since in the 1960s, gender issue has surfaced substantially in analyzing SES in societies particularly when explaining poverty levels (Moser, 2012; Pressman, 2002, 2003; Chant, 2006). The gender concern with regard to socio-economic status is

based on the paradigms explaining disproportionate level of poverty among men and women particularly with regard to female-headed households (FHHs) and male-headed households (MHHs). Gender poverty gap is experienced in both developed and under-developed countries. Literature shows that in the world, most of the poor households are those headed by women (Chant, 2012; Cawthorne, 2008). For example, literature shows that by 2008, the gap in poverty rates between men and women was wider in America than anywhere else in the western world (Cawthorne, 2008). In sub-Saharan Africa, Tanzania inclusive, poverty levels take similar trend whereby majority of the poor are households headed by females (Macro, 2011; Kehler, 2013).

For a long time, researchers have made effort to establish the link between gender and SES. The explanation that women and their households consists majority of the poor is widespread (Peterson, 1987; Pressman, 2002, 2003; Chant, 2003, 2006; Cawthorne, 2008; Moser, 2012). One of the prominent theories is the Feminist Explanations for the Feminization of Poverty (Pressman, 2003); the theorist associate women and poor SES with poor participation in the labor market. Gender poverty disparity is apparent, the debate remains on whether the factors that link women and poor SES as reported in the existing literature apply across different socio-economic groups.

Women are linked with poor SES through a variety of factors such as inequality in wages, segregation of employment in paying occupations and domestic sexual-related violence, whereby women are paid less than men even when they have the same qualifications and work same hours (Cawthorne, 2008; Hejase et al., 2013, 2015). The main argument explaining the link between women and poor SES is that women spend more time in performing reproductive roles that usually are not associated with economic gain (Pressman, 2003). Reproductive role is defined as activities related to the creation and sustaining the family and the household (Komatsu et al., 2015; Bibler and Zuckerman, 2013). Women are known to perform multiple roles in societies that are productive role, reproductive role, and the role of community management (Moser, 2012), because of these multiple roles women are constrained in their involvement in productions (Pressman, 2003; Cawthorne, 2008; Moser, 2012).

The link between reproductive roles and household SES is complex, and it involves several factors, most of which have not been studied. The factors vary from one socio-economic group to another across different communities. Studies explaining women factors that lead to poor household SES were conducted mainly in

developed countries (Pressman, 2002, 2003; Cawthorne, 2008; Chant, 2012; Moser, 2012) and thus may not be directly extrapolated to under-developed African communities like Tanzania. For example, number of children, which is likely to influence the time that a woman spends for childcare, differs among rural and urban societies even within the same region like Tanzania (Macro, 2011).

Therefore, this study aimed to examine the relationship between women reproductive factors and household SES in Morogoro district, Tanzania. The key reproductive factors in this study included the number of biological children of the study participants, birth interval, and number of unplanned pregnancy(ies) a participant had experienced as well as the age when a participant conceived for the first time. Specifically, the study intended to (i) determine the association between the number of children per woman and household SES, (ii) examine the relationship between the birth interval and household SES, (iii) relate unplanned pregnancies and household SES in the study area, and (iv) analyze the link between the age at first pregnancy and household SES.

Participation of women in socio economic development is inevitable if higher SES is to be attained. This is because they make higher proportion in the productive workforce. In agricultural sectors in Tanzania, women constitute majority (54%) of the work force (Leavens and Anderson, 2011; Palacios-Lopez et al., 2015), meaning that their contribution on economic development is important in order to realize positive change in development not only in their households but also in the whole community. Moreover, the government of Tanzania is committed to transform the economic status of its citizens. This is demonstrated in the development plans formulated that include the frameworks of the first Five Year Development Plan (FYDP I, 2011/2012-2015/2016) and the National Strategy for Growth and Reduction of Poverty (NSGRP/MKUKUTA II, 2010/2011-2014/2015). Findings from this study will provide valuable information concerning the reproductive factors in relation to household SES in rural context, which can be used by development stakeholders to design appropriate interventions for improving living standards of rural residents.

METHODOLOGY

Description of the study area

The study was conducted in Morogoro district because of the

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prevalence of poverty in the area, where 55% of households (HH) in the district are considered as poor based on headcount ratio (Lusambo, 2016). The district is one of the rural areas where fertility rate is very high. The Total Fertility Rate (TFR) for women 15 to 49 years of age in Tanzania was 6.1 in rural areas compared to 3.7 in urban (Macro, 2011). This indicates existence of potential reproductive issues in rural areas. Six villages were involved in this study. The villages were Kinonko and Maseyu from Gwata ward, Madamu and Kibwaya from Mkuyuni ward, as well as Tandai and Ludewa from Kinole ward.

Sampling procedure

The sample size was calculated by considering the standard normal deviation set at 95% confidence level (1.96) and 55% as the estimated prevalence of poverty in the study population (Lusambo, 2016). Using the formula:

$$n = \frac{z^2 (p)(1-p)}{e^2}$$

where 'z' = 1.96 for 95% CI, 'p' is expected true proportion (55%) and 'e' is the desired precision (0.05), the minimum sample size was estimated to be 381 participants to achieve the desired statistical power (Hejase and Hejase, 2013). However, in order to increase statistical power and precision, 65% of the calculated minimum sample was added to the minimum sample, hence 627 women were included in the study.

The study population was women of reproductive age that is between 15 and 49 years as defined by the Tanzania Demographic and Health Survey report (Macro, 2011). The study participants were those who were residents in the study villages, with at least two children and willing to take part in the study. Majority of the study participants were of the Muslim religion. The units of analysis were both households and individual women. In consultation with local leaders, using available village registers, purposive sampling was used to list down women with the required age from each of the study villages. From the lists, all women who were heads of household were included in the study and those from male-headed households were randomly sampled. All women from female-headed households were included in the study because they are usually fewer (Macro, 2011). Three hundred and twenty-three (59.6%) of the sampled women came from male-headed households while 219 (40.4%) came from female-headed households. After data cleaning, 542 participants were qualified for the analysis. Therefore, the response rate was 86.44%.

Definition of the study variables

Outcome variables

The dependent variable for this study was household SES (wealth index) computed from housing characteristics and asset possession using the Polychoric Principle Component Analysis (PCA). PCA can be defined as a linear combination of optimally weighted observed variables. PCA is used to create a single index variable from a set of correlated variables (Vyas and Kumaranayake, 2006). The main idea of PCA is to reduce the dimensionality of a data set consisting of many variables correlated with each other, either heavily or lightly, while retaining the variation present in the dataset, up to the maximum extent.

Household characteristics that is ownership of the house and material used to build the house and the toilet facility were also

used to determine the outcome variable household SES as previously described (Macro, 2011). Another indicator was possession of any of the following assets: motorbike, radio, bicycle, generator, and solar power equipment as recommended by other studies (Filmer and Pritchett, 2001; Sahn and Stifel, 2003; Rutstein and Johnson, 2004; Azzarri et al., 2006). The first component of polychoric PCA was used to generate wealth scores and the scores were then classified using cluster analysis as described in previous studies (Vyas and Kumaranayake, 2006). Cluster analysis attempts to group the most similar cases in one group while maximizing difference between groups. By using this technique, it was possible to create the dependent variable household SES by categorizing wealth scores. The resulting two categories were low and medium-high. The ultimate units of the analysis were individual women.

Data collection methods

Assorted methods were employed in collecting information concerning the study participants and corresponding households. Focus Group Discussions (FGDs) and observations were used to collect primary data. Documentary review was used to collect secondary data. Primary data included demographic information, reproductive factors (number of children, birth interval, unplanned pregnancy and age at first pregnancy), as well as household SES (housing characteristics, toilet facility and assets owned by the household). Secondary data from the national, regional, district and village statistics included poverty distribution in Tanzania, population size per participating village and socio-economic characteristics of the study population.

Explanatory variables and their definitions

The explanatory variables were the selected reproductive factors. They included number of biological children of the study participants, birth interval, and number of unplanned pregnancy(ies) a participant had experienced as well as the age when a participant conceived for the first time. For this study, birth interval refers to the interval between the last two consecutive live births (Koenig et al., 1990; Macro, 2011). On the other hand, unplanned or unintended pregnancies are terms used interchangeably which refer to pregnancies that are reported to have been either unwanted (that is, they occurred when no more children were desired) or mistimed (that is, they occurred earlier or later than desired) (Santelli et al., 2003).

Data collection tool

Data on all study participants were obtained using a structured questionnaire through face to face interview. The questionnaire used in this study was developed by the PhD candidate. Validity and reliability of the questionnaire were determined. It was first piloted on ten respondents before the actual study and these respondents were excluded during actual data collection and analysis. After the pre-test, necessary adjustments in phrasing were made. While the questionnaire was used to collect quantitative data, a separate checklist was used to collect qualitative data through FGDs. The questionnaire was organized into four sections to enable capturing of information about demographic, household and reproductive factors as well as household SES. The checklist was designed to capture information about issues that either needed supplementary explanation, or was not known to normal respondents. Such issues include reasons for low level of education among women, instability of marriages, teenage pregnancy and occurrence of unplanned pregnancies among women in the study area.

Statistical analysis

Quantitative data

After data entry, data cleaning was done. Data were compiled and analyzed using the Statistical Product and Service Solutions, SPSS (Armonk, NY: IBM Corp) version 23.0, an IBM software acquired since 2009 (Hejase and Hejase, 2013). Quantitative analysis involves computations of measures of central tendency (means and/or medians with SD and IQR), frequencies and percentages. Ordinal logistic regression models were applied to test associations and the effect of each explanatory (independent) variable on the outcome variable Odds ratio (ORs) with 95% Confidence Interval (95% CI) for reproductive factors associated with household SES were estimated. A p-value of <0.05 was considered to be the cut-off for statistical significance.

Qualitative data

Analyzing qualitative data involved the use of content analysis as recommended by Krueger et al. (2001). Field notes were reviewed and the information from individual focus groups was summarized. Themes were aligned based on guiding questions to indicate different opinions about research issues. Important points were illustrated by quotes.

RESULTS

Descriptive statistics of household and demographic characteristics of respondents

Analysis of data on demographic and household characteristics of the participants was performed. Results for this analysis are shown in Table 1. The age range of participants was between 18 and 49 years, with a mean age of 33.6 (SD= 7.9). About sixty percent (60.5%) of the participants were either married or co-habiting while about a third (29.2%) of participants was widowed, separated, or divorced. The rest of the interviewed women were never married. Sixty-six percent (65.9%) of households involved in the survey consisted of between 4 and 6 persons with the median of 5 persons, whereas one-fifth (20.3%) had more than 6 members. About seventy-three percent (72.9%) consisted of at least one child aged below 5 years; and another big proportion of interviewed women came from households consisting of 1 to 2 children aged 5 to 14 years.

Other characteristics concerning household composition are shown in Table 1.

Descriptive statistics of reproductive factors of study participants

Here, presents reproductive factors of the study participants. Results are shown in Table 2. More than half of the respondents (52.6%) had 2 to 3 children. The median (IQR) number of children per woman participating in the study was 3 (2-5). Nineteen percent of them

desired to have more than 6 children while 27.5% of participants had experienced unplanned pregnancies. The mean age at first pregnancy was 18.5 (SD=3.2; Range=12-35), with 56.5 and 43.5% of participants becoming pregnant for the first time at age below 18 and above 19 years, respectively.

FGDs results showed that reasons for conceiving at young age included getting marriage at that age, poverty, family instability resulting to separation of couples as well as culture associated with matrilineal system. About one third (27.5%) of the study women had experienced unplanned pregnancies. The contributing factors for unplanned pregnancies included lack of family planning education particularly for male partners hence not supporting their wives in birth control and poor family planning services in the study area (FGDs). Seventy-six percent (76.40%) of the participants consented for the first pregnancy while the rest of the women did not consent for first pregnancy. Reasons for conception included getting married (41.3%), ignorance of birth-control methods (30.2%), being idle (27.0%) and being raped (1.6%).

Association between explanatory reproductive factors and household SES

Five explanatory variables that were contemplated to influence the outcome variable (household SES) were subjected to ordinal logistic regression models to analyze the association between the study variables. The explanatory variables were namely: number of children per woman, maximum number of children a woman desired to have, interval of last two births, number of unplanned pregnancies, and the age of a woman at first pregnancy. Out of these variables, three variables did not show significant relationships with the outcome variable (Table 3). Two variables, that is, maximum number of children a woman desired to have and the age at first pregnancy showed significant association with the outcome variable. While the number of children a woman desired to have showed negative relationship with SES, the age of a woman at first pregnancy showed a positive significant association with the outcome variable. Women who wished to have more than 5 children were significantly less likely to be in the higher (medium-high) SES category compared to those who wished to have fewer children (≤ 5 children) [OR 0.68; 95% CI: (0.46-0.99), $p<0.05$].

Women who conceived while older than 18 years of age, were almost fifty percent (48%) more likely to be in the higher (medium-high) SES category compared to those conceiving for the first time while they were 18 years or younger [OR 1.48; 95% CI: (1.02-2.14), $p<0.05$]. A birth interval of 2 or more years between the last two births showed a weak association with SES. Women who spaced their children for 2 years or more showed 32%

Table 1. Household and demographic characteristics of respondents (N=542).

Characteristics	Frequency (n)	Percentage
Age category (years)		
18 - 24	62	11.4
25 - 35	275	50.7
36 - 49	205	37.9
Mean (SD*, Range) Age (years)	33.6 (7.9, 18-49)	
Education level		
No formal education	220	40.6
Primary	306	56.4
Secondary or higher	16	3.0
Marital status		
Never married (Single)	56	10.3
Married/Cohabiting	328	60.5
Divorced, widow, separated	158	29.2
Household size (No. of persons)		
Less than 4	75	13.8
4 - 6	257	65.9
More than 6	110	20.3
Median (IQR**) number of HH members	5 (4 - 6)	
HH*** composition by age (years)		
No. of HHs with <5 years (n=314):		
Number of children		
1 child	229	72.9
2 or more	85	27.1
No. HHs with 5 – 14 years (n=480):		
Number of children		
1-2	343	71.5
3 or more	137	28.5
No. of HHs with ≥15 years (n=542):		
Number of persons		
1 - 3	425	78.4
4 or more	117	21.6

*SD=Standard deviation); **IQR=Interquartile range; ***HH=Household.

more likely to attain medium-high SES compared to their counterparts who spaced their last two births for less than 2 years apart. However, this relationship was not statistically significant neither in bivariate or multivariate logistic regression analysis.

DISCUSSION

The mean age of respondents was 33.6 years, ranging from 18 to 49 years, with the age category of between 25

and 35 years forming the majority of participants. This implies that most of the women who participated in the survey bear children within this age range. In this study, 40.6% of women had not attained formal education. This proportion shows a considerable rate of illiteracy among women in the study area. The observed illiteracy rate was high compared to the average national illiteracy rate of 22 and 18% in 2010 and in 2012, respectively (Macro, 2011). The level of education has been reported as an important factor with impact on reproductive and SES issues. Education empowers women by increasing their

Table 2. Reproductive factors of respondents (N=542).

Reproductive characteristic	Frequency (n)	Percentage
Median (IQR*) number of children	3 (2-5)	
Number of children		
2 – 3	285	52.6
4 – 5	230	42.4
6 – 10	27	5.0
Median number of children desired (n=524)	6 (5 – 6)	
Number of children desired		
2 – 3	29	5.4
4 – 5	410	75.6
≥ 6	103	19.0
Interval of last two births (in years) (n = 498)		
< 2	137	27.5
2 – 3	268	53.8
≥ 4	93	18.7
Unplanned pregnancy		
Not experienced	393	72.5
Experienced	149	27.5
Mean (SD**, Range) age at first pregnancy (years)	18.5 (3.2, 12-35)	
Age at first pregnancy (Years)		
≤ 18	306	56.5
≥ 19	236	43.5
Consent for first pregnancy (n = 535)		
Not consented	126	23.6
Consented	409	76.4
No consent 1st pregnancy, reason (n = 126)		
Got married	52	41.3
Ignorance of contraceptives	38	30.2
Economic problems (being idle)	34	27.0
Raped	2	1.6

*Interquartile range (IQR);**Standard deviation (SD)

autonomy and understanding of family planning issues, which often results into bearing fewer children (Levine et al., 2001). Concerning the number of children per woman, our findings show that majority of women had 2 to 5 children, though 19% of them desired to have more than 6 children. The desired number of children for each woman is in line with findings from the Tanzania Demographic and Health Survey 2012 (URT, 2016), which reported a Total Fertility Rate (TFR) in rural Tanzanian women aged 15 to 49 years to be 6.1 compared to 3.7 in urban areas (Macro, 2016).

In this study and consistent with the Tanzania Demographic and Health Survey data (Macro, 2016), the

number of children a woman desired to have, a likely predictor of family size, was negatively associated with SES. Congruent to our finding, a study that involved American women revealed a negative association between a woman's own income and her number of children, regardless of education (Huber et al., 2010). Previous studies in the Republic of Korea indicated that individuals with the highest education level and better incomes had significantly fewer children compared with the group with the lowest education. Significantly, the non-manual labor group was found to have fewer children compared with those working as homemakers (Kim and Sung, 2013).

Table 3. Reproductive factors associated with household SES (N=542).

Variable	Household SES		cOR	95% CI	P value	aOR	95% CI	P value
	Low n (%)	Medium-high n (%)						
Number of children:								
3 or less	121 (42.5)	164 (57.5)						
More than 3	121 (47.1)	136 (52.9)	0.83	0.59-1.16	0.543	1.00	0.68-1.46	0.321
Maximum number of children desired (n=524):								
5 or less	97 (38.3)	156 (61.7)						
More than 5	136 (50.2)	135 (49.8)	0.62	0.44-0.87	0.048	0.68	0.46-0.99	0.0134*
Interval of last two births (years) (n=500):								
Less than 2	18 (52.9)	16 (47.1)						
2 or more	214 (45.9)	252 (54.1)	1.33	0.66-2.66	0.115	1.32	0.64-2.75	0.078
Unplanned pregnancy(ies):								
Yes	67 (45.0)	82 (55.0)						
No	175 (44.5)	218 (55.5)	1.02	0.70-1.49		1.02	0.68-1.53	0.056
Age at first pregnancy (years):								
18 or younger	150 (49.0)	156 (51.0)						
Older than 18	92 (39.0)	144 (61.0)	1.51	1.07-2.12	0.035	1.48	1.02-2.14	0.0118*

*Significant at $p < 0.05$; SES = Socio-economic status; cOR=Bivariate analysis odds ratio; aOR=Multivariate analysis odds ratio.

This negative relationship has previously been proposed to operate through a diverse set of ways including early pregnancy hence early parenthood and close spacing of children, which compromises economic productivity (Peterson, 1987; Budig and England, 2001; Cawthorne, 2008). According to Kamuzora and Mkanta (2000), the mainstream approach to effects of family size on wellbeing is based on a neo-malthusian *ceteris paribus* assumption of negative effects of high fertility which collaborates with the argument of savings for investment derived from lower proportions of

children, following reduction of fertility. A study in Morogoro region of Tanzania show that large-sized households tended to be income-poor, despite the lack linearity consistence (Mutabazi et al., 2015).

Findings from this study therefore underscore the importance of family planning education among women that will enable them to effectively plan for appropriate number and spacing of their children. The World Health Organization recommends the spacing between consecutive children to be at least 2 years (World Health

Organization, 2005). Appropriate planning of the number and spacing of children will enhance economic and development plans, including planning for costs of child education.

More than a half of study participants had their first conception below the age of 18 years, reflecting the predominance of early (teenage) pregnancies and motherhood in the study area. The age at first pregnancy showed a significant positive association with household SES. Participants who had their first pregnancy at or above 18 years were more likely to be in the higher

(medium-high) household SES category. Teenage pregnancies and motherhood have been reported to be interlocked with poverty through discontinued education, reduced employment opportunities, un-stable marriages, low incomes and heightened health and developmental risks (Rindfuss et al., 1984).

Findings from this study therefore explain the high degree of vulnerability of the study community, especially women, to poverty through childhood pregnancies and motherhood as previously suggested elsewhere (Varga, 2003; Jaiyeoba, 2009; Hofferth et al., 2001). FGDs attributed teenage pregnancies to early marriages as well as poverty and family instability that forces girls to take responsibility of caring families. Cultural beliefs associated with matrilineal societies, to which the study community belongs, societies, to which the study community belongs, was reported to encourage early pregnancies by believing that getting children for a girl was important in ensuring perpetuation of the clan.

Through FGDs, participants explained their experience of schoolgirls becoming pregnant and fail to complete secondary education. As expressed by participants during FGDs, community members had the opinion that the education system in the country is likely contributing to the early pregnancies. A woman in Kibwaya village made the following remark; *'...Lack of accommodation (hostels) in secondary schools forces students to stay in private residential apartments with no proper care, which tend to subject the girls to risks of engaging in unsafe sex, with consequences of unplanned pregnancies...'*

The findings underscore the need to conduct studies to establish empirical evidence on incidence of pregnancies in schools in the study area to suggest entry points for intervention considering that only 3% of participants showed to have attained post-primary school education. Participants expressed their views that the teaching on reproductive health in schools makes youths to ignore traditional training about reproductive matters, while it drives the youth to engage in sexual activities without knowing the consequences.

A woman from Maseyu village had this comment to make *'... "Current education system exposes girls to sexuality prematurely and thus accelerates their involvement in sexual activities. While the school syllabus for reproductive health is incomplete, it makes girls lose interest of what their parents teach them..."'* The study findings from the current study were in line with the report of the WHO (McIntyre and World Health Organization, 2006), that a quarter of all women in Tanzania begin childbearing as adolescents before reaching the age of 20 years (Ngallaba et al., 1993).

A handful of un-consented pregnancies among participating women were observed. The most common reasons were 'getting married', 'ignorance on contraception' and 'being idle'. All of the mentioned reasons are linked to family poverty. Poor households tend to force their teenage children into marriages as a

means of economic gain (Varga, 2003). Ignorance of contraception and being jobless are both results of failure to access education and secure an income generating activity. Most of the study women had their last two births spaced at most 36 months apart. This birth interval is in accordance with the WHO recommendation of 2 to 3 years (World Health Organization, 2005). The health benefits of longer birth intervals of at least 2 years apart have been reported by several studies (Morley, 1977; Setty-Venugopal and Upadhyay, 2002; Marston, 2006; Macro, 2011).

CONCLUSIONS AND RECOMMENDATIONS

This study has found that the number of children has negative relationship with household SES such that women who wished to have relatively many children, more than five, were less likely to belong to higher (Medium - High) SES. The desire for many children (>5) constrain the attainment of higher SES. Women who conceived while older than 18 years of age, were more likely to attain higher SES compared to those who conceived while they were younger; but majority of women in the study area conceived for at the age of 18 years or younger. Early pregnancy and motherhood restrict the households from attaining higher SES. Factors promoting early pregnancies and motherhood are many with different nature including but not limited to economic and cultural factors. Based on the conclusions, the government through the Ministry of Health is urged to promote reproductive health education in Morogoro district. Early pregnancies and motherhood should be strongly discouraged as part of reproductive health interventions specially tailored to suit low literacy group so that the intended messages are delivered effectively.

Limitations

The results of this study are subject to the limitation that respondents may not have reported honestly about their reproductive information, income, desire for children or other sensitive topics. Several methods were used to minimize such potential biases including the use of native Swahili language to increase the rapport with respondents and to minimize language barriers. Although respondents were not asked to provide their names or other personal identifiers to observe privacy, a possibility exists that some respondents may have intentionally altered their responses in order to impress the interviewers.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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